



Career adaptability, self-efficacy and job engagement in the Zimbabwean health sector

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Orientation: Modern health systems are characterised by fast modification of work environments and social and economic structures, and rapid technological evolution, mainly because of globalisation and migration flows. In such dynamic environment, career adaptability, self-efficacy and job engagement become vital.

Research purpose: This research work seeks to analyse the connection between career adaptability, self-efficacy and job engagement in the Zimbabwean health sector using a case study of Mashonaland East province.

Motivation for the study: Literature on the connection between career adaptability, self-efficacy and job engagement in the health sector is restricted.

Research approach/design and method: The study employed a quantitative approach. Implementing the General Self-Efficacy Scale, Career Adapt-Abilities Scale and Utrecht Work Engagement Scale, the suitable data were collected from 220 health employees. Structural equation modelling was implemented to analyse the link between career adaptability, self-efficacy and job engagement and to design the structural model.

Main findings: The study's results indicate that career adaptability has a positive effect on job engagement, career adaptability is positively linked to self-efficacy, and job engagement positively affects self-efficacy.

Practical/managerial implications: Career adaptability, job engagement and self-efficacy are substantially connected. Hence, the management must robustly implement strategies that stimulate these aspects to enhance employee morale.

Contribution/value-add: The study adds logical and thoughtful decision-making as the management assesses the association between career adaptability, self-efficacy and job engagement.

Keywords: career adaptability; self-efficacy; job engagement; structural equation modelling; Zimbabwe; health sector.

Introduction

Given the current social, economic and technological alterations in Zimbabwe, the ability to adapt, modify or show adaptability, job engagement and self-efficacy among healthcare workers has become desirable. Because of the political and economic instability, the country has witnessed brain drain (i.e. high rate of health-employee emigration) as employees seek better-paying opportunities abroad. Healthcare employees in Zimbabwe receive low salaries, adversely affecting their morale and ultimately resulting in higher turnover rates. The situation is made worse by the high rate of inflation, which erodes the purchasing power of salaries and by understaffing and high patient-to-staff ratios, which lead to employee burnout. Supporting career adaptability, self-efficacy and job engagement is therefore crucial in Zimbabwe's health sector to ensure that healthcare workers are resilient, motivated and able to provide high-quality patient care amid the sector's ongoing challenges.

Employees' capacity to handle problems and changes is vital in this rapidly changing business environment. People face a substantial burden to acclimate to numerous situations and safeguard their growth and existence (Shet, 2024). Dima et al. (2021) postulated that, in this continuously changing world, people should endlessly deal with complexity, innovation and transformation to attain individual objectives and uphold their significance in difficult situations. Interestingly, modern health systems are characterised by fast modification of work environments and social and economic structures and rapid technological evolution, notably

because of globalisation and migration flows (Ma et al., 2023). Generally, this indicates that workers must nowadays be more innovative and creative. They are expected to have a set of new and diverse skills such as adaptability and flexibility that are in line with the speed of change and sophistication that is taking place in sub-Saharan Africa (Zhi et al., 2024). Therefore, career adaptability becomes a competence factor because it enables individuals to navigate the ever-changing landscape of their profession or industry in an uncertain and fast-changing environment with unpredictable and novel tasks, constraints and situations (Ma et al., 2023). Ma et al. (2023) further indicated that career adaptability is a central construct in the development of adult careers because it enables individuals to stay in a relevant field.

