

High-Performance Work Systems in the Australian Higher Education Sector: A Critical Review and Future Research Agenda

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Abstract

The advocates of the configurational perspective view high-performance work systems (HPWS) as a complementary bundle of strategically driven and contextually specified human resource management practices that leads to employee and organisational performance through positive attitudinal outcomes. A study of the contemporary context could better configure the HPWS bundle for any industry undergoing significant transitions. Australia's higher education (HE) sector has observed significant changes since 2009 that have potentially redefined how human resource (HR) management practices interact and counteract within the system. No study to date has explored these changes and their impact on the HPWS configurations in the Australian HE industry. This study explores the changes in the Australian HE sector in recent years and identifies their strategic HR implications through a systematic review of the literature. The result will benefit the key decision-makers to configure the bundle of HPWS by confirming the external and internal fit within the transitional context of the Australian HE sector. Future researchers can use the proposed framework to design empirical studies in similar contexts.

Keywords: HPWS, Australian Higher Education Sector, Strategic Human Resource Management, Systematic Literature Review, External and Internal Fit, Context.

1. Introduction

High-Performance Work Systems (HPWS) is a popular term across the academic fields of human resource management, industrial or employment relations, organizational behavior and operations management. Government ministries, think tanks, Human Resource (HR), professional associations, trade unions and management consultants widely use the HPWS frame work (Zacharatos et al., 2005). HPWS in any job environment demands a well-designed system that ensures engaged employees who are intellectually and emotionally capable of producing strategic outcomes

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(Zacharatos et al., 2005). Research has shown positive relationships between HPWS, HR outcomes and organizational performance (Zacharatos et al., 2005). HPWS is now viewed as an integrated system of HR activities, where employees are interconnected through empowerment, motivation, and shared values, and they work together to achieve personal, group and organizational outcomes in a particular context (Boxall & Macky, 2009).

To accomplish these desired outcomes, it is essential to understand the dynamics of internal and external strategic fits between different HR Management practices within its context (Boxal, 2012; Boxall & Macky, 2009; Budhwar & Debrah, 2001; Newell & Scarbrough, 2003). Many extant HPWS literature has explored the importance of internal and external contexts in selecting the strategically aligned bundle of human resource management practices leading to performance (Humphrey, Nahrgang, & Morgeson, 2007; Khan, 2013, 2015; Mittal, 2015). Even the best set of HR and operational practices can be proven counterproductive in a changing context. Therefore, a periodic and systematic study of the contextual transitions in the industry has been recommended for the HR practitioners to appropriately configure HPWS for a specific sector (Khan, 2013, 2015).

Several authors have focused on exploring the uniqueness of context to advance SHRM research, where the influence of HPWS on organizational performance varies (Combs, Liu, Hall, & Ketchen, 2006; Derely, 1998). Furthermore, industry context has been suggested as a potentially significant moderator that deserves attention (Combs, Liu, Hall, & Ketchen, 2006; Batt, 2002; Datta, Guthrie & Wright, 2005). Boxall and Macky (2009) emphasised the importance of understanding contextual differences in service industries due to the wide range of strategic choices available (e.g., mass service vs. professional service) within the same industry. The service industry could gain maximum benefit from HPWS instead of the manufacturing sector since employees in the service industry usually have more discretion over their work (Rosenthal, Hill & Peccei, 1997). Moreover, the effects of HPWS on employee behaviour directly influences the quality of services, as service industry employees maintain close contact with customers (Batt, 2002).

The higher education (HE) sector is one of Australia's most economically significant service industries that could use a contextually configured HPWS framework to attain sustainable competitive advantage in a rather dynamic global business environment. This study responds to the call for qualitative HPWS research to propose an updated and customized bundle of HR and managerial practices for a unique and unexplored context like the Australian HE sector. Our findings will guide future researchers to gather empirical evidence in similar contexts.

2. The Significance of Studying HPWS in the Australian HE Sector

The Australian HE sector underwent significant reformative changes in the new millennium. Along with many other western economies, Australia gradually moves from an industrial economy to a knowledge-based economy. This trend elicits a further expansion of the tertiary education system, where the increasingly diverged student body and HE providers bring in new challenges to the sector (Goedegebuure & Schoen, 2014). Moreover, the rapid changes in technology and government policy (fund cut and increased quality assurance requirements) influence all aspects of the Australian HE industry and value delivery to the key stakeholders (Marginson, 2013).

