

HIGH-PERFORMANCE WORK PRACTICES (HPWPs) IN DETERMINING SUCCESS OF SOUTH AFRICAN COMPANIES: FACT OR FICTION?

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Abstract

Background: The aim of the research was to examine the application of HPWPs within South African companies. The study was undertaken due to a lack of empirical knowledge regarding the presence of HPWPs in South African companies.

Objectives and Methodology: A quantitative study, using an HPWP questionnaire developed by the University of Texas (USA), was used to gather the data via the CATI process. Exploratory factor analysis, Pearson's product-moment correlations and the Kruskal–Wallis one-way analysis of variance were used to analyse the data statistically.

Findings: The presence of HPWPs within South African companies is not significant, irrespective of age and size, and serious weaknesses exist in areas such as job design strategies, job and work characteristics, and the application of reward schemes. The findings show that a holistic approach to the use of HPWPs is required, failing which, companies will find themselves experiencing low productivity and low job commitment levels.

Contribution: A unique HPWPs scale for benchmarking South African companies is presented, which may be used to identify weaknesses and strengths, and allow companies to correct their weaknesses and capitalise on their strengths.

Key phrases:

Companies; competitiveness; high-performance work practices (HPWPs) and South Africa

1. INTRODUCTION

There is no doubt that in today's highly competitive marketplace the management of people is one of the primary keys to organisational success (Grobler & Wörnich 2016; Saridiakis 2013:1). Unfortunately, in the past, for a number of reasons – such as the constant struggle for recognition as an important strategic resource – too little attention has been paid to the effective management of human resources in South African organisations (Grobler, Wörnich, Carrell, Elbert & Hatfield 2011:3).

Awareness of the inadequacies of human resource management (HRM) emerged only when comparing local companies to the successes of organisations in other countries, where human resources are considered critical to the success of the company (Parry 2017).

For example, one only needs to look at the 2017/2018 Global Competitiveness Index Report (Schwab 2017:137). Of the 137 countries participating in the project, South Africa obtained an overall rating of 61 out of 137 countries. Countries are evaluated on 12 different pillars. Although South Africa still remains one of the most competitive countries in sub-Saharan Africa, and continues to receive excellent results in complex areas such as innovation (ranked 39), business sophistication (ranked 37), and financial market development (ranked 44), there are still a number of negative factors pertaining to the HRM environment that are worrying. These include labour market efficiency (ranked 93), and higher education and training (ranked 85) (Schwab 2017:268).

According to Marchington and Wilkinson (2012:4–5), HRM practices are central to improving the capability of an organisation, and thus its particular competitive advantage, enabling the organisation to compete more successfully than other companies for markets and profits in the industry and in the marketplace. This is known in the literature as the “resource-based view” (Barney 1991:99). When these HRM practices are aligned and clustered with the needs of internal and external customers, companies are more likely to succeed contributing collectively to the benefit of the country (Zeuch 2016). This holistic process, which consists of bundles of specific HRM practices, is known as high-performance work practices (HPWPs) or high-performance work systems (HPWSs) (Agarwal & Farndale 2017; Bello-Pintado 2015; Ivars & Martínez 2015; Jeong & Shin 2017; Topcic, Baum & Kabst 2016; Wu, Hoque, Bacon, Luser & Carlos 2015).

Studies found that HPWPs affect labour productivity, employee absenteeism, employee turnover as well as the financial well-being of organisations (Aguta & Balcioglu 2015; Armstrong & Taylor 2017; Buller & McEvoy 2012; Datta, Guthrie & Wright 2005:135–145; Guthrie, Flood, Liu & MacCurtain 2009:112–125; Hoque, Wass, Bacon & Jones 2017; Kehoe & Wright 2013; Melesse 2016; Messersmith, Patel, Lepak & Gould-Williams 2011:1105; Mohr & Zoghi 2008:275; Shin & Konrad 2017 and White & Bryson 2013).

Despite these views, other researchers have mixed views on whether a real relationship between HPWPs and organisational performance exists (Kaufman 2015:107). Some researchers, such as Michaelis, Wagner and Schweizer (2015:1035) indicate that for some organisations this is true, while for others it is not. For example, they suggest that it is true for large organisations that dominate the market, and as such, have economies of scale, which allow them to benefit from HPWPs (Michaelis *et al.* 2015:1035).

For some researchers, the link between HPWPs and the success of the organisation remains more or less a black box (Mihail & Kloutsiniotis 2016:424–438). Despite these views, Boxall and Macky (2009:963) and Boxall and Winterton (2015) indicate that HPWPs enhance the participation of employees in decisions about their work and consequently release untapped human potential, beneficial for the survival of the organisation. This view is shared by authors such as Posthuma, Campion, Masimova and Campion (2013:1184).

Against the above background, it is important to expand the investigation into this aspect within South African companies, as little research has been directed towards studying the different contextual environments that will influence the selection of the most appropriate HPWPs. Thus, gaining knowledge in this regard is important.