Career adaptability refers to:

[T]he readiness to cope with the predictable tasks of preparing for and participating in the work role and with the unpredictable adjustments prompted by the changes in work and work conditions. (Savickas, 1997, p. 254)

De Abreu et al. (2024) propounded that career adaptability affects how an employee perceives her or his ability to strategise and adapt to altering career intentions, particularly in the face of unanticipated incidents such as transitions, traumas and projected tasks. Career adaptability therefore leads to increased motivation as adaptable individuals are more motivated to learn and grow, leading to increased job engagement. Individuals with high self-efficacy are more likely to feel confident in their ability to adapt to changing career circumstances. Career adaptability permits individuals to make sensible selections concerning their career path and how they address workplace problems by understanding their jobs and themselves (Chen et al., 2022; Creed et al., 2009; Tahiry & Ekmekcioglu, 2023). Tahiry and Ekmekcioglu (2023) articulated that career adaptability has been more vital in the modern era as it includes qualities that allow healthcare workers to address changes they encounter in their careers such as the adoption of technological advancement and data analytics, thereby driving the demand for health care workers with specialised skills in these areas. Therefore, career adaptability implies the interconnection between people and the dynamic conditions in which they operate. The emphasis lies on self-regulatory potencies held and implemented by individuals to manage problems that confront them in their work settings (Wang et al., 2024) and the facilitation of career goals and behaviours. Existing literature has indicated that individuals with excellent adaptability skills can make more realistic and sensible decisions than individuals with poor adaptability skills. Adaptable individuals can better cope with challenges and setbacks, reducing stress and increasing engagement.

As the job and career scenery is characterised by continuing unpredictability and magnifying unstableness and flexibility (Tsang et al., 2023), the work pressure on health personnel

such as managing complex cases can be stressful as it requires high levels of concentration. Hence, it poses an increasing menace to job engagement and self-efficacy. Thus, chronic work pressure can lead to emotional exhaustion, causing employees to feel drained and depleted. Self-efficacy refers to the individuals' decision on their abilities to summon the cognitive resources, motivation and paths required to satisfy specific circumstantial requirements (Bandura, 1986). Chhajer et al. (2018) opined that self-efficacy refers to a positive anticipation of favourable outcome premised on faith in an individual's capabilities. Efficacy can be established out of four chief sources: vicarious learning, task mastery, emotional arousal and social persuasion (Bandura, 1977; Lawrent, 2024).

Engagement refers to:

[T]he simultaneous employment and expression of a person's 'preferred self' in task behaviours that promote connections to work and others, personal presence [physical, cognitive, and emotional] and active, full performances. (Kahn, 1990, p. 700)

Alshamrani et al. (2023) and Chhajer et al. (2018) asserted that people who are engaged are portrayed as entirely there psychologically, focused, feeling attached with others, united and absorbed in their task executions during the change process. Thus, being a fully engaged employee connects basically to a person's psychological condition of mind while at work. Engaged workers devote their emotional, physical and cognitive energies (Chhajer et al., 2018). Thus, job engagement is a noteworthy source as it leads to increased creativity and innovation, as individuals are more open to new ideas and experiences.

The study is structured as follows: The problem statement brings to the fore the crux of the matter and the research objectives. The 'Literature review and Hypotheses development' section provides a synthesis of relevant literature and designs the adopted hypotheses. The 'Method' section outlines the study's methodology, followed by the 'Results' section, which presents the findings of the study. The 'Discussion' section discusses the study results, and the work is wrapped up in the 'Conclusion' section.

Problem statement

There is generally a lack of competency in the treatment of career adaptability that involves coping with developmental tasks and present and future changes in the career context. It promotes adjustment and successful transition across the career lifespan but it is not being given the attention that it deserves by both employees and management. Employees are allowing passive mindsets to take control and to strengthen their confidence and to shape and explore their career dreams, thus exhibiting a lack of direction and purpose. Therefore, employers should develop the ability to adapt their employees' careers through social connections and the richness of local work opportunities. The government through higher education systems should develop graduates

with employability skills who have a combination of achievements, understandings and personal attitudes or qualities that classify them as workers who are potentially more capable of achieving the desired job and of making a good career choice.