Under the current transitional stage, the Australian HE sector seems to be an interesting context to study HPWS. According to MacDuffie (1995), innovative HR practices, i.e., HPWS, may contribute to economic performance subject to the fulfilment of the following three conditions: (1) employees possess knowledge and skills that managers often lack; (2) employees are motivated to apply these skill and knowledge through discretionary effort; and (3) achievement of firm's business and production strategy depends on such discretionary effort. Australian HE sector essentially accommodates all these conditions.

The economic significance of this sector in Australia is considerable as well. According to the latest studies, this sector directly employs more than 120,000 staff and supports education to over one million students, contributing around \$25 billion to the Australian economy (Deloitte Access Economics, 2015). International students and their visitors contribute \$17.1 billion to Australian GDP in 2014-15, and the Australian HE sector attracts the lion's share of these international students. Professional, Scientific and Technical Services (\$735 million), Finance (\$603 million), Non-residential Property Operators and Realtors (\$427 million) and Employment, Travel Agencies and Other Administration Services (\$345 million) have been identified as the indirect beneficiaries from international students in Australia (Deloitte Access Economics, 2016).

Despite the economic significance of this sector, there is still no evidence of HPWS studies in the higher education setting in Australia. HPWS generally entails high skills of employees who have discretion and opportunity to use their skills in collaboration with other workers and an incentive structure to enhance employee motivation and commitment (Batt, 2002). The education sector fits the typical profile of a sector that may benefit from a carefully configured HPWS. HPWS commonly includes

strategically driven HR practices such as systematic selection, incentive pay, profit sharing, the use of job analysis and redesign, information sharing, empowering leadership style, employee autonomy, reduced status distinction, performance appraisal, teamwork, continuous training and development, opportunities for internal promotion, management development and so forth (Hartog & Verborg, 2004; Khan, 2013; Way et al., 2002). These classic compositions of HPWS may not be successfully operationalized or linked to produce desired HR outcomes in the Australian education sector facing counteracting strategic goals in the contemporary business environment. For example, well-intended continuous training and development, teamwork and information sharing can be viewed as an excessive workload that causes occupational stress and burnout. Therefore, a strategically aligned and contextually specified configuration of HPWS for the sector warrants exploration and understanding of this context at the contemporary, transitional stage.

To address the persisting gap in the HPWS literature, this study aims to explore the context of the Australian HE sector over the past ten years through a critical review of HPWS literature and HE reports. Furthermore, the study will investigate the black box of HR that connects the contextually specified configuration of HR and operational practices to the desired employee outcomes in this sector to propose a customized HPWS framework for further empirical studies.

The paper is structured in four major sections. First, the methodology of the research has been outlined. Second, the key findings from the systematic search and critical review of literature have been presented. Third, the implications of the significant findings have been discussed, and finally, the conclusion and scope for future research have been outlined.

3. Methodology

HPWS studies have predominantly applied various quantitative research methods and tools such as correlational, cross-sectional, regression, factor analysis, multi-level analysis, Structural Equation Modelling (SEM), and ANOVA using LISREL, SPSS and AMOS. However, the growing application of the configurational approach and divergence arguments instead of the universalistic or convergence approach calls for more in-depth qualitative studies to verify the strategic fit of HPWS composition in a selected context. The proposed study plans to investigate what and how the type of questions that calls for the application of a qualitative research design, according to Yin (2012), to gain a deeper understanding and holistic view of the current HPWS configuration in the Australian HE sector. In recent years, systematic literature review is gaining popularity in business

studies and management science (Kerañen et al., 2012; Mainella et al., 2014). Since no research on HPWS has covered the Australian HE sector to date, acritical review of literature has been used to propose an HPWS framework based on emerging issues and challenges faced by this sector. We have used three extensive databases and VOS viewer software to conduct a systematic search and critical review of literature for the study. The remaining segments of the methodology section outline the search, selection and analysis of the articles that were finally used as the source data for discussion.

