


# The relationship between self-leadership, the future of human resource management, and work engagement

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**Orientation:** With Industry 4.0 at our doorstep, we would benefit from a better understanding of how the future of human resource management (HRM) relates to self-leadership and work engagement.

**Research purpose:** The purpose of this study was to determine the relationship between self-leadership, the future of HRM and work engagement.

**Motivation for the study:** The future of HRM in South Africa, as well as its relationship with organisational behaviour dimensions such as self-leadership and work engagement, is under-researched. A better understanding of work engagement as the missing link between self-leadership and the future of HRM needed to prepare for the future world of work.

**Research approach/design and method:** A survey was conducted amongst members of the South African Board of People Practices, and a quantitative research approach was therefore used. The relationships were investigated through correlation analysis and regression analysis.

**Main findings:** All the variables positively relate to one another and self-leadership predicts work engagement and the future of HRM. Furthermore, work engagement mediates the relationship between self-leadership and the future of HRM.

**Practical and managerial implications:** Human resource practitioners have a responsibility to ensure that they are able to lead themselves, be engaged in their work and prepare for the future of HRM.

**Contribution/value add:** The critical connection between work engagement and self-leadership could help direct organisations toward improving, maintaining and refining human resource managers' and human resource practitioners' ability to lead themselves and be more engaged.

**Keywords:** future of HRM; self-leadership; South Africa, survey; work engagement.

## Introduction

Our world is constantly changing. The first industrial revolution started in the late 18th century with steam power and mechanisation; the second started in the late 19th century with electricity and led to assembly lines; and the third started in the mid-20th century, powered by new information technology and automation. 'In 2020, organisations need to be more agile, future oriented and willing to adapt to contemporary technological trends' (Thareja, 2020, p. 34). Now, we have embarked on Industry 4.0 (I4.0). The concept of I4.0, identified as the fourth industrial revolution (4IR), was initially introduced in Germany in 2011 (Lu, 2017; Sanders, Elangeswaran, & Wulfsberg, 2016). It refers to the integration of physical objects, human actors, intelligent machines, production lines and processes across organisational boundaries to form a system in which all processes are integrated and information is shared in real time. According to Basl (2017), the basic principle of I4.0 is the connection of machines, work pieces and systems, and businesses creating intelligent networks along the entire value chain that can control each other autonomously. Industry 4.0 is often identified with a number of technologies involving, for example, the Internet of Things (IoT), big data and analytics, cybersecurity and 3D printing (Tortorella & Fettermann, 2017), and is likely to affect people, processes and companies. Within the South African context, human resources (HR) practitioners need to embrace technology and automation, find new ways of work, and be agile regarding the I4.0 (Dhanpat, Buthelezi, Joe, Maphela, & Shongwe, 2020). Molloy and Ronnie (2021) stated that South Africa struggles to navigate the exponential change of the 4IR.

To get the most out of I4.0 technologies, organisations will have to invest heavily in building capabilities in the following dimensions: data and connectivity, analytics and intelligence, conversion to the physical world and human-machine interaction (Oberer & Erkollar, 2018). An organisation would require a successful HR strategy to cope with the challenges of I4.0 transformation (Sivathanu & Pillai, 2018). Human resources practitioners must transform and embrace I4.0 (Schultz, 2017). The future of HR presents the profession with opportunities and thought-provoking challenges and complexities (Cohen, 2015). Ulrich, Ulrich, Burns and Wright (2021) suggest an HR competency model to simplify complexity and this includes the mobilisation of information, advancing human capability, accelerating business, and the fostering of collaboration. To match the pace of I4.0 and leverage its true benefit, companies should focus on the automation of HR processes, make the workforce smarter and more agile to drive efficiency and innovation, improve productivity, save costs and stay hyper-competitive (Verma, Bansal, & Verma, 2020). Schultz (2017) accentuated that analytical skills, employment relations and future workspace are of utmost importance in the future of human resource management (HRM). Due to the I4.0 challenges, HR practitioners need a positive level of enthusiasm and dedication toward their job (Alzyoud, 2018). Aromaa et al. (2019) emphasised the role of work engagement in the digital transitions of organisations in I4.0. Because of the increasing use of technology, digitalisation and automation in the workplace, it is essential to understand the role of work engagement in the sense that when employees are more likely to invest in the work they do, it may lead to a higher quality of work produced (Roto, Palanque, & Karvonen, 2019). In the qualitative study of Schultz (2017) about the future of HRM, work engagement and self-leadership were found to be important themes. Bloem et al. (2013) also mentioned the importance of work engagement during I4.0, and Mustaffa and Ghani (2019) referred to self-leadership as another important element in facing I4.0. For this reason, self-leadership and work engagement were chosen as variables to further investigate the future of HRM. There could be a possible nexus between self-leadership, future HRM and work engagement, but little, if any, research has examined this relationship.

Against this backdrop, the following question arose: What is the relationship between self-leadership, work engagement and the future of HRM? Therefore, this article aims to bridge the gap in the literature by exploring whether self-leadership and work engagement influence the future of HRM.