The application of knowledge and skills, which is self-efficacy, in the pursuit of behavioural attainments is lacking in hospitals in Zimbabwe (Cordeiro et al., 2024). The four broad processes through which efficacy beliefs operate: namely, choice behaviour, effort expenditure and persistence, thought patterns and emotional reactions are lacking in Zimbabwe hospital employees. In light of economic, social and technological changes currently prevailing in the country, the capacity to adjust, to adapt or to display adaptability has become desirable. Popular career concepts such as protean and boundary-less careers emphasise the individual responsibility for active career management and imply that adaptability is required to be successful (Kurtuldu & Özçelik, 2023). This is seriously lacking in the hospitals in Zimbabwe.

Research objectives

- To explore the relationship between career adaptability and job engagement.
- To examine relationship between career adaptability and self-efficacy.
- To assess the relationship between the relationship between job engagement and self-efficacy.

Literature review and hypotheses development

Career construction theory

The career construction theory (CCT) explains the interpersonal and interpretive practices via which people enforce direction and meaning on their vocational behaviour. It deals with how the career landscape is designed via social and personal constructivism. The CCT proclaims that people create reality representations but do not create reality. In this theory, careers are perceived from a contextualist viewpoint, which views development as powered by environment adaptation instead of maturation (Ali & Mehreen, 2024). Wang and Li (2024) postulated that the development of humans is associated by social environment adaptation via self-construction and human-environment amalgamation. The CCT indicates that career adaptability is affected by one's understanding of her or his environmental encounters, and it offers insights that enhance comprehension of how persons decide on, endorse and use their personal resources to chase their career objectives (Savickas, 2021).

Conceptual framework

The study's conceptual framework (Figure 1) shows the connections between the adopted variables.

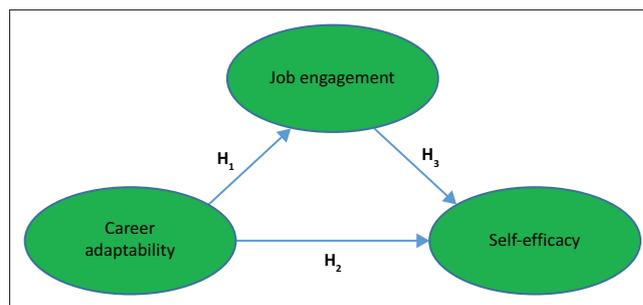


FIGURE 1: Conceptual framework.

Hypotheses development

Career adaptability and job engagement

Several authors have indicated that career adaptability relates to job engagement (for instance, Hassan et al., 2024). Career adaptability has been recognised as vital to job engagement. Yang et al. (2019) postulated that career adaptability is vital in forecasting work engagement. Specifically, Chen et al. (2024), Jiang et al. (2023), Nilforooshan and Salimi (2016) and Rossier et al. (2012) are some of the authors who have indicated that career adaptability positively influences work engagement. Adaptable individuals are more motivated to learn and grow, leading to increased job engagement. Adaptable individuals can better cope with challenges and setbacks, reducing stress and increasing engagement. Career adaptability can lead to increased job satisfaction, as individuals feel more in control of their careers and above all, it leads to enhance sense of purpose. Adaptable individuals are more likely to find meaning and purpose in their work, leading to increased engagement. Based on the examined literature, it can be hypothesised that:

H1: Career adaptability is positively associated with job engagement.

Career adaptability and self-efficacy

Existing literature has indicated that career adaptability and self-efficacy are connected. Heng and Chu (2023) and Öncel (2014) opined that career adaptability strongly correlates with self-efficacy. In 2021, Marcionetti and Rossier (2021) propounded that career adaptability and self-efficacy are associated with solid interrelationships, with one affecting the other across time. Interestingly, they concluded that greater levels of career adaptability can result in greater levels of self-efficacy. It can be noted that when individuals change jobs or industries, their career adaptability can influence their self-efficacy in navigating new roles and responsibilities. It is of essence to note that when individuals make significant career changes, their adaptability can impact their self-efficacy in developing new skills and adjusting to new work environments. Career adaptability can influence their self-efficacy in managing stress and delivering results when individuals face high-pressure projects or tight deadlines. Essentially, when individuals encounter complex problems or challenges, their adaptability can impact their self-efficacy in finding creative solutions. Based on the examined literature, it can be hypothesised that:

H2: Career adaptability is positively associated with self-efficacy.