As is traditional with articles of this nature, this article is structured as follows: in the next section, a literature review, consisting of a definition of the concept of HPWP and a brief overview of the theory pertaining to HPWPs will be provided. Also included will be the objectives of the study. Following this, the research methodology will be discussed followed by the findings of the study. The final section of the article deals with the limitations, conclusions and possible future areas of research.

2. LITERATURE REVIEW

Defining the HPWP context

According to Punia and Garg (2012:509), no single definition of the HPWP concept exists in the literature. Based on the work of different authors in the field, Fu (2013:244) defines the concept of HPWP as follows:

An integrated system of HR practises that enhance employees' knowledge and skills. Strengthen their internal and external relationships, and also support organisational processes, routines, databases and systems in such a way that the firm's resources are created to gain a sustainable competitive advantage. Fu's (2013) definition reflects the views of numerous authors, and can thus be seen as a good summary of the concept as it covers the enhancement of employees' knowledge and skills and the improvement of their social skills with co-workers and the organisation, and contributes to the development of organisational capital, leading to organisational competitiveness.

Origins of HPWPs

Over the years, many efforts have been made to improve the contribution of the HR function towards organisational performance (Bae, Chuma, Kato, Kim & Ohashi 2011:2). A major breakthrough came with the elevation of the HR function to the strategic level of the organisation with the development of the strategic human resource management (SHRM) theory (Wright & Ulrich 2017:45–65). This theory dictates that, to make a contribution to organisational performance, individual HR practices need to be packaged or bundled in such a way as to realise the strategies pursued by the organisation (Campion, Fink, Ruggeberg, Carr, Phillips & Odman 2011:225–262). Wright and Boswell (2002:247) call this “parallelism”.

Gaining sophistication in this area has led to the development of the high-performance work practices (HPWPs) theory, also known as “innovative HR practices” (MacDuffie 1995:197), “high commitment practices” (Pheffer 1994:16), “progressive HR practices” (Kravetz 1988:17); “alternative work practices” or “flexible work practices” (Delaney & Godard 2002:395). This involves the bundling of HR practices to improve the human capital value of the organisation resulting in the motivation of employees to use their human, social and organisational assets in pursuit of the goals of the organisation (Yanadori & Jaarsveld 2014:50).

Classification of HPWPs

According to Becker and Gerhart (1996:779), HPWPs can be divided into two types of practices: firstly, alternative work practices, which consist of alternate job practices such as job enrichment, job rotation and quality circles, and secondly, high-commitment work practices, which consist of sophisticated training and development and behaviour-based appraisal systems. Thompson (2001:627), on the other hand, expanded on this classification by identifying three individual groups that he views as important, namely – high-involvement practices, such as semi-autonomous, problem-solving teams; HRM practices to build skills, such as formal recruitment, regular performance appraisal, training and development; and employee relations, building loyalty and trust amongst colleagues to strengthen the climate of cooperation.

A further classification, which has received much attention in the literature over the years, is that of Appelbaum, Bailey, Berg & Kalleberg (2000); Boselie, Dietz & Boon (2005:67). These authors classified the individual HRM practices into three clusters known as ability, motivation and opportunity- (AMO-) enhancing HR practices. According to Boselie (2010), people will perform well when they – are able to do so through training and development; are motivated to do so through evaluation and feedback; and have opportunities and support in the work environment through team participation and in decision-making. HRM practices built around this logic would realise these goals. Gill and Meyer (2013:509) see this as the “high road” to creating a competitive advantage for the organisation.

Application of HPWPs

The question that needs to be answered next is, how do HPWPs affect individual and organisational performance?

It is important to note that HPWPs act within the strategic framework of the organisation, as well as the characteristics of the organisation. It is thus largely context-based. Building high levels of human capital through attracting and retaining superior-performing individuals is the first step in the process. This can be affected by HRM practices such as recruitment and selection, training and skills-based pay. For the human capital to add value to the organisation, employees need to share their knowledge and create new knowledge to address the challenges facing the organisation. Thus, developing a knowledge-sharing culture, building trust between employees, and obtaining communication skills are essential

building blocks to develop. This can be supported by also providing group-based pay schemes, which will result in the development of social capital resources. The employees and teams developed through their social interaction could develop expert knowledge amongst themselves, known as “internal knowledge” (tacit knowledge) (Kacmar, Andrews, Van Rooy, Steilberg & Cerrone 2006:133). The interaction outside the organisation with clients and the observation of the competitors may lead to the development of external knowledge known as explicit knowledge (Boselie, Dietz & Boon 2005:67-94).

The knowledge process could involve three components, namely **exploitation**, where the re-use of existing knowledge takes place, **exploration**, where new knowledge is generated, and **transformation**, where the process of maintaining and reactivating existing knowledge takes place. The knowledge generated can then be integrated into the organisational knowledge (also known as ‘explicit knowledge’) through staff training and performance control, which will result in a person–organisation (P–O) fit (Kooij & Boon 2018:61).