## Literature review

### Self-leadership

Leadership is a complex topic and can be studied from different approaches that require different definitions (Oberer & Erkollar, 2018). For the purpose of this study, the focus is on self-leadership. Self-leadership has its theoretical roots in Bandura's (1977, 1986) social learning and social cognitive theories, in self-regulation theory (Carver & Scheier, 1981),

and in the concept of 'self-management' (Manz, 1983). It is also related to the concept of influencing oneself (Alves et al., 2006). Bandura's (1977, 1986) theories explained how people can influence their own motivation, cognition and behaviour. The continuous interaction between people and their environment allows them to use the consequences of their own behaviour as a source of information and motivation (Norris, 2008). Behavioural self-regulation processes enable people to monitor the gap between actual performance levels and the standards or goals they set themselves (Carver & Scheier, 2002). Self-leadership strategies are applied to improve the effectiveness of these self-regulatory processes. These strategies include behaviour-focused strategies, natural reward strategies and constructive thought strategies (Neck & Houghton, 2006). Self-leadership can be surmised as the ability to self-influence to achieve one's goals (Mustaffa & Ghani, 2019). Exceptional HR leaders are 'results-oriented, team builders, motivators, highly organised and demonstrate the ability to coach and develop the people around them' (Longenecker & Fink, 2015, p. 23).

### Behaviour awareness

Politis (2006) stated that Manz developed a theory which goes beyond Bandura's study of self-control. According to this theory, behaviour-focused strategies provide specific approaches to identify ineffective behaviours and replace them with more effective ones (Houghton, Dawley, & DiLiello, 2012). These strategies include: self-reward, self-cueing, self-observation, self-punishment, self-goal setting, self-correcting feedback and practice (Manz, 1992; Manz & Neck, 2004; Neck & Houghton, 2006). Houghton and Neck (2002) stated that these strategies were designed to encourage positive, desirable behaviours that lead to successful outcomes, whilst suppressing negative, undesirable behaviours that lead to unsuccessful outcomes.

### Volition and task motivation

Self-leading individuals are motivated to do a task and use self-influencing strategies such as goal setting, self-observation, creating natural rewards as part of their will (volition) to take a particular course of action (Van Dorssen-Boog, De Jong, Veld, & Van Vuuren, 2020). Natural reward strategies focus on the enjoyable aspects of a task or activity (Manz & Neck, 2004; Neck & Houghton, 2006). Natural reward strategies can be expressed as situations in which the fun aspects of the task or activity are motivated or rewarded by the individual. The task or activity should be enjoyable so that a natural reward should be apparent. Then, the individual should move away from the negative aspects of the task and focus on the rewarding aspects (Manz & Neck, 2004; Neck & Houghton, 2006). In this way, the individual who focuses on the pleasant aspects of the task exhibits better performance and increases his or her performance (Houghton & Neck, 2002). There are two basic natural reward strategies, namely building more pleasant features for the task and shaping perceptions for the task (Manz & Neck, 2004; Neck & Houghton, 2006). Essentially, the former strategy represents

changing the task itself in order to make it better, whilst the latter involves cognitive reframing of the task in order to make it seem better (Mahembe, Engelbrecht & De Kock, 2013).

## Constructive cognition

Constructive thought pattern strategies can be expressed as the formation of constructive thought patterns and the formation of habits that will affect performance positively. Manz (quoted in Neck, Nouri, & Godwin, 2003, p. 701) described a thought pattern as 'certain ways of thinking about our experiences' and 'habitual ways of thinking'. These strategies include the definition and change of non-functional beliefs, assumptions, mental images and self-talk (Neck & Houghton, 2006). Positive and effective thought patterns are developed, and negative thoughts are reduced (Manz & Sims, 2001; Neck & Houghton, 2006). Mental imagery refers to imagining the successful performance of a task before it is actually completed (Neck et al., 2003).

## The future of human resource management

Industry 4.0 is upon us, with significant implications for how organisations conduct business (Baldassari & Roux, 2017). The challenges the HR profession faces in I4.0 include: the huge amount of data we have, the rapidity of change, new business models and even smart services enabled by digital tools (Dhanpat et al., 2020). The future of work by Schultz (2017) highlighted the following future HRM factors: analytical skills, employment relations and future workspace. The relationship between these factors was not further investigated. For this reason, for the purpose of this article, analytical skills, employment relations and future workspace formed part of the critical dimensions of future HRM.

### Analytical skills

Traditional HR applications were used administratively for payroll and record-keeping, but there is much more to HR analytics than simple descriptive data collection and reporting. Analytical skills entail applying existing and generating new scientific knowledge to develop practical solutions (Van der Togt & Rasmussen, 2017). According to Shrivastava, Nagdev and Rajesh (2018), analytical skills refer to the use of analytical techniques such as data mining, predictive analytics and contextual analytics to enable managers to take better decisions related to their workforce. Analytics should focus less on HR practices and more on HR outcomes (Ingham & Ulrich, 2016). Human resources practitioners should possess analytical skills to analyse data, inform business decision-making and predict what might happen in the future (Van den Heuvel & Bondarouk, 2017). Possessing analytical skills allows better people decisions and more effective and efficient HR (Van der Togt & Rasmussen, 2017). An increased focus on workforce analytics forces HR practitioners to obtain analytical skills to be more useful business partners (Krysinski, Reeves, Stice-Lusvardi, Ulrich, & Russell, 2017).

## Future workspace

Workspace demand is driven by professional employment trends and is especially sensitive to space requirement assumptions (Miller, 2014). The nature of work itself is becoming more flexible and virtual (Chernyak-Hai & Rabenu, 2018), and this may have an impact on future workspace. Digitalisation and smart communication technology are the enablers for new workspace design (Kämpf-Dern & Konkol, 2017). It is essential to provide the right balance between office, home office and third workplace, together with suitable information technology (IT) tools and behavioural aspects, to make working at a distance effective (De Bruyne & Gerritse, 2018). The agility required to support a constantly evolving workforce can be enabled by the infrastructure to design the workspace (Harris, 2015). Flexibility and customisation of space and furniture need to be incorporated into workspace design to satisfy the unique needs of end users (Hills & Levy, 2014). An opportunity for dialogue and critical thinking in an organisation is essential to ensure proper workspace design (Totterdill & Exton, 2014). Dialogue will allow HR practitioners to converse with all relevant stakeholders to obtain their views into improving workspace design. Critical thinking is necessary to think widely and more in-depth regarding best options for especially future workspace design. The new workspace presents a greater diversity of stakeholders and workers, which impacts employment relations.