Job engagement and self-efficacy

It is widely documented that job engagement and self-efficacy are connected. Numerous studies have indicated that self-efficacy significantly and positively impacts job engagement (Adnan et al., 2024; Wiyanto et al., 2024). Interestingly, Simbula et al. (2011) indicated that several studies have assumed that self-efficacy affects job engagement but not vice versa. In the existing literature, a myriad of studies (see, for instance, Simbula et al., 2011 and references therein) discovered that work engagement positively influences self-efficacy. Premised on the reviewed literature, it can be hypothesised that:

H3: Job engagement is positively associated self-efficacy.

Research method

Positivism research philosophy

Positivism research philosophy involves investigators dealing with discernible reality within community, resulting in generalisations (Cannas et al., 2024). It usually adopts a straightforward quantitative approach to investing phenomena and claims that the social world can be understood objectively (Žukauskas et al., 2018). Positivism and quantitative methods go together, that is, positivist principles have underpinned mainly quantitative methods. Positivism research philosophy stringently puts emphasis on uncontaminated data and facts free from individual bias. This philosophy provided solid guidance to this research and is regarded as the most suitable given that the study's main aim is to examine the association between variables.

Quantitative research approach

The research work was hinged on the quantitative research approach. Quantitative research is the process of gathering and examining mathematical data using statistical methods to support or refute alternative knowledge or claim (Bhangu et al., 2023; Dehalwar, 2024). Fundamentally, it quantifies and analyses variables to discover patterns, forge forecasts, examine causal associations and generalise results. This indicates that quantitative research is meant to generate results that are objective and can be practically confirmed and generalised to other populations.

Case study research design

A case study refers to a methodical, thorough study concerning an individual, a cluster of individuals, a society or any other unit in which the investigator scrutinises detailed data associated with a number of variables to generalise over a number of units (Pregoner, 2024; Verma et al., 2024). Case studies assess sophisticated issues in a situation that is natural to augment their comprehension. Therefore, the issues' holistic character can be dealt with (Dehalwar & Sharma, 2024). In the same vein, Cannas et al. (2024) asserted that case studies are recognised by 'holistic' assessment and by a 'thick event' explanation. The case study

research design assisted researchers to comprehend the study in better way as rich data were collected.

Research population and research sample

We selected a target population of 2200 staff from public hospitals in Zimbabwe with a particular focus on Mashonaland West province, the second largest province in Zimbabwe. Further, we determined a sample of 220 participants, consisting of health care employees from different departments of public hospitals. Hence, a total of 220 questionnaires were sent to the respondents over 2 months. Out of the 220 questionnaires sent, 215 responses were considered for data analysis after eradicating incomplete and invalid responses, giving an effective response rate of 97.70%. Male and female responses contributed 25.58% and 74.42%, respectively, to the total number of valid responses. Most valid responses came from the 30 to 39-year-age group, and most of the participants (44.20%) had 40–49 years of working experience with their current employer. Most of the respondents possessed certificates (49.80%) when considering qualifications.

Only employees for public hospitals located in Mashonaland West province were allowed to take part in this analysis. Partakers were contacted via their human resources departments. Researchers personally recruited the participants by talking to them and revealing the study's aim. Interested participants were asked to sign the informed consent form before completing the questionnaire. Participants were notified that their reactions will be utilised for academic intentions only and treated as confidential and anonymous. Interestingly, this augmented the accuracy of the research results. Further, researchers informed participants that their partaking was non-compulsory and that they could terminate their involvement at any time. The research work practices were executed according to the ethical standards of the institutional research committee. They were accomplished according to relevant regulations and guidelines.