3.1 Search and Selection of Articles:

The Web of Science, Scopus and EBSCO were used to search peer-reviewed academic articles. These databases cover many peer-reviewed journals, conference proceedings and edited books in economics and management sciences (Anees-ur-Rehman, Wong, & Hossain, 2016). Different combinations of three keywords have been used separately to search for peer-reviewed journal articles, notes, reviews, editorial, conference proceedings, edited book chapters, government-funded or authorized reports and documents through the selected databases from October 2017 to January 2018 (Table 1). Though the concept of strategic human resource management and HR best practices were shaping the HPWS construct since early 1980s, the exact term (i.e., HPWS) was not essentially used in all relevant literature. Therefore, A critical review of HR literature from 1980 to 2000 has been used to study the early stages of evolution of HPWS concept. For a systematic literature review, the time range was selected from 2001 till date (which is the 31st of January 2018) with special consideration to the journal articles in the search engines. The following table provides a summary of 128 articles and its categories.

Table 1: Selected HPWS Literature (2001-2018)

Reference categories	Frequencies
Research articles	123
Conference proceedings	2
Academy of Management Annual meeting forum	3

Note: Discipline: Educational research, management, operations research/management science, business finance, business, industrial relations labor and psychology

The keywords used for the search are high-performance work systems or HPWS, Australia and the higher education industry. After the elimination of the duplication, we found 761 HPWS literature. Only 128 of this Literature were considered relevant to the field of management and business. However, none of this literature has studied HPWS in the context of the education sector in Australia, which indicates a literature gap.

Two authors were engaged in extracting the relevant information from the articles and recording them on a spreadsheet at this stage; the information recorded includes but are not limited to the author's name, the title of the article or report, year, source title, volume, issue, page count and number, ranking of the journal (publishers' name in case of a report or document), citation profile, an affiliation of the publication, authors' affiliations, abstracts (where applicable), keywords used by the authors, document type, database sources, and the web source. The spreadsheet records were then crosschecked individually by the authors to correct anomalies and duplications and apply further exclusions to be used as a complete set of information for the analysis. The criteria used for exclusions are incomplete information or document and relevance to the scope of current research. The authors discussed and agreed on the articles and documents' relevance, clarity, and reliability and selected them for the analysis. This procedure is considered standard in review articles (e.g., Anees-ur-Rehman, Wong, & Hossain, 2016; Dahlander and Gann, 2010).

3.2 Method of Analysis:

A critical review of literature was used to explore the evolution of HPWS concept. For the systematic search of literature from 2001-2018, we also used VOS viewer software to identify the actual cluster of the research area. The VOS viewer software identifies the critical areas in the HPWS research from 2001 to 2018. The Scopus, web of science and Ebsco have searched 1286 articles. Among these 1286 articles, 761 articles were related to the concept of HPWS (i.e. high involvement work system, performance management system, performance commitment, performance, performance management system). The next round of the filtering process included extracting the core 128 articles that are purely focused on HPWS literature based on the web search database engines mentioned earlier. The VOS viewer software is an intervention tool that helps to extract the essential items, themes and core critical words from the databases that this study used. VOS viewer has used 761 articles to provide a graphical presentation, which predominantly includes scholarly articles. The main advantage of VOS analysis is that it has a 'non-intrusive nature, using the literature generated in a scientific or non-scientific field to identify and visualize knowledge structures (García-Lillo et al., 2016). Moreover, NVivo was used to identify the key HPWS related themes from the Australian HE sector reports (see Figure 3).