## Employment relations

Employment relations are about the interests of employers and workers. In the future world of work, there will be significant changes in employment relations (Hatting, 2017):

There is considerable debate about whether the field of employment relations is either too theoretical and removed from the concerns of everyday life in the workplace to be relevant to practitioners and policymakers or, conversely, it has been too partisan in its relationship with unions or employers and has served the needs of one party or the other. (Lansbury, 2018, p. 6)

Trust and reciprocity are necessary for sustainable employment relations (Dundon, 2019). Whilst the regulation of the workplace and interaction between employers and unions remain key concerns to the field of employment relations, other issues related to people at work, employment and organisations are important in bringing a broader perspective to the subject (Lansbury, 2018). South Africa is one of the unionised countries in the world and the involvement of trade unions in resolving disputes including grievances and disciplinary matters is crucial (Mzangwa, 2015). Mzangwa (2015) also stated that employment relations are informed by labour legislations. Poor employment relations impose significant costs on workers and society, such as labour turnover, absenteeism, workplace injuries and industrial conflict (Wilkinson, Barry, Gomez, & Kaufman, 2018). A recent economic development that has an increasing impact on employment relations is the gig economy. Dundon (2019, p. 8) posited that 'in terms of employment relations, debates continue about the legal status of gig-economy



work'. Particular concerns include the ambiguous nature of the relationships between workers and intermediary platforms, with people who work in the gig economy being denied basic protections (Stewart & Stanford, 2017). Ljungholm (2019) stated that workers in the on-demand economy are freelancers, contingent workers, part-time workers, full-time workers, independent contractors, or a hybrid category. There are many challenges in the realisation of I4.0. In order to adopt a certain technology and improved software processes, many ethical considerations need to be identified and considered if a company is to obtain an ethical development and deployment of I4.0 (Rahanu, Georgiadou, Siakas, Ross, & Berki, 2021). Therefore, there must be greater governance of ethics in the future world of work.

## Work engagement

Over the past two decades, HR scholars and practitioners have exerted a great deal of effort towards understanding engagement. The concept of employee engagement was first proposed by Kahn (1990, p. 693) as the 'harnessing of organization members' selves to their work roles; self-employment and self-expression of people physically, cognitively, and emotionally in their work lives'. Saks (2006, p. 601) defined employee engagement as a 'different and unique concept' which is composed of knowledge, emotion and behaviour. Macey and Schneider (2008) suggested to regard engagement as a wide-ranging term which contains different types of engagement (traits engagement, psychological state engagement, behavioural engagement), and each one needs different conceptualisations, such as proactive personality (traits engagement), involvement (psychological state engagement) and organisational citizenship behaviour (behavioural engagement). Work engagement has been defined as 'a positive, fulfilling work-related state of mind that is characterized by vigour, dedication, and absorption' (Schaufeli, Bakker, & Salanova, 2006, p. 702). Work the I4.0 challenges, HR practitioners need a positive level of enthusiasm and dedication toward their job (Alzyoud, 2018) and this is the reason why work engagement was chosen as construct in this study. The three dimensions of work engagement, namely vigour, dedication and absorption are discussed below.

### Vigour

Vigour, which is the physical component of work engagement, involves high levels of energy and mental resilience whilst working. Chughtai and Buckley (2008) postulated that higher levels of vigour suggest an individual's increased readiness to devote effort within his or her work by not becoming easily fatigued and developing the tendency to remain resolute in the face of task difficulty or failure.

### Dedication

Dedication refers to being strongly involved in one's work and experiencing a sense of significance, enthusiasm and challenge. Dedication constitutes the emotional component of work engagement, characterised as putting one's heart into the job, and it typifies individuals' strong sense of

identification with their work (Chughtai & Buckley, 2008). Dedication also encompasses feelings of enthusiasm, passion, pride and challenge, and indicates individuals' psychological involvement in their work, combined with a sense of significance (Gawke, Gorgievski, & Bakker, 2017). As noted by Biggs, Brough and Barbour (2014), dedicated individuals are strongly involved in their work and experience a sense of significance, enthusiasm and challenge. Such individuals are inspired by work tasks and are absorbed in their work to the benefit of the organisation.

### Absorption

Absorption refers to being fully concentrated and engrossed in one's work. Thus, work engagement is a positive motivational state (Bakker, Demerouti, & Sanz-Vergel 2014). Schaufeli and Salanova (2007) highlighted the importance of various job resources, such as supervisory coaching, social support from colleagues and supervisors, autonomy, positive work climate, performance feedback, task variety and training facilities, in enhancing employees' work engagement. The cognitive component of work engagement, which is often interchangeable with the absorption dimension, is characterised by being fully concentrated and happily engrossed in work, and feeling like time flies when working (Breevaart, Bakker, & Demerouti, 2014). Absorbed individuals are completely immersed in their work so that time appears to pass so rapidly that they forget everything else that is around them, and often find it difficult to disengage or detach themselves from their work (Chughtai & Buckley, 2008). This component of work engagement refers to the full concentration, satisfaction and engrossment that individuals receive from performing their job-related tasks. All these dimensions result in highly engaged employees who perform their best and contribute to the success of the organisation.