Convenience sampling technique

Convenience sampling was adopted in this analysis. Participants were selected because they were readily and easily available (Marshal et al., 2021). Munce et al. (2021) postulated that convenience sampling allows researchers to quickly and conveniently select participants from available sources, such as specific departments or organisations. We adopted convenience sampling because it is least expensive, least time consuming, easy to administer and convenient compared to other sampling techniques (Bhangu et al., 2023; Kuehn & Rohlfing, 2024). Marshal et al. (2021) proffered that convenience sampling can help streamline recruitment and reduce costs associated with extensive participant outreach, screening and data collection. Thus, this technique allowed researchers to gather data efficiently within a limited timeframe.

Data collection

We developed an online questionnaire and sent it to participants through WhatsApp and email. Participants were

given 2 months (i.e. September 2022 and October 2022) to complete the questionnaires. A sample of 220 workers was chosen to partake in the study.

Instruments

Demographic data: This section focused on the standard demographic data that sought to understand the characteristics of each respondent. The section asked respondents to state their age range, gender, marital status, highest level of education and duration of employment with their current employer.

Career adaptability

We implemented the Turkish version of the Career Adapt-Abilities Scale (CAAS) (Savickas & Porfeli, 2012) to analyse career adaptability. This scale consists of 24 items and is classified into four constituent parts that relate to career adaptability: attention, confidence, curiosity and control. However, in this study, only 12 items were deemed fit. Items are rated on a 5-point Likert scale stretching from 1 = 'not strong' to 5 = 'strongest'. Several authors have adopted CAAS under different cultural backgrounds, and it has been applied in several areas. The existing literature has shown that CAAS is an effective and dependable tool for examining career adaptability (e.g. Akin et al., 2014). Cronbach's alpha test was performed for the reliability of the data, and a 87% test result indicated a good internal consistency of the collected data.

Self-efficacy

This study analysed self-efficacy implementing the General Self-Efficacy (GSE) Scale (Schwarzer & Jerusalem, 1995). The GSE scale comprises 10 items. All items are scored by implementing a 4-point Likert scale ranging from 1 = 'strongly agree' to 4 = 'strongly disagree'. The GSE scale measure has been extensively implemented globally, and its high stability and reliability have been reported as 90%, and its construct validity has been established in several studies (Das et al., 2024; Molińska & Rajchert, 2024). The Cronbach's alpha coefficient for the study was 0.86.

Job engagement

We applied the Utrecht Work Engagement Scale (UWES) (Schaufeli et al., 2002) to examine job engagement. The UWES items are classified into three constituent parts that expose the fundamental aspects of engagement: dedication (five items), vigour (six items) and absorption (six items). Items are scored on a 7-point Likert scale ranging from 0 = 'never' to 6 = 'always/every day'. Extant literature has indicated that the UWES is a reliable and valid tool for examining job engagement (see, e.g. Gwamanda et al., 2024; Musevenzo et al., 2024).

Data analysis

To assess the association between career adaptability, self-efficacy and job engagement, we applied the SmartPLS

software. The partial least square (PLS) path modelling approach was implemented to estimate the structural equation model (SEM). Microsoft Excel (Microsoft Corporation, Redmond, Washington, United States) and Statistical Package for the Social Sciences (SPSS) (IBM SPSS Statistics, IBM Corporation, Armonk, North Castle, Westchester, New York, United States) 28.0 were also used. We adopted PLS-SEM as it is efficient in parameter estimation (Andrade, 2021). Path analysis was used to assess the direct effect in the context of the structural model test. Several measures were implemented to examine the validity and reliability of the results and the model's goodness-of-fit. A bootstrapping procedure with 5000 samples was implemented to analyse the relationships between the variables.

Ethical considerations

Ethical approval to conduct this study was obtained from the Great Zimbabwe University School Research Committee (reference number: 05/08/2022).