4. Findings and Analysis

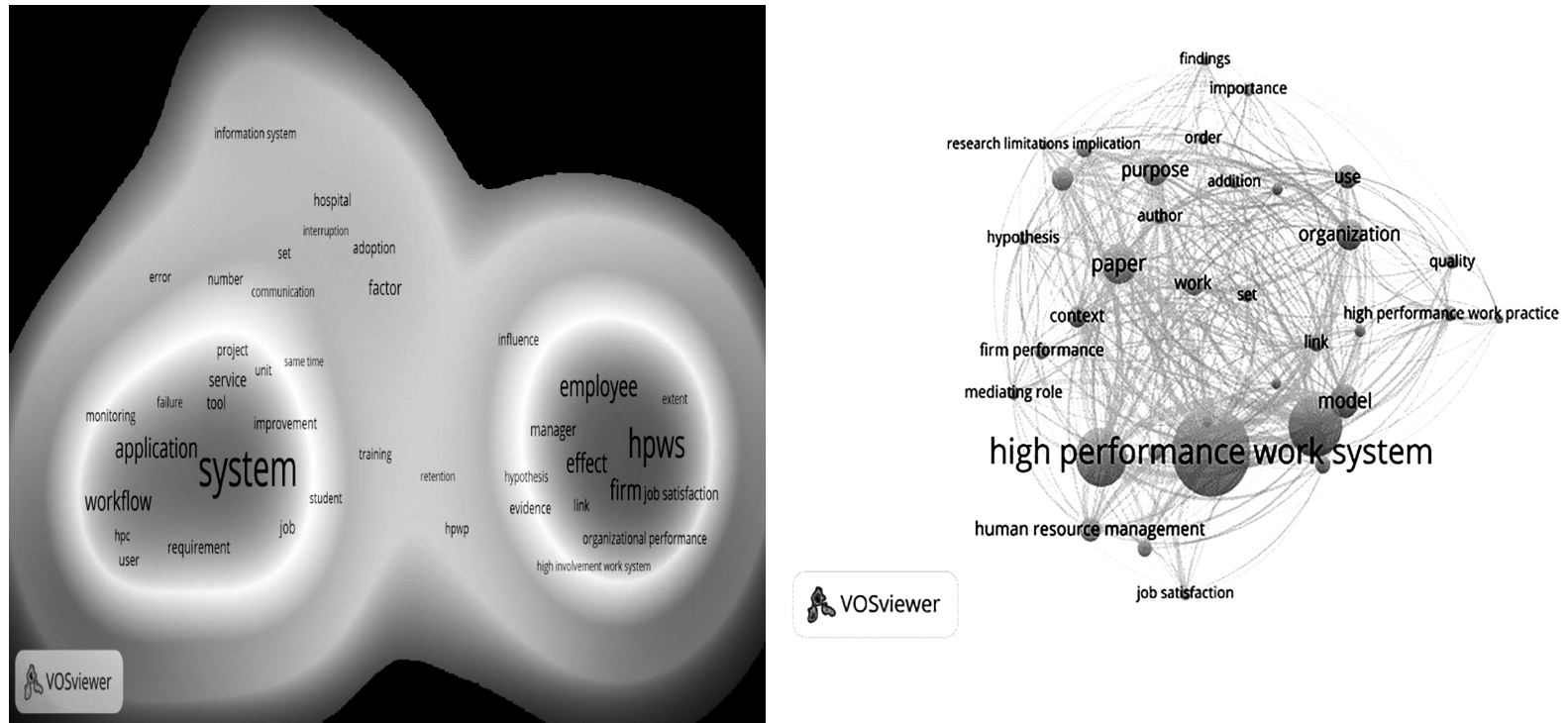
This section has been organized in two major parts: (1) Evolution of the HPWS Concept, and (2) Transitional Context of Australian HE Sector.

4.1 Evolution of the HPWS Concept

The study by Posthumam et al. (2013) refers to the human resource as 'architecture' that includes four different levels such as principles, policies, practices and products. This four-level of human resources establishes an organization's vision, mission, values, strategies, tactics, and competencies. These strategic HR systems that enhance employee competencies, commitment and productivity are often called 'high-performance work systems' (Appelbaum, Bailey, Berg and Kalleberg, 2000; Dutta, Guthire and Wright, 2005). Selection, training, appraisal and reward are the four commonly used contents of HPWS (Posthuma et al., 2013). Ichiniowski, Shaw and Prensushi (1997) identified six high-performance work practices (HPWP): incentive pay, recruiting and selection, teamwork, employment security, flexible job assignment and labor relation. Comparably, Wright and Boswell (2002) ascertained a bundle of six HPWP that includes selection, training and development, recruitment, compensation, performance management, participation, and work/design.