## Hypothesis development

Previous studies have shown that there is a relationship between self-leadership and work engagement (Kotzé, 2017; Shaoping, Huachun, & Yongheng, 2015). Breevaart et al. (2014) found that daily self-leadership (comprising five strategies: self-goal setting, self-reward, self-punishment, self-observation and self-cueing) was positively related to employees' resourcefulness and this increased their daily work engagement. Breevaart et al. (2014) also argued that self-leadership enables employees to motivate themselves, achieve required standards and optimise their work environment, and therefore increases their work engagement. Harunavamwe (2018) stated that self-leadership is an integral part of the personal resources that facilitate positive behaviour that eventually translates to work engagement. Gomes, Curral and Caetano (2015) found that work engagement had a mediating effect on the relationship between self-leadership and individual innovation. It is interesting to note that self-leadership can have a significant effect on work engagement as well as a partial mediating effect on the relationship between organisational justice and employees' work engagement (Park, Song, & Lim, 2016).

Training opportunities, career development opportunities and developmental performance appraisal, as part of the key dimensions of developmental HR practices, were positively related to work engagement in the study of Ahmed, Kura, Umrani and Pahi (2019). The study of Aybas and Acar (2017) found that perceived HR practices (skill, motivation, empowerment enhancing and working conditions) predicted work engagement through psychological capital. Alzyoud (2018) found that HRM practices (employee communications, employee development, and rewards and recognition) influenced work engagement. There is a positive relationship between HRM (ability enhancing practices, motivation enhancing practices and opportunity enhancing practices) (Tensay & Singh, 2020) and engagement. Tensay and Singh (2020) also found that engagement partially mediated the relationship between HRM and organisational performance. Human resource management (service training and performance appraisal) has a positive and significant influence on work engagement (Suan & Nasurdin, 2014). Work engagement and job crafting mediate the relationship between employee perceptions of HR practice and employee performance (Guan & Frenkel, 2018).

Human resource management practices (high performance, high commitment, high control, high involvement and international HRM) and leadership (authentic, ethical, transformative, paternalistic, authoritarian and global leadership, and leader-member exchange) have interactive effects on organisational, team/unit and individual outcomes (Zhao, Liu, Zhu, & Liu, 2020). Leadership has an indirect effect on outcomes through HRM practices, and HRM practices may have an indirect effect on outcomes through leadership. For example, transformational CEOs are likely to adopt skill-based HRM practices (Lopez-Cabrales, Bornay-Barrachina, & Diaz-Fernandez, 2017). Gill, Gardner, Claeys and Vangronsveld (2018) found that there is a link between authentic leadership and HR practices (system strength, alignment and fit).

Previous studies about the relationship between self-leadership and future HRM (analytical skills, employment relations and future workspace) could not be found. Previous studies about the relationship between work engagement and future HRM (analytical skills, employment relations and future workspace) could also not be found. The aim of this article was therefore to fill this research gap.

The following hypotheses were investigated in this article:

- H1:** Self-leadership is positively related to work engagement.
- H2:** Self-leadership is positively related to the future of HRM.
- H3:** Work engagement is positively related to the future of HRM.
- H4:** Behaviour awareness, volition and task motivation (factor 1 of self-leadership) predict the future of HRM.
- H5:** Constructive cognition (factor 2 of self-leadership) predicts the future of HRM.
- H6:** Behaviour awareness, volition and task motivation (factor 1 of self-leadership) predict work engagement.

**H7:** Constructive cognition (factor 2 of self-leadership) predicts work engagement.

**H8:** Work engagement mediates the relationship between self-leadership and the future of HRM.

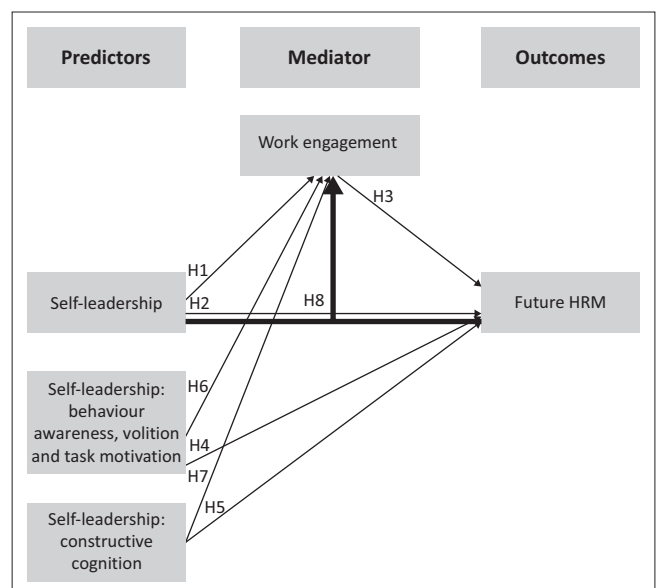
The hypothesised model is illustrated in Figure 1.

## Method

### Sample and procedure

Within the survey research design, data were collected by means of a questionnaire that was sent via SurveyMonkey to the members of an HR professional body in South Africa, namely the South African Board of People Practices (SABPP). The selection criterion for this study was SABPP members who worked in industry, not in academia, or who were self-employed. The reason for this decision was to obtain the views of HRM practitioners who dealt with HR issues in the workplace. Human resource management academics would not have been able to answer some of the questions because of the actual execution of certain HRM functions. The profiles of the respondents are shown in Table 1.