The development of efficient and effective routines, databases and systems within the organisation is essential to realise the achievement of human and social capital goals. This knowledge is known as the organisational capital of the organisation (Fu 2013:244). Thus, the intangible assets of expert knowledge, internal or external relationships and the efficient routines, databases and systems will result in heightened individual and organisational performance (Fu 2013:255-257). This is known in literature as the “learning organisation” (London & Sessa 2015; Newbold & Pharoah 2009).

To achieve the goals for this study the following objectives were set:

- to determine the unidimensionality of the distinct HPWP factors (scales) through relevant statistical analysis;
- to examine the presence of HPWPs within South African companies; and
- to study the differences in the application of these practices in South African companies according to their size and age.

3. RESEARCH METHODOLOGY

Research design

As far as research in the area of HPWPs is concerned, the literature indicates that it typically involves either management responses or employee responses of an organisation (Carvalho & Chambel 2016:116-129; Harley, Sargent & Allen 2015:740-760).

The literature further indicates that research can either involve formal or informal HPWPs (Yanadori & Jaarsveld 2014:502). Informal HPWPs are those in which employees or managers participate, even though the organisation does not formally adopt those practices (Mohr & Zoghi 2008:275). Informal HPWPs are therefore initiatives by employees that exist outside the formal organisational HR policies, for example, using quality circle practices (Blaga & Jozsef 2014:1459), which do not exist in the organisation. The focus of this study was on formal HPWPs from a management perspective. The reason for this approach was that the researchers could not find any similar study of HPWPs having been undertaken within South African companies. The study was thus of an exploratory nature.

Measurement instrument

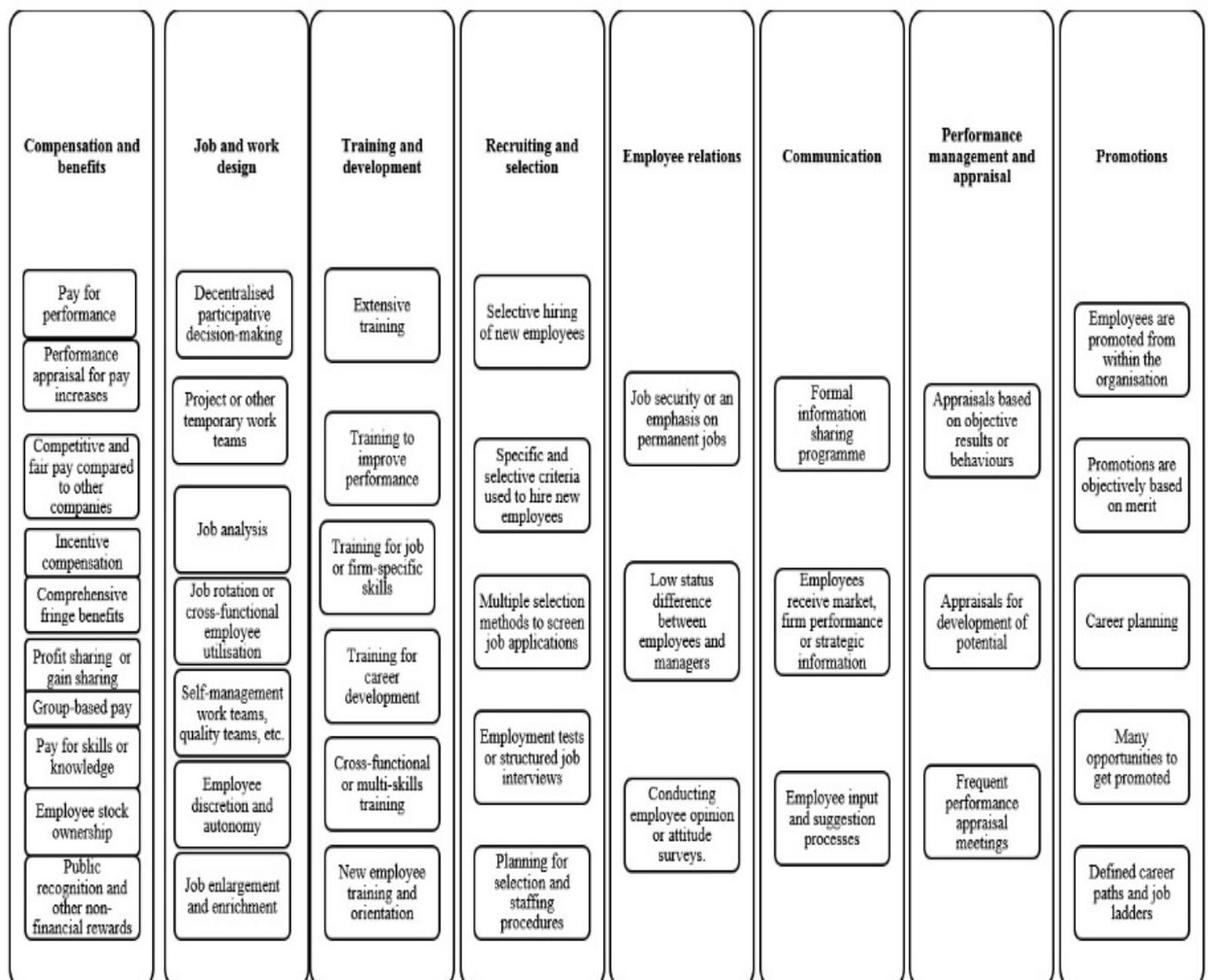
An HPWP questionnaire was developed based on a worldwide HPWPs literature search conducted by a team of academics at the University of Texas (USA) in El Paso (Posthuma *et al.* 2013:1184). The purpose of the questionnaire was to determine the state of HPWPs within the BRICS countries, that is, Brazil, Russia, India, China and South Africa. The questionnaire was used for the first time in this current project. In view of this, it was not possible to make exact comparisons with regard to previous studies. This project will enable future use of the instrument that was developed, in different settings. This article reports on the findings as far as they pertain to the South African leg of the project. The aim of the questionnaire was to establish to what extent HPWPs were being applied to staff within organisations. The questionnaire consisted of eight HR practices with sub-categories (see **FIGURE 1**). The categories were:

- compensation and benefits;
- job and work design;
- training and development;
- recruitment and selection;

- employee relations;
- communication;
- performance management and appraisal; and
- promotions.

Each of the HR practices contained a cluster of innovative activities (see **FIGURE 1**).

FIGURE 1: Categories of human resource management practices as reflected in the high-performance work systems (HPWS) survey as used in South Africa



Source: Posthuma *et al.* 2013

The questionnaire also included dimensions such as human, social and organisational capital, as well as issues related to low costs, innovation, market as well as operational and financial performance. Some of these aspects will be the focus of further articles. A number of biographical questions relating to the respondents were also included.

Sample drawn and response rate

A stratified (industry-based) random sample was used to identify the respondents. Data was collected from a number of industries, such as banking, insurance, textile, sugar, shoe manufacturing and cold drinks. The sampling frame was the Bureau van Dijk Orbis Financial Information System (SA) database (Van Dijk 2011). After eliminating all the companies with fewer than 100 employees, which resulted in a population of 260 companies, only those companies with 100 or more employees were selected for the survey. The reason for this selection was that companies with 100 or more employees could be assumed to have systematic HR programmes (Datta *et al.* 2005:138). A 60% stratified, random sample was drawn, which resulted in a sample size of 156 companies. After contacting the companies, 12 declined to participate in the survey, which resulted in an adjusted sample size of 144 companies. The major group in the sample was the manufacturing industry (65.8%) while the service/retail sector represented 17.7% of the respondents. The questionnaire was designed with a 5-point Likert-type scale ranging from “none or very few” to “all or nearly all” and it focuses on the extent to which the HPWPs are applied to the staff of an organisation (see **TABLE 1**).

TABLE 1: Measuring scale for survey

1	2	3	4	5
0–5%	6–25%	26–74%	75–94%	95–100%
None or very few	Few	Some	Many	All or nearly all

Source: Statistical scale applied to data

A total of 79 completed, usable questionnaires were recovered from a sample of 144 companies, representing a response rate of 54.8%. The survey was undertaken during 2014/2015. Although the response was small, this is not uncommon for this type of study (Abdul-Halim, EE, Ramayah & Ahmad 2014; Nientied & Shutina 2017). The data was collected using a computer-assisted telephone interviewing technique (CATI). To avoid

potential measurement error problems of single-source ratings of HR practices, as noted by Podsakoff, MacKenzie, Paine and Bachrach (2000:513-563), the data was collected from Human Resource Management as well as Financial and Marketing directors. The average mean age of the companies participating in the survey was 32.12 years (SD 23.101) and the average mean number of employees working in the companies was 1107.40 (SD 5681.064). The average mean staff turnover rate for the employees was 6.3504 per year (SD 6.21766).

4. EMPIRICAL RESULTS

The first goal of the study was to determine the unidimensionality of the distinct HPWPs factors (scales) through exploratory factor analysis.

Exploratory Factor Analysis

Due to the small sample size (fewer than 200), it was decided not to undertake a confirmatory factor analysis (CFA) as well. The first step in the exploratory factor analysis (EFA) was to determine whether the data was suitable for factor analysis. This was done by using the Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy. The results ranged between 0.613 and 0.881, which exceeded the recommended value of 0.6 (Hair, Black, Babin & Anderson 2010; Kaiser 1990). Providing further support that factor analysis is suitable for data analysis, Bartlett's test of sphericity was statistically significant ($p < .000$) for the 8 constructs representing 42 HPWP statements included in the questionnaire (Field 2013; Hair *et al.* 2010). Consequently, the data for the 42 high-performance work statements within the constructs were subjected to an EFA, to identify the underlying distinct factors (scales) reflected by the individual statements (Hair *et al.* 2010). Principal axis factoring was used as extraction method, and Promax as rotation method. A summary of the EFA is provided in **TABLE 2**. The total variance explained by the identified factors ranged between 31.2% and 82.6%.