Results

Measurement model testing

We used Cronbach alpha (CA), composite reliability (CR) and average variance extracted (AVE) to check reliability and validity of the research instruments. Table 1 presents the CA, CR and AVE values. The CA and CR values are greater than the endorsed yardstick of 0.70, confirming the internal consistency of the constructs and indicating that the data are reliable (Hair et al., 2010; Musevenzo et al., 2024). Convergent validity was affirmed because the AVE values exceed the endorsed 0.5 yardstick (Fornell & Larcker, 1981; Hair et al., 2010; Nunnally, 1994). Measurement items with factor loadings less than 0.70 were eradicated to enhance the model's dependability (Musevenzo et al., 2024).

The Fornell-Larcker criterion was adopted to assess the discriminant validity, and the results are presented in Table 2.

The square roots of the AVE values are higher than the correlation coefficients between the variables, indicating the existence of discriminant validity (Wan & Duffy, 2022). This

TABLE 1: Reliability and convergent validity.

| Variable | CA | CR | AVE |
|----------|-------|-------|-------|
| CA | 0.879 | 0.909 | 0.624 |
| JE | 0.919 | 0.935 | 0.673 |
| SE | 0.914 | 0.932 | 0.660 |

AVE, average variance extracted; CR, composite reliability; CA, career adaptability; JE, job engagement; SE, self-efficacy.

TABLE 2: Correlation coefficient matrix and discriminant validity.

| Variable | CA | JE | SE |
|----------|--------------|--------------|--------------|
| CA | 0.790 | - | - |
| JE | 0.765 | 0.820 | - |
| SE | 0.782 | 0.723 | 0.813 |

Note: The values in bold indicates the variation between each data point relative to the mean. In this study, discriminant validity is established at the construct level.

CA, career adaptability; JE, job engagement; SE, self-efficacy.

confirms the distinctiveness of the variables, guaranteeing that they consider fundamental features (Musevenzo et al., 2024). Further, correlation coefficients outlined in Table 2 provide preliminary support for the developed hypotheses.

We also implemented the Heterotrait-Monotrait ratio of correlations (HTMT) technique to assess discriminant validity (see Table 3).

The HTMT ratios were below the endorsed benchmark of 0.90, thereby confirming the existence of discriminant validity.

Further, we assessed the existence of multicollinearity using variance inflation factor (VIF) values (see Table 4).

The VIF values fall between 1 and 5, indicating moderate correlation among variables but inadequate to permit corrective measures (Islam et al., 2023). This implies that multicollinearity is not an issue in this study, enhancing the model's reliability and research results' validity.

Goodness-of-fit measures

In this study, the normed fit index (NFI) and standardised root mean square residual (SRMR) were implemented to assess the goodness-of-fit of the developed model (see Table 5).

The SRMR value of 0.073 falls below the endorsed benchmark of 0.08 (Goretzko et al., 2024). This indicates a good fit. Further, the NFI value of 0.911 is more than the suggested standard of 0.90, indicating that the model fits the data well (Musevenzo et al., 2024). In short, the suggested model fits data nicely.

Structural equation model and hypotheses testing

The study assessed the relationships between the variables of interest as shown by the conceptual framework implementing the SEM. The path coefficients are illustrated in Table 6.

TABLE 3: Heterotrait-Monotrait and discriminant validity.

| Variable | CA | JE | SE |
|----------|-------|-------|----|
| CA | - | - | - |
| JE | 0.858 | - | - |
| SE | 0.878 | 0.881 | - |

CA, career adaptability; JE, job engagement; SE, self-efficacy.

TABLE 4: Variance inflation factor results.

| Relationships | VIF |
|---------------|-------|
| CA -> JE | 1.000 |
| CA -> SE | 3.960 |
| JE -> SE | 3.960 |

CA, career adaptability; JE, job engagement; SE, self-efficacy; VIF, variance inflation factor.

TABLE 5: Goodness-of-fit results.

| SRMR | NFI |
|-------|-------|
| 0.073 | 0.911 |

SRMR, standardised root mean square residual; NFI, normed fit index.