It is interesting to note that more females than males participated in this study. With reference to age groups, most of the participants fell within the 35–44 years age group, followed by individuals in the 45–54 years age group, which could be an indication that HR practitioners in these age groups seem to be enthusiastic about the future of HRM studies. With respect to the area of specialisation, more than half of the respondents specialised in HRM. This could be an indication that human resource development (HRD), labour relations management (LRM), and other areas of specialisation such as organisational development, vocational rehabilitation, HR generalist (HRM, HRD and LRM included), safety and risk management, and HR information systems are occupied in smaller numbers in the South African context. Of the respondents, 55.6% worked in



HRM, Human resource management.

**FIGURE 1:** Hypothesised model.

**TABLE 1:** Profile of the respondents.

Demographic parameter	Classification	N	n	%
Gender	Male	124	47	37.9
	Female		77	62.1
Age	18–24	124	1	0.8
	25–34		22	17.7
	35–44		50	40.3
	45–54		35	28.2
	55–64		14	11.3
	65 years and older		2	1.7
Area of specialisation	Human resource management	123	70	57.0
	(HRM)		27	22.0
	Human resource development (HRD)		14	11.3
	Labour relations management (LRM)		12	9.7
Sector	Private	124	69	55.6
	Public		40	32.3
	Other		15	12.1
Highest educational attainment	Grade 12	120	3	2.4
	Certificate		47	37.9
	Diploma		42	33.9
	Degree		20	16.1
	Professional or honours degree		8	6.5

the private sector and 32.3% worked in the public sector, whilst 12.1% worked in other sectors related to state-owned enterprises. This could be a signifier that the majority of the SABPP members worked in the private sector. Lastly, most of the respondents possessed a certificate or a diploma and therefore postgraduate qualifications does not seem to be of the essence to these HR practitioners.

## Measures

For the purpose of this study, the abbreviated self-leadership questionnaire (Houghton et al., 2012), the short version of the work engagement questionnaire of Schaufeli et al. (2006), and a new questionnaire based on the work of Schultz (2017) to measure future HRM were used. Examples of the items used to measure each of the three variables were as follows:

### Future HRM:

- I am future-fit (focused on what is ahead than behind).
- I assist management to redefine work relationships between the employer and employee to fit future purposes. I am future-fit (focused on what is ahead than behind).
- I use future thinking skills (the ability to mind-time travel into the future, experience that imagined future and back-cast to develop strategies in the present to realise the preferred future).

### Work engagement:

- At my work, I feel bursting with energy.
- I find the work that I do full of meaning and purpose.
- Time flies when I am working.

### Self-leadership:

- I establish specific goals for my own performance.
- I make a point to keep track of how well I'm doing at work.
- I work toward specific goals I have set for myself.

A five-point Likert scale (1 – never; 2 – almost never; 3 – about half of the time; 4 – most of the time; 5 – all the time) was used for all the questionnaire items. Face validity was ensured by conducting a pilot test with 16 HRM, HRD and LRM specialists. These managers had 5 years' experience or more as an HRM, HRD or LRM specialist. Content validity was determined by having the questionnaire reviewed by nine HRM, HRD and LRM academics. These academics possessed a doctoral degree in the relevant field of expertise and a minimum of 5 years' experience as an academic. These experts reviewed the language, structure and design of the questionnaire. Construct validity was ensured by conducting a principal factor analysis. To progress to factor analysis, the Kaiser-Meyer-Olkin measure of sampling adequacy was determined. It was 0.865 for work engagement, 0.796 for self-leadership and 0.811 for the future of HRM. The factor analysis confirmed the theoretical sub-scales, namely, work engagement (vigour, absorption and dedication) and the future of HRM (analytical skills, future workspace and employment relations), except for self-leadership, which was grouped into a two-factor solution (factor 1: behaviour awareness, volition and task motivation and factor 2: constructive cognition). All these factors were discussed in the literature review.

The reliability coefficients for the future HRM questionnaire are not available because this is a newly developed questionnaire. According to Mahembe, Engelbrecht and Wakelin (2017), the Cronbach's alphas for the self-leadership questionnaire were as follows: behaviour awareness and volition = 0.66, task motivation = 0.68, and constructive cognition = 0.54. In the study of Gautam and Enslin (2019), the overall Cronbach's alpha was 0.89. The Cronbach's alphas for work engagement according to Choi, Suh, Choi, Lee and Son (2020) were as follows: vigour = 0.63, dedication = 0.65, absorption = 0.56. Kantan and Sadullah (2012) found that absorption's Cronbach's alpha was 0.84 and for vigour and for dedication the Cronbach's alpha was 0.89.

In this study, scale reliability was measured using Cronbach's alpha. The alpha readings are presented in Table 2.

Feinberg, Kinnearz and Taylor (2013) suggested that the acceptable level for measuring the reliability of an instrument is 0.7. Table 2 indicates that all alpha readings were above the recommended 0.7 value. The scales used in this study were reliable or internally consistent. For this study, it was decided to keep the employment relations factor with its 0.634 reliability coefficient because composite reliability values of 0.60–0.70 are acceptable in exploratory research (Nunnally & Bernstein, 1994).

**TABLE 2:** Scale reliabilities.

Variable	Scale	Number of items	Cronbach's alpha
Self-leadership	Behaviour awareness, volition and task motivation	4	0.854
	Constructive cognition	4	0.752
Vigour	Dedication	5	0.878
	Vigour	5	0.819
	Absorption	6	0.809
Future HRM	Analytical skills	4	0.776
	Future workspace	5	0.801
	Employment relations	3	0.634

HRM, human resource management.