Unidimensionality (the practice is represented by one factor) was confirmed for all HPWPs except for "Compensation and benefits" and "Job and work design" where the eigenvalue criterion (greater than 1) identified two factors in each case. It was decided to rename these factors as follows: Factor 1 – "Compensation and benefits", Factor 2 – "Reward schemes" for the original set of items representing "Compensation and benefits", and Factor 1 – "Job and work design characteristics" and Factor 2 – "Job design strategies" for the original set of

items representing “Job and work design”. The Cronbach’s alpha values were all above the recommended exploratory threshold of 0.6, except for the statement “Recognition rewards”, which measured 0.379. As it represented a specific important component within the HPWP bundle, it was decided to retain this statement for the study. As this study was exploratory, the use of a lower limit for Cronbach’s alphas (0.60) was acceptable (Hair *et al.* 2010). For the exploratory research, all the constructs thus showed internal consistency (reliability) except for the item mentioned earlier (re: recognitions rewards). A total of 10 factors were identified (see **TABLE 2**).

TABLE 2: Summary of exploratory factor analysis for high-performance work practices

Factor	Construct	Item	Item description	KMO & Bartlett test	Variance explained	Factor 1	Factor 2	Cronbach
F1	Compensation and benefits	Q1.1	Pay for performance	0.734 ($p < 0.001$)	42.80%	0.822		0.793
		Q1.2	Performance appraisal			0.872		
		Q1.3	Competitive fair pay			0.537		
		Q1.4	Incentive compensation			0.507		
		Q1.5	Fringe benefits			0.316		
		Q1.8	Pay for skills			0.505		
F2	Reward schemes	Q1.6	Profit sharing				0.837	0.684
		Q1.7	Group-based pay				0.503	
		Q1.9	Employee stock ownership				0.695	
		Q1.10	Recognition rewards				0.379	
F3	Job and work design characteristics	Q2.1	Decentralised decision-making	0.760 ($p < 0.001$)	57.90%	0.794		0.808
		Q2.2	Temporary work teams			0.8		
		Q2.3	Job analysis			0.304		
		Q2.4	Job rotation			0.505		
		Q2.5	Self-managed work teams			0.815		
F4	Job design strategies	Q2.6	Employee discretion and autonomy				0.546	0.792
		Q2.7	Job enlargement and enrichment				1.051	
F5	Training and development	Q3.1	Extensive training	.881 ($p < 0.001$)	59.10%	0.805		0.891
		Q3.2	Train performance			0.877		

Factor	Construct	Item	Item description	KMO & Bartlett test	Variance explained	Factor 1	Factor 2	Cronbach
		Q3.3	Training in firm-specific skills			0.817		
		Q3.4	Train career development			0.802		
		Q3.5	Cross-functional training			0.723		
		Q3.6	New employee training			0.544		
F6	Recruiting and selection	Q4.1	Selective hiring	.783 (p < 0.001)	62.60%	0.636		0.889
		Q4.2	Criteria to hire			0.822		
		Q4.3	Multiple selection methods			0.787		
		Q4.4	Employment tests			0.875		
		Q4.5	Planning for selection			0.814		
F7	Employee relations	Q5.1	Job security	.613 (p < 0.001)	31.20%	0.427		0.562
		Q5.2	Low status difference			0.593		
		Q5.3	Employee surveys			0.635		
F8	Communication	Q6.1	Information-sharing programme	0.622 (p < 0.001)	46.40%	0.45		0.687
		Q6.2	Market performance strategic info			0.795		
		Q6.3	Employee input			0.747		
F9	Performance management and appraisal	Q7.1	Objective result appraisals	0.760 (p < 0.001)	82.60%	0.867		0.934
		Q7.2	Appraisal development			0.935		
		Q7.3	Performance appraisal meetings			0.924		
F10	Promotions	Q8.1	Promoted from within	0.739 (p < 0.001)	55.70%	0.595		0.860
		Q8.2	Promotions on merit			0.706		
		Q8.3	Career planning			0.802		
		Q8.4	Promotion opportunities			0.795		
		Q8.5	Defined career paths			0.812		

Source: Primary data collected through a structured questionnaire

4.2 Inferential statistics

The first type of inferential statistics that was applied to the identified factors was the Pearson product-moment correlation. This was used to determine the correlations between the variables (factors). The results are indicated in **TABLE 3**.