Figure 1 shows two dominant clusters of HPWS research. The green cluster represents the service and manufacturing sectors covered by HPWS literature. The red cluster identifies a research trend linking HPWS to employee job satisfaction, commitment, retention, and organizational performance. The red cluster also highlights the human resource management (HRM) discipline, where researchers have usually conducted quantitative research in the service sector. The red cluster has gained academic recognition due to its high impact. One of the main contributions of this research is that it focuses on the systematic search and critical review of HPWS related literature. This research design provides a precise instrument to identify new directions within the Management, HRM research, and prevailing paradigms, which can be highly useful for future management, education, behavioral science, and business discipline researchers. The following sections chronologically explore the HPWS research paradigm for future direction. Four major time frames have been identified to structure the discussion in this section.

Figure 1: The key themes, discipline and industries covered in the HPWS literature



Source: Intellectual structures of the HPWS discipline; visualization performed using VOS viewer© – map created without applying any normalization.

4.1.1 The early stages of development (1900-1970):

Performance-based management practices have been advocated in the form of best practices by the scientific management community during the 1900s (Parks, 1995). Taylor and his followers mainly focused on finding best practices driven toward productivity, as productivity was the only regular performance outcome of that time (Cappelli & Newmark, 2001). Later, behavioral scientists redirected the focus of this best practice trend towards finding the Industrial Relation practices that lead to increased job satisfaction and motivation, and eventually employee performance. Herzberg's (1966) and Hackman and Oldham (1980) are examples of the above trend. From the 1960s, research was directed towards finding the best HR practices for improving employee motivation and performance (Kling, 1995; Parks, 1995).

4.1.2 The early conceptualization stages (1970-1990):

The concept of high-performance work systems (HPWS) emerged from the human resource management (HRM) discipline with the initiation of Japanese high-quality production systems in the 1970s through to 1980s (Boxall & Macky, 2007). These production systems initially included quality circles, just-in-time inventory and delivery, and a flexible team-based production (Boxall & Macky, 2007; Bartram, 2005; Boxall & Purcell, 2003). In the early 1980s, the strategic human resource management concept (SHRM) became popular. This perspective linked HR strategies to business strategy as the primary tool for gaining competitive advantage (Schuler & Jackson, 1987; Schuler & MacMillan, 1984). Since then, several HR practices have been used to observe causal relationships between individual HR practices and organizational outcomes (Huselid & Becker, 1996). Since 1986, a comprehensive list of HR best practices was tested in the U.S. context by Delaney, Lewin and Ichniowski. Their research findings were published in 1989. However, the term 'HPWS' was not widely used (e.g., Delaney, Lewin, & Ichniowski, 1989).

4.1.3 Conceptualization stage (1990-2000):

In 1990, the Bipartisan Commission on the Skills of the American Workforce, led by two former Secretaries of the U.S. Department of Labor, coined the term 'High-Performance Work Organization' in 'America's Choice: High Skills or Low Wages!'. The term 'High-Performance Work Practices (HPWP)' was first used in a study published by the U.S. Department of Labor in 1993, and it has been used ever since (Huselid & Becker, 1995; U.S. Department of Labor, 1993). Later, HRM practices were linked to the performance of U.S. manufacturing industries (Ichniowski & Shaw, 1999).

Parks (1995) pointed out that the contents of a high-performance workplace vary across writers, academic disciplines, companies, production plants and countries. The original list of HPWPs developed in the USA was further extended and customized for use in specific strategic contexts (like the service industry) in different studies during this period. However, these studies mostly covered Anglo cluster countries or western developed economies. Researchers started to critically contest the idea of best practices inherent in the early conceptualization of HPWP with a more logical best fit perspective. A significant shift in the theoretical perspective from resource-based view (RBV) towards institutional or new institutional theory in the HPWS literature was observed at the end of this period (Paauwe & Boselie, 2003). In line with this shift, Storey (1995) defined HRM as a distinctive approach to employment management that seeks to achieve competitive advantage through the strategic deployment of a highly committed and capable workforce, using an integrated array of cultural, structural and personnel techniques.