## Data analysis

The Statistical Package for the Social Sciences (SPSS 24) was used to analyse the numeric data in the study. Pearson correlation was conducted to determine the significant relationships; and multiple regression analysis was used to determine the predictions. According to Hayes (2009), mediation is a sequence of causal relations by which variable X exerts its effect on variable Y by influencing intervening variables. The mediation role of work engagement between the future of HRM and self-leadership was investigated.

## Ethical considerations

The SABPP gave permission to the researcher for conducting the study. Ethical permission for this study was obtained from the Research Ethics Committee of the Tshwane University of Technology, Ref#: FCRE2018/FR/10/025-MS. High ethical standards were followed in all aspects of the research process. All possible respondents were provided with an overview of the study before inviting them to voluntarily participate. The respondents were assured that their responses would be anonymous and confidential, and were informed that they could withdraw from the study at any stage should they feel it necessary to do so. All respondents indicated their consent on SurveyMonkey.

## Results

Table 3 illustrates the means, standard deviations (SD) and correlations between the variables used in this study. An examination of the means revealed that most of the respondents indicated that they almost never agreed with the statements about self-leadership ( $M = 1.99$ ,  $SD = 0.59$ ), the future of HRM ( $M = 2.50$ ,  $SD = 0.64$ ) and work engagement ( $M = 2.07$ ,  $SD = 0.58$ ). The strength of associations between the variables was tested using the Pearson correlation coefficient ( $r$ ). As shown in Table 3, the Pearson correlation coefficients suggested positive linear associations between the scales. Cohen (1988) suggested that a small relationship is represented by an  $r$  ranging from 0.10 to 0.29, a medium correlation is identified by an  $r$  ranging from 0.30 to 0.49, and a large and significant relationship is identified by an  $r$  ranging from 0.50 to 1.0. An  $r$ -value of 1 indicates a perfect positive correlation, whilst  $-1$  indicates a perfect negative correlation,  $0.5$  indicates a moderate positive correlation,  $-0.5$  indicates a moderate negative correlation, and  $0$  shows no

**TABLE 3:** Means, standard deviations and correlations of all variables.

Variable	M	SD	1	2	3
Self-leadership	1.99	0.59	1	0.534*	0.491**
Future HRM	2.50	0.64	0.534**	1	0.491**
Work engagement	2.07	0.58	0.419**	0.419**	1

Note:  $N = 124$ .

HRM, human resource management; SD, standard deviation.

\*, A  $p$ -value of 0.01 infers, assuming the hypothesis is correct, any difference seen (or an even bigger more extreme difference) in the observed results would occur 1 in 100 (or 1%) of the times a study was repeated.\*\*,  $p < 0.01$ .

correlation. The larger the absolute value of the coefficient, the stronger the relationship between the variables. The practical significance seems to be medium and large. By implication, an increase in a scale results in increases in other scales if a positive correlation exists, whilst the reverse is also true. These results confirmed hypotheses H1, H2 and H3.

Regression analysis was used to determine whether self-leadership predicted the future of HRM and work engagement. To better explore this relationship, the two self-leadership factors (behaviour awareness, volition and task motivation, as well as constructive cognition) were used.

From Table 4, it is clear that factor 1 of self-leadership, namely behaviour awareness, volition and task motivation, predicted the future of HRM ( $\beta = 0.51$ ,  $p < 0.5$ ) and work engagement ( $\beta = 0.42$ ,  $p < 0.5$ ). Factor 2 (constructive cognition) also predicted the future of HRM ( $\beta = 0.13$ ,  $p < 0.5$ ) and work engagement ( $\beta = 0.17$ ,  $p < 0.5$ ). These results confirmed hypotheses H4, H5, H6 and H7.

According to Hayes (2009), mediation is a sequence of causal relations by which variable X exerts its effect on variable Y by influencing intervening variables. The mediation role of work engagement between the future of HRM and self-leadership was investigated. The variables that were measured are depicted in Figure 2, where X = self-leadership, Y = the future of HRM and M = work engagement.

Figure 2 illustrates the effect of self-leadership (c') on the relationship between talent X and Y. The results are discussed in Table 5.

The number of bootstrap samples for bias-corrected bootstrap confidence intervals (CI): 5000 and level of confidence for all CIs in output: 0.95. Mediation is found when one variable (X) has an effect on an outcome variable (Y) through one or more intervening variable(s), also known as mediators (Hayes, 2009). From Table 5, it is clear that work engagement mediated the relationship between self-leadership and future HRM at 0.10 (95% CI [0.18, 0.19]). These results confirmed hypothesis H8.

## Discussion

The purpose of this study was to explore the relationship between self-leadership, the future of HRM and work engagement. In a nutshell, this study found that self-leadership



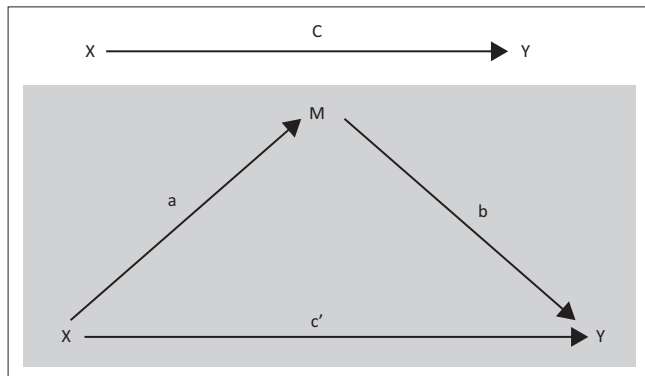
**TABLE 4:** Regression results.