TABLE 3: Inter-correlations matrix of the factors identified

Construct		Compensation and benefits	Reward schemes	Job and work design characteristics	Job design strategies	Training and development	Recruitment and selection	Employee relations	Communication	Performance management and appraisal	Promotion
Compensation and benefits	Pearson correlation	1	.487**	.675**	.551**	.639**	.507**	.327**	.452**	.641**	.584**
	sig.(2-tailed)		0,000	0,000	0,000	0,000	0,000	0,005	0,000	0,000	0,000
	N	77	75	75	75	76	76	72	76	77	75
Reward schemes	Pearson correlation		1	.491**	.460**	.363**	.277*	.328**	.422**	.416**	.419**
	N		76	75	75	76	76	71	76	76	74
	Pearson correlation			1	.527**	.539**	.490**	.288*	.527**	.461**	.477**
Job and work design characteristics	sig.(2-tailed)				0,000	0,000	0,000	0,014	0,000	0,000	0,000
	N			76	75	75	76	72	76	76	74
	Pearson correlation				1	.568**	.424**	.416**	.435**	.547**	.445**
Job design strategies	sig.(2-tailed)					0,000	0,000	0,000	0,000	0,000	0,000
	N				77	76	77	72	77	77	74
	Pearson correlation					1	.572**	.389**	.564**	.687**	.651**
Training and development	sig.(2-tailed)						0,000	0,001	0,000	0,000	0,000
	N					77	77	72	77	77	75
	Pearson correlation						1	.435**	.472**	.585**	.511**
Recruitment and selection	sig.(2-tailed)							0,000	0,000	0,000	0,000
	N						78	73	78	78	75
	Pearson correlation							1	.594**	.654**	.522**
Employee relations	sig.(2-tailed)								0,000	0,000	0,000
	N							73	73	73	71
	Pearson correlation								1	.652**	.652**
Communication	sig.(2-tailed)									0,000	0,000
	N								78	78	75

Construct		Compensation and benefits	Reward schemes	Job and work design characteristics	Job design strategies	Training and development	Recruitment and selection	Employee relations	Communication	Performance management and appraisal	Promotion
Performance management and appraisal	Pearson correlation									1	.611**
	sig.(2-tailed)										0,000
	N	77								79	75
Promotion	Pearson correlation										1
	sig.(2-tailed)										
	N										75

Source: Primary data collected through a structured questionnaire

Note: *correlation is significant at the $p < 0.05$ level (2-tailed)

**correlation is significant at the $p < 0.01$ level (2-tailed)

Interpretation

0–0.199	Very weak
0.2–0.399	Weak
0.4–0.599	Moderate
0.6–0.799	Strong

Source: Primary data collected through a structured question

From the table, it is clear that there was a dominance of positive correlations, which varied from weak to strong, which were all significant. For example, a strong correlation (.687) was found between performance management and training ($p < 0.01$ level), which makes sense, as training has a major influence on the performance of employees, while a weak correlation (.277) was found between selection and reward schemes ($p < 0.05$ level), which also makes sense, as these two aspects do not have anything directly in common with one another. At a deeper level, it is clear from **TABLE 3** that all the factors, although they are all each distinct in their own right, have some form of relationship, which varies in intensity, with a correlation coefficient of between 0.684 and 0.934. The means, medians and standard deviations for the factors are shown in **TABLE 4**.

TABLE 4: Descriptive statistics: Means, medians, standard deviations of factors

	Compensation and benefits	Reward schemes	Job and work design characteristics	Job design strategies	Training and development	Recruitment and selection	Employee relations	Communication	Performance management and appraisal	Promotions
Mean	3.2316	1.9507	2.6158	2.6688	3.4524	3.6795	3.0639	3.0556	3.2700	3.1307
Median	3.1667	1.7500	2.7000	3.0000	3.5000	3.8000	3.0000	3.3333	3.3333	3.2000
Std. deviation	1.03490	.96525	.98347	1.09608	1.07533	1.17034	.96491	1.07767	1.40520	1.01900
Skewness	-.346	.961	.062	.217	-.265	-.740	.079	-.144	-.239	-.159
Kurtosis	-.616	.221	-.802	-.612	-.997	-.328	-.583	-.520	-1.259	-.564
Minimum	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Maximum	5.00	4.75	4.80	5.00	5.00	5.00	5.00	5.00	5.00	5.00

Source: Primary data collected through a structured questionnaire

By analysing the mean values of the factors, it was clear that the most widely implemented factors within organisations were: recruitment and selection ($M=3.6795$; $SD=1.17$) followed by training and development ($M=3.4524$; $SD=1.07$), compensation and benefits ($M=3.2316$; $SD=1.03$), performance management and appraisal ($M=3.2700$; $SD=1.40$) and promotions ($M=3.1307$; $SD=1.01$), while the lowest impact factor appeared to be reward schemes ($M=1.9507$; $SD=.96$). Amongst the rest of the factors, the order of application within the organisations was: employee relations ($M=3.0639$; $SD=.96$), communication ($M=3.0556$; $SD=1.07$), job design strategies ($M=2.6688$; $SD=1.09$), and job and work design characteristics ($M=2.6158$; $SD=.98$). Other important statistical information included that the kurtosis coefficients fell within the range of $-.564$ to $.221$, which indicates that a normal distribution can be assumed, while similarly the skewness coefficients fell between $-.144$ and $.961$. A brief discussion of the individual factors follows.

Factor 1: Compensation and benefits

This factor, which focuses on the payment of salaries and benefits to the employees (also known as “direct and indirect payments”), plays an important role in focusing the efforts of the employees on exhibiting specific behaviours necessary to achieve the goals of the organisation (Cascio 2006:418–420). It thus has a direct effect on the motivation of employees. Some HPWPs identified within this factor were “Competitive and fair pay” and “Fringe benefits”.