The HPWS concept primarily included comprehensive employee recruitment and selection procedures, incentive compensation, performance management systems and extensive employee involvement and training at this stage (Delery, Gupta & Shaw, 1997; Huselid & Becker, 1995; Jones & Wright, 1992). A consistent stream of contributions to the area of the HPWS extended this concept beyond traditional HR activities by linking them to performance (Huselid & Becker, 1995; Jones & Wright, 1992). Table 2 highlights the seminal contributions that shaped the HPWS concept from 1990 till date.

4.1.4 The entire formation of the HPWS concept (2000-2018):

From 2000 onward, the configurational perspective and divergence view gained popularity in HPWS literature instead of the universalist and convergence perspectives. SHRM literature now defines HPWS as an inimitable bundle of HR practices with unique internal and external fit to the organization that improves organizational outcomes through a causal chain or a somewhat mysterious black box. The foundation of the contemporary HPWS framework inherently triangulates RBV and new institutionalism perspectives with due acknowledgement of both 'inside out' and 'outside in' view of strategic direction and adaptation of HR practices in an organization. Boxall and Macky (2009: 9) pointed out the importance of considering the diverse range of strategic focus and associated work practices within the service industry and units, contending that "between the extremes of mass and professional services, there are industries and market segments in which firms compete through quality as well as costs, and the

potential exists for more empowering forms of management that enhance customer satisfaction and retention".

The operational definition of HPWS was still considerably varied in this period. Harley (2005) defined HPWS as the systematic use of mutually reinforcing human resource management, which has an emphasis on selecting the right employees, developing their skills, organizing work so that employees have the right to solve problems creatively and use the reward system effectively to motivate employees to achieve organizational goals. Harley et al. (2007) study showed that HR practices are positively associated with autonomy, affective commitment and job satisfaction but negatively associated with turnover intentions, psychological strain and work effort. Similar findings in this period instigated further investigations in uncovering the so-called black box of HPWS-performance link.

Gulzar, Moon, Attiq and Azam (2014) explained the ‘black box’ of HPWS by understanding and determining the effect of HPWS on employees’ counterproductive psychological outcomes and their impact on employees’ behavior (e.g., job satisfaction, job-related stressors, negative thoughts and inconsistency towards positive thinking). Similarly, Messersmith, Patel, Lepak (2011) and Gould-Williams (2011) have also suggested unlocking the black box of HPWS by understanding job satisfaction, commitment and empowerment as mediating variables in the HPWS-performance link. The adverse effects of counterproductive HR practices have been associated with employee turnover and burnout in various studies (Flinkman et al., 2010; Chau et al., 2009; Jourdain and Chenevert, 2010).

Table 2: HPWS studies from 1990 to 2018

Year	Concepts of HPWS	Seminal HPWS paper
1990 to 2000	The link between HPWS/ HPWP and organizational performance	Jones & Wright (1992)
	The link between HPWS/ HPWP and employee performance	Hughlied et al. (1993)
	Best practice versus best-fit debate	Huselid & Becker, (1995)
	Convergence versus divergence	
	Importance of context in HPWS study	Ichniowski & Shaw, (1999)
	Resource-based view	Appelbaum, Bailey, Berg, & Kalleberg (2000)
	Focused on quantitative research design	
2001 to 2010	Strategic human resource management	Paauwe & Boselie (2003)
	Internal and external fit	
	HR strength/ climate	Bowen & Ostroff (2004)
	HR black box	

Year	Concepts of HPWS	Seminal HPWS paper
	HR causal chain	Boxall & Macky (2009)
	Perceived HPWS/employee attribution	
	Institutionalism and new institutionalism	
	Introduction of mixed-method research design	
2010 to 2018	Importance of studying HPWS in developing country context	Boxall, Ang & Bartram (2011)
	Use of case study research design	Boxall (2012)
	Adaption of HPWS as a bundle	Zhang, Di Fan et al. (2014)
	Increased focus on the implication on HR practitioners	Huselid & Becker (2017)
	Extension of empirical studies in different cultural and industrial contexts	Argyris (2017)
	Cross-cultural and comparative studies	Safavi & Karatepe (2018)
	Increase of meta-analysis and multi-level study	
Beyond 2018	Emerging trends in HPWS research	Our study uses
	Systematic literature review (SLR) for a comprehensive model	systematic search and critical review
	Scope for more theoretical integration/tri-angulation with other contemporary concepts such as sustainable HRD and decent work	of literature to propose a comprehensive HPWS
	A more comparative and longitudinal study.	framework for the Australian HE context.