Self-leadership	The future of HRM				Work engagement			
	$\beta$	SE	<i>t</i>	$R^2$	$\beta$	SE	<i>t</i>	$R^2$
Factor 1: Behaviour awareness, volition and task motivation	0.51*	0.07	6.25	0.33	0.42*	0.16	4.86	0.36
Factor 2: Constructive cognition	0.13*	0.07	1.61	0.33	0.17*	0.7	2.01	0.26

HRM, human resource management; SE, standard error.

\*, A *p*-value of 0.01 infers, assuming the hypothesis is correct, any difference seen (or an even bigger more extreme difference) in the observed results would occur 1 in 100 (or 1%) of the times a study was repeated.

*p* < 0.05; unstandardised regression coefficients are reported.



X = self-leadership, Y = the future of HRM and M = work engagement.

**FIGURE 2:** A simple mediation model.

and work engagement were positively related to the future of HRM. Self-leadership predicted the future of HRM and work engagement, and lastly, work engagement mediated the relationship between self-leadership and the future of HRM. Previous studies conducted on the relationship between the future of HRM (analytical skills, future workspace and employment relations) and work engagement, as well as the relationship between the future of HRM (analytical skills, future workspace and employment relations) and self-leadership, could not be found. It is noteworthy to mention that the mean revealed that there was a tendency to almost never agree with the statements about self-leadership, the future of HRM and work engagement. As seen in Table 6, all the hypotheses were accepted.

It was found that self-leadership was positively related to work engagement, concurring with the studies of Breevaart et al. (2014), Shaoping et al. (2015), Park et al. (2016), Kotzé (2017) and Harunavamwe (2018). Self-leadership has a significant effect on work engagement as well as a partial mediating effect on the relationship between organisational justice and employees' work engagement (Park et al., 2016). Gomes et al. (2015) found that work engagement had a mediating effect on the relationship between self-leadership and individual innovation. In this study, however, work engagement mediated the relationship between self-leadership and the future of HRM. Harunavamwe (2018) found that self-leadership is an important part of the personal resources that facilitate positive behaviour that eventually translates to work engagement.

**TABLE 5:** Mediation – Complete standardised indirect effect of work engagement on self-leadership and the future of human resource management.

Mediator	Effect	SE	LLCI	ULCI
Work engagement	0.10	0.04	0.18	0.19

SE, standard error; LLCI, lower level of confidence interval; ULCI, upper level of confidence interval.

**TABLE 6:** Summary of the hypotheses testing.

Hypotheses	Accepted/Rejected
H1: Self-leadership is positively related to work engagement.	Accepted
H2: Self-leadership is positively related to the future of HRM.	Accepted
H3: Work engagement is positively related to the future of HRM.	Accepted
H4: Behaviour awareness, volition and task motivation (factor 1 of self-leadership) predict the future of HRM.	Accepted
H5: Constructive cognition (factor 2 of self-leadership) predicts the future of HRM.	Accepted
H6: Behaviour awareness, volition and task motivation (factor 1 of self-leadership) predict work engagement.	Accepted
H7: Constructive cognition (factor 2 of self-leadership) predicts work engagement.	Accepted
H8: Work engagement mediates the relationship between self-leadership and the future of HRM.	Accepted

HRM, human resource management.

Previous studies found that HRM correlated with leadership (Gill et al., 2018; Lopez-Cabrales et al., 2017; Zhao et al., 2020), but studies on future HRM (analytical skills, employment relations and future workspace) and self-leadership could not be found. Suan and Nasurdin (2014), Aybas and Acar (2017), Alzyoud (2018), Guan and Frenkel (2018), Ahmed et al. (2019) and Tensay and Singh (2020) found that HRM had a positive relationship with work engagement, but this study found that future HRM had a positive relationship with work engagement.

As we enter I4.0, there has been a slight increase in literature about the future of HRM. However, research about the future of HRM has commonly overlooked the challenges of HR practitioners who are not possessing analytical skills, not being involved in designing future workspace and not addressing the concerns surrounding employment relations in the future world of work. The roles of self-leadership and work engagement in the future of HRM have also been overlooked or perhaps underestimated. The current study has contributed to a better understanding of these challenges and concerns. For the purpose of this study, the future of HRM focused on three critical factors, namely analytical skills, future workspace and employment relations. These three factors were found to be an important outcome in the future of HRM study by Schultz (2017). The current study was the first to investigate these three factors and their relationship with work engagement and self-leadership. Therefore, this offers a whole new field of research opportunities.

Self-leadership emphasises the importance of internal rather than external factors that control the behaviour of an individual. It is therefore vital that HR managers and HR practitioners be aware of their ability to lead themselves and monitor their engagement levels.



The findings of this study alludes to the fact that in the South African context, work engagement emerged as a critical driver of self-leadership and future HRM. Human resources practitioners, therefore, need to enhance their own work engagement in order to lead themselves and manage the future of HRM, with specific reference to their own analytical skills and the managing of employment relations and future workspace. To foster a culture of engagement, South African HR practitioners should lead by example. Work engagement could be the link between self-leadership and the future of HRM.

Overall, this study showed the important notion to contribute to bridging the gap in the literature by exploring the effect of self-leadership and work engagement on the future of HRM. Work engagement mediated the relationship between self-leadership and the future of HRM, and this produced new knowledge in the field of HRM and organisational behaviour. On a practical level, this indicates that necessary attention must be given to the improvement of work engagement, as work engagement will influence self-leadership and future HRM.