Factor 2: Reward schemes

A further motivational factor was the presence of reward schemes within organisations (so-called “incentive pay schemes”) (Daft & Marcic 2013:338). These schemes are created to compensate those employees who really excel and play an important role in enabling the organisation to become competitive (Marchington & Wilkenson 2012:387). Typical HPWPs identified within this factor were “Employee stock ownership” and “Profit-sharing or gainsharing”.

Factor 3: Job and work design characteristics

This factor involves activities by the organisation to build a strong and healthy organisation. These activities are characterised by, amongst others, creating an organisational structure, which facilitates the building of sound relationships between employees and the organisation. This will ultimately have a positive effect on individual satisfaction and organisational performance (Anthony, Kacmar & Perrewe 2010:176-181). Typical HPWPs include “Job rotation”, “self-managed work teams”, “decentralised decision-making” and “temporary work teams”.

Factor 4: Job design strategies

This factor focuses specifically on the strategies used to develop jobs within the organisation, which will affect building the ability of employees to make a meaningful contribution to the organisation (Carbery & Cross 2013). Typical HPWPs include “employee discretions” and “autonomy”, “job enlargement” and “job enrichment”.

Factor 5: Training and development

This factor focuses on building organisational capacity through the strengthening of skills, knowledge and competencies of employees (Martin & Siebert 2016:224). This helps to improve the employees' ability to function effectively and efficiently within the organisation. Typical HPWPs include "extensive training", "training for job-specific or organisation-specific skills", and "training for career development".

Factor 6: Recruitment and selection

Recruiting employees with the necessary abilities and behaviours is important for organisational success. If done correctly, this could influence the productivity levels within the organisation and might lead to higher levels of profitability, which in turn might enhance organisational competitiveness (Mello 2011:336–344). Typical HPWPs include "selective hiring" of new employees, "specific and explicit criteria" for hiring new employees, and "multiple selection methods to screen employees".

Factor 7: Employee relations

Building healthy employee relations within an organisation is vital for its survival. This has a direct influence on the culture and climate within the organisation, and ultimately on organisational outcomes (De Janasz, Dowd & Schneider 2015:236-254). An important component within this relationship is that of trust (Reina & Reina 2015:2-4). If healthy trust exists within the organisation, it will influence the loyalty and commitment of the employees towards the organisation and their co-workers. Typical HPWPs include "job security", or an "emphasis on permanent jobs" and "low status difference" between employees and managers.

Factor 8: Communication

The communication factor plays a vital role as it involves the channels through which information is disseminated within the organisation (Martin & Whiting 2013:282). It directly influences information sharing, which is important if the workplace is to stay focused on the goals of the organisation (De Janasz *et al.* 2015:153). Good or proper communication can decrease uncertainty and clarify goals. Typical HPWPs include "formal information sharing programmes", "employee input" and "suggestion processes".

Factor 9: Performance management and appraisal

For organisations to reach their goals, it is important to measure the performance of their employees and, where necessary, to assist in the improvement of the employees' performance (Cunningham 2016:157-182). It is vital that workforce performance is aligned with the organisational strategies (Mello 2011:428). An important component here is the regular feedback provided to the workforce on their performance status (Mathis & Jackson 2003:296). Typical HPWPs include "appraisals for development" or "potential" and "appraisals based on objective results or behaviours".

Factor 10: Promotions

For employees to stay focused and motivated in achieving organisational goals, it is necessary to allow them to grow and move up to higher-level positions within the organisation (Mondy & Mondy 2014:372). Besides improving organisational performance, the availability of promotions also has a positive influence on employee turnover (Daft & Marcic 2013:334-335). Typical HPWPs include "promotions objectively based on merit", "many opportunities to get promoted", and "defined career paths" and "job ladders".

When looking at the mean values of the above factors (also see **TABLE 1**), it is important to remember that the mean values within category 3 mean that the factors are applicable to 'some' employees in the organisation (between 26 and 75%), while the values in category 2 represent applicability to 'few' employees (between 6 and 25%). It is thus fair to say that the participating organisations cannot be classified as being absolutely high-performance work organisations (HPWOs). Although using a different measuring instrument, similar findings were made in Ireland (Guthrie *et al.* 2009) as well as in Albania, another developing country (Nientied & Shutina 2017:12-20). The foregoing results thus answer the first two goals of the study. The question that arises next is whether the application of the HPWPs within the organisations varies according to their age and size.

5. SIGNIFICANCE OF VARIATIONS IN THE IMPLEMENTATION OF HPWPs ACCORDING TO AGE AND SIZE OF SOUTH AFRICAN COMPANIES

Having identified the HPWP factors (scales) as well as their prominence within companies, it was important to establish to what extent the age and size of the organisation influence the application of these practices. From the literature, it would appear that age has an influence on these practices (Oladapo & Onyeaso 2013; Van Geenhuizen & Reyes-Gonzalez 2007), whilst this also applies to the size of the organisation (Chadwick, Way, Kerr & Thacker 2013; Kroon, Van de Voorde & Timmers 2013:71-91; Wu *et al.* 2015:408-423). The findings appear in **TABLE 5**.