The study results indicate that career adaptability had a substantial positive effect on job engagement ($\beta = 0.865$, $t = 34.495$, $p < 0.001$); career adaptability had a substantial positive influence on self-efficacy ($\beta = 0.332$, $t = 5.474$, $p < 0.001$) and job engagement had a significant positive effect on self-efficacy ($\beta = 0.636$, $t = 11.136$, $p < 0.001$).

Table 7 presents the decisions concerning the developed hypotheses.

A visual representation of the fitted model, with coefficients and factor loadings, is displayed in Figure 2.

Discussion

This research work sought to analyse the connection between career adaptability, self-efficacy and job engagement in the Zimbabwean health sector. We discovered that career adaptability is linked positively to job engagement. The implication here is that as career adaptability level increases, job engagement level rises and the converse is true. Career adaptability provides employees with the resources to deal with job-linked encounters and problems, leading to improved work-life balance, makes employees more optimistic in obtaining knowledge and novel skills, helps employees bring into line their career picks with their interests and values, nurtures an optimistic viewpoint on work atmospheres and job prospects, improves employees' resilience to change and makes employees more cooperative and socially competent. Chen et al. (2024), Jiang et al. (2023), Liu et al. (2023), Nilforooshan and Salimi (2016) and Rossier et al. (2012) are some of the researchers that have exposed that career adaptability and job engagement are related positively. Career adaptability can lead to increased job satisfaction, as individuals feel more in control of their careers.

The study findings have indicated that career adaptability is linked positively to self-efficacy. That is to say, as career adaptability level rises, self-efficacy level increases. Career adaptability positively influences self-efficacy by augmenting an individual's capability to manage career-linked problems and transitions effectively, promoting career advancement. Marcionetti and Rossier

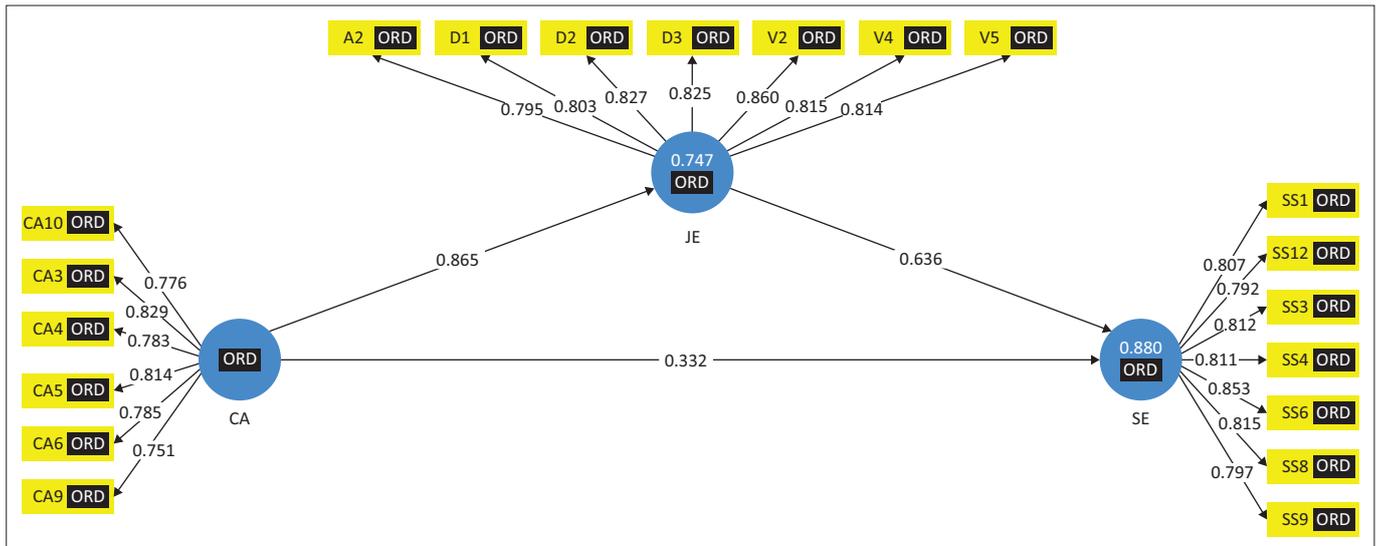
TABLE 6: Path analysis results.