### Practical implications

The fact that the respondents in this study almost never agreed with the statements about self-leadership, the future of HRM and work engagement could be an indication that they did not see themselves as being self-led, engaged and ready for the future of HRM with specific reference to their analytical skills, future workspace and employment relations. It is however not clear. From a practical point of view, the theorising and results of the study are applicable to HR managers and HR practitioners. The measure of the future of HRM is comprised of items that measure specific HR behaviours. Thus, the results from the study could be used to train, coach and mentor HR managers and HR practitioners to promote preparation for the future of HRM, be self-led and be more engaged. In order to ensure a practical impact, training, coaching and mentoring should focus on how to be self-led, how to be engaged in the future world of work, how to improve HR's analytical skills and employment relations, as well as how to design future workspace.

Engagement related to improving employment relations is also essential. The critical connection between work engagement and self-leadership could help direct organisations toward improving, maintaining and refining HR managers' and HR practitioners' ability to lead themselves and be more engaged. This can be done by creating an awareness and providing training sessions on how to improve one's work engagement and self-leadership. These two abilities will assist HR with the successful transition into the future of work. In dealing with I4.0 challenges, the ability of HR practitioners to lead themselves and be engaged in their work will affect the future of HRM.

The cognitive component of work engagement, which is often interchangeable with the absorption dimension, is

characterised by being fully concentrated and happily engrossed in work, and feeling such as time flying when working. This relates to cognition (positive thought patterns) as part of self-leadership. Behavioural strategies such as self-reward, self-cueing, self-observation, self-punishment, self-goal setting, self-correcting feedback and practice should be encouraged to improve positive and desirable behaviours. Vigour, which relates to high levels of energy and mental resilience experienced, should be encouraged even in cases where performance in the future may be challenging. Dedication is characterised by strong involvement in one's work, which results in positive feelings about work, such as pride and inspiration. Human resources practitioners should be made aware of this quality to maintain or improve their dedication.

### Limitations, recommendations and future research

As with all studies, there are limitations to the present study. A limitation in this study is that it was cross-sectional in nature and can therefore not be generalised to all HR practitioners. The sample was comprised of members of a professional HR body in only one country. Therefore, it is suggested that professional HR bodies from other countries also be involved in a similar study. Additionally, researchers would be well served to consider research in different workplaces, such as tertiary institutions, private companies and government departments. Another limitation is that this study relied on only three factors (analytical skills, future workspace and employment relations) as part of the future of HRM. There is a need to investigate more future HRM factors such as technology readiness, agile leadership and future HRM competencies to form a holistic view of the future of HRM and how to prepare for it. Another limitation is that I4.0 was mentioned as a background scene for this article, and its role or impact in relation to self-leadership, work engagement and the future of HRM was not investigated.

It is recommended that organisations support, train and develop HR practitioners to be future-fit. Constant learning and upskilling are no longer differentiators, but rather necessities if HR practitioners want to keep themselves relevant in this changing landscape. Human resources practitioners, therefore, also have a responsibility to ensure that they are able to lead themselves, be engaged in their work and prepare for the future of HRM. The ability to communicate, connect and establish relationships is very important. With respect to self-leadership, their task motivation links with their work engagement, which is an indication of a positive motivational state.

A research idea is that future researchers can attempt to replicate or test the findings of this study longitudinally. Although further research can, of course, provide additional validity to the conclusions that have been drawn here, it is suggested that the next step should be a qualitative approach and Delphi technique to obtain rich data about HR practitioners being self-managed, engaged and prepared for

the future world of work. Line management, subordinates, peers and clients of HR practitioners can also be included in such a study to obtain a holistic view about HR practitioners as being self-led, engaged in their work and prepared for the future. As discussed in the above section, the respondents almost never agreed with the statements about self-leadership, the future of HRM and work engagement. This could be an indication that they did not see themselves as being self-led, engaged and ready for the future of HRM, with specific reference to their analytical skills, future workspace and employment relations. This needs further investigation by using a qualitative study, for example, to obtain rich data as to why respondents did not perceive themselves as being self-led, engaged in their work and future HRM-fit. Other studies can also be conducted to determine whether HR practitioners in different industries of South Africa and other countries also perceive themselves to not be self-led, engaged in their work or future-fit, with specific reference to their analytical skills, future workspace and employment relations.

Future research should examine the future of HRM in relation to other leadership styles, such as authentic leadership, agile leadership and leadership 4.0. Future research should also investigate other types of engagement, such as employee engagement, which focuses on the cognitive, affective and behavioural levels of a person. Future work should aim to better understand how the future of HRM interacts with leadership and engagement. In this study, the future HRM factors, namely analytical skills, future workspace and employment relations, were used. In further studies, other types of future HRM factors should be examined in terms of their relationship to self-leadership and work engagement. Self-leadership, work engagement and the future of HRM may positively impact I4.0, but this needs to be investigated scientifically. Overall, more research is needed to ensure that HRM will be relevant and add value in I4.0.

## Conclusion

This article aimed to bridge the gap in the literature by exploring whether self-leadership and work engagement influenced the future of HRM. This study provided evidence of the relationship between self-leadership, the future of HRM and work engagement. The article concluded by arguing that the role of work engagement and self-leadership is critical to our understanding of the future of HRM. Taken together, these results produced new knowledge to better prepare for the future of HRM. Further research needs to continue to examine the nexus between self-leadership, the future of HRM and work engagement. Organisations need to support, train and develop HR practitioners to be future-fit. With I4.0 at our doorstep, it is expected that this study will encourage researchers to conduct more research about the future of HRM.

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### Competing interests

The author declares that there is no conflict of interest.

## Author's contributions

Prof. Schultz was the sole contributor.

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## Data availability

The author confirms that the data supporting the findings of this study are available.

## Disclaimer

The views and opinions expressed in this article are those of the author and do not necessarily reflect the official policy or position of any affiliated agency of the author, and the publisher.

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