TABLE 5: Kruskal–Wallis one-way analysis of the variance by ranks

Construct	Testing business age differences		Testing employee size differences	
	Chi square	Sig value	Chi square	Sig value
Compensation and benefits	2.054	0.358	1.373	0.503
Reward schemes	7.217	0.027*	2.092	0.351
Job and work design characteristics	3.072	0.215	2.936	0.230
Job design strategies	0.229	0.892	2.470	0.291
Training and development	2.182	0.336	0.238	0.888
Recruitment and selection	2.028	0.363	2.439	0.295
Employee relations	4.218	0.121	0.717	0.699
Communication	4.744	0.093**	0.303	0.859
Performance management and appraisal	0.789	0.674	0.727	0.695
Promotions	3.535	0.171	2.434	0.296

Source: Primary data collected through a structured questionnaire

Note: *Significant at the 0.05 level of significance

**Significant at the 0.01 level of significance

To test for significant differences between the factors as far as the size (number of employees) and age of the companies (years of existence) are concerned, the Kruskal-Wallis one-way analysis of variance ranks test was used, due to the small number of companies in each age and size category. For the size of the companies, the following categories were used; fewer than 200 employees (N=29), 201 to 499 employees (N=30), and 500 and more employees (N=20). For the age of the companies, the following categories were used: 0 to 20 years (N=32), 21 to 30 years (N=18), and 31 years and older (N=27) and missing data (2). The results indicate that, at the 5% level of significance, no statistically significant difference existed between the three employee groups in relation to each of the HPWP factors. Furthermore, with regard to the age of the companies, no statistically significant differences between the three company age groups existed in terms of eight of the HPWP factors. However, with regard to the "Reward schemes" factor, a statistically significant difference existed between the company age groups. The mean ranks indicate that, at the 5% level of significance, the young companies (20 years or younger) were more inclined to report that this practice applied to more employees (mean rank=45.63) than the companies that were older than 30 years (mean rank=35.33). The reason for this could perhaps be that the younger companies were still finding themselves in a growth phase and thus needed to motivate those employees who excelled at their work and contributed to the growth of the company. In addition, at the 10% level of significance, with regard to communication, a statistically significant difference existed between the company age groups. The mean ranks indicate that the older companies (30 years or older) tended not to have these communication practices in place for many employees (mean rank=31.74) versus the two younger company age groups (mean ranks of 40.61 and 44.22 respectively). As mentioned earlier, the younger companies were perhaps experiencing a growth phase and proper communication between all employees was important in order to enable the employees to focus their energy on the goals of the organisation. On the other hand, in the case of older companies, as they reached maturity, they became more complacent and breakdowns in this area started to appear with them developing a bureaucratic structure. This could perhaps be linked to the lower presence of job and work design characteristics, as indicated earlier in the findings. The foregoing discussion thus answers the third and last goal of the study.

6. SUMMARY OF FINDINGS

The primary purpose of this research was to establish the application of HPWPs within South African companies. There is no doubt that as a developing country, South Africa needs to become more competitive to other countries as indicated in the latest (2017/2018) Global Competitive Index Report. This will create greater wealth and many more jobs for the citizens of the country. The foundation of this whole process is the people of South Africa. The literature indicates that by applying high-performance work practices (HPWPs), which incorporate a range of HRM practices, this is possible. Through a detailed analysis, the findings of the study indicate that although there was a presence of HPWPs within South African companies at the time of this research, the application of these practices appeared to be of a less sophisticated and intense nature. If significant success is to be achieved, a serious commitment from both employees and managers, including HRM managers, is required. In contrast to the findings reported in previous studies, the results of this study also indicate that, at the time of the research, the size and age of South African companies did not have any significant influence on the application of HPWPs. Only in the areas of reward schemes and the use of communication practices did the younger companies appear to apply these practices to a greater significant group of employees than the older companies did. A number of challenges therefore exist for South African companies if South African is to become a competitive nation.

7. LIMITATIONS AND FUTURE RESEARCH

This study had a number of limitations.

The sample used in this study was relatively small, as it only represented 79 companies from various industries. It is recommended that a more in-depth study be undertaken within specific industries to determine the role of HPWPs within these industries. Furthermore, the sample only focused on companies in the private sector. Since the public sector plays a pivotal role in creating the infrastructure within a country, the role of HPWPs should also be investigated in this sector, as it can be expected that the use of HPWPs will be different in profit, non-profit and public organisations. As mentioned earlier, two broad approaches to research are followed in the HPWP field, namely eliciting the views of management and eliciting the views of employees. There is a further dimension mentioned in the literature, namely that between formal and informal HPWPs. It might also be interesting to investigate

whether these HPWP's differ according to the life cycle of the organisation. A further area of investigation of interest may be to establish whether these practices differ between management and non-management employees. It is therefore recommended that the scope of the research be expanded to include all these variables.

8. CONCLUSION

Company success is influenced by the presence of HPWPs. From the organisation's side, it requires the creation of HRM practices, structures and processes, while from the employees' side it requires them to improve their knowledge and skills, greater involvement and commitment to realise the achievement of the organisational goals.

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