| Relationship | Coefficient (β) | T statistic | p |
|--------------|-------------------------|-------------|---------|
| CA -> JE | 0.865 | 34.495 | < 0.001 |
| CA -> SE | 0.332 | 5.474 | < 0.001 |
| JE -> SE | 0.636 | 11.136 | < 0.001 |

CA, career adaptability; JE, job engagement; SE, self-efficacy.

TABLE 7: Hypotheses decisions.

| Hypothesis | Decision |
|---|-----------|
| H1: Career adaptability is positively associated with job engagement. | Supported |
| H2: Career adaptability is positively associated with self-efficacy. | Supported |
| H3: Job engagement is positively associated self-efficacy. | Supported |



CA, career adaptability; JE, job engagement; SE, self-efficacy; ORD, ordinal data.

FIGURE 2: Structural equation model.

(2021) propounded that self-efficacy and career adaptability are associated with strong interrelationships, affecting each other over time. Interestingly, they concluded that greater levels of career adaptability can result in greater self-efficacy levels. In the same vein, Savickas and Porfeli (2012) propounded that career adaptability resources can improve greater career decision-making self-efficacy to chase career objectives. Kvasková et al. (2023), Aydin (2022), Matijaš and Seršić (2021) and Guan et al. (2016) are some of the authors that discovered that career adaptability and self-efficacy are positively correlated. Career adaptability can help individuals cope with challenges and setbacks that can in turn enhance their self-efficacy.

We exposed that job engagement is positively linked to self-efficacy. Job engagement positively influences self-efficacy by improving emotions, experiences and resources, strengthening one's trust in their capability to perform responsibilities successfully. Specifically, job engagement promotes self-efficacy by promoting mastery experiences and skills development, reinforcing positive emotions, enhancing resilience via commitment, inventing prospects for social modelling, lining up with intrinsic motivation, augmenting initiative taking and ownership of one's work and promoting better use and acquirement of job resources. Xanthopoulou et al. (2009) postulated that job engagement, by motivating self-improvement via learning and goal attainment, constructs job resources and personal resources (like self-efficacy) over time. (For more information on the connection between job engagement and self-efficacy, the interested reader may refer to Simbula et al. (2011), Hakonen et al. (2008) and Bakker and Demerouti (2007), among other authors.)

Conclusion

Implementing the GSE scale, CAAS and UWES, data were collected from 220 health employees. The SEM was adopted

to analyse the connection between career adaptability, self-efficacy and job engagement in the Zimbabwean health sector using Mashonaland East province as a case study. The study's results indicate that career adaptability positively impacts job engagement; career adaptability positively influences self-efficacy and job engagement positively affects self-efficacy. Hence, human resource management practitioners should introduce interventions such as training and development of personnel to strengthen job engagement, career adaptability and self-efficacy. This can augment the productivity and commitment of employees.

Even though the study results are interesting, it can be difficult to generalise them to other areas and sectors of the economy as it focused only on a single sector of the namely health. To get new insights and to promote the generalisability of study results, future research should be executed considering the extensive Zimbabwean health sector and other sectors of the economy, namely mining, tourism and manufacturing. In addition to job engagement, career adaptability and self-efficacy, future research should include more measures in such a study. The study also contributes to policy as it enlightens the government on coming up with practical ways of motivating health personnel.

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Competing interests

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

Authors' contributions

N.M., K.M., M.C. and F.R.M. contributed to this research by providing conceptualisation and conducting research methodology, carrying out the formal analysis and investigation, writing of the original draft, contributing to review and editing, overseeing validation of results and coordinating the research activities. M.S. contributed to this research acquiring funding as well.

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Data availability

The data that support the findings of this study are available from the corresponding author, F.R.M., upon reasonable request.

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