4.2 Transitional Context of Australian HE Sector:

Unlike many other sectors, the performance of higher education institutions includes both immediate and long term complex mix of outcomes influencing the institutional factors at the industrial and national level. This section explores the HR challenges the Australian HE sector faces due to the recent pervasive transformations in the external environment. In line with the institutional isomorphism concept introduced by DiMaggio & Powell (1983) within the theoretical precincts of institutional perspective (see Meyer & Rowan, 1977; Paauwe & Boselie, 2003), we have presented our findings under three major themes in this segment. These three themes are coercive, normative and mimetic forces.

The isomorphism theory within the institutional paradigm has been used to generalise the impact of the institutional changes within the Australian HE sector for this study. We acknowledge that individual institutions within this sector may develop their unique strategy to deal with the challenges. Nonetheless, the recent transitions imposed by external factors have posed

some common challenges to all HE institutions in Australia, leading to some isomorphic changes in the HR policy and practices within the industry. The analysis in this segment is limited to the common HR challenges faced by all Australian HE Institutions.

4.2.1 Coercive forces

Coercive pressures are often embedded in the regulatory process and may formally or informally be enforced in various proportions on different organisations (DiMaggio & Powell, 1983; Meyer & Rowan, 1977; Paauwe & Boselie, 2003). HR managers and agents within a sector may face these coercive forces at the international (e.g., ILO conventions), national (e.g., government policy and regulations on wage or employment) and industrial level (e.g., sector-specific regulatory or policy changes) (Paauwe & Boselie, 2003; Tsai 2010).

The widespread economic and public sector reform in government and especially the concepts of competition and contestability significantly impacted Australian universities (Storey and Armstrong 2003). Table 3 highlights the four significant periods of reform and expansion that took place in this sector. It is visible that considerable expansions took place in the Australian university sector after the late 1990s. Successive governments had to take different measures to monitor the ever-widening range of activities and sector performance (Lokuwaduge & Armstrong, 2014; Middlehurst, 2004; Swansson et al., 2005). Out of the 170 higher education providers in Australia, 43 were operating in mid-2016 as universities, including one specialist university and two overseas universities. The pervasive reformative measures have been transformed into coercive pressure on Australian HE institutes. These regulations impact all aspects of HRM, including job description and specifications, recruitment and selection, training and development, employee relations, conflict management, teamwork, performance management and reward administration.

Table 3: The policy reforms in the Australian HE sector (1945-2018)

Years	Policy reforms and critical focus areas
Phase 1 (1945-1960)	Establishment and building of new Universities, i.e., infrastructure development
Phase 2 (1960-1988)	Growth of binary system of universities and degree-granting colleges of advanced education and abolition of university fees.
Phase 3 (1988-2008)	Removal of the binary divide and introduction of HECS by Minister John Dawkins (Dawkins reforms).
Phase 4 (2008-2018)	2008: Bradley Review 2012: Demand-driven deregulations

Years	Policy reforms and critical focus areas
	Outcomes: The shift in regulatory paradigm from structure to quality The uncapping of undergraduate places TEQSA Role of technology in learning and teaching Multi-campus coordination, enquiry based learning, blended learning programs.

Source: Compiled from various government and HE industry reports. The references are included in the list.

4.2.2 Normative forces

Normative forces are shaped by the link between the management policies and the professionalisation of a particular occupation that affects the nature of management control (DiMaggio & Powell 1983; Paauwe & Boselie 2003). Professionals' shared norms and values in a specific industrial community are acquired through similar formal education, skills and experiences, and professional networks (Boon et al., 2009; Paauwe & Boselie 2003). The normative force of professionalisation has been defined by DiMaggio & Powell (1983) as 'the collective struggle of members of an occupation to define conditions and methods of their work, to control the production of producers, and to establish a cognitive base and legitimacy for their occupational autonomy' (p. 151).

The value of knowledge sharing and collaboration within and across academic disciplines and beyond the institutional boundaries is one of the unique features of the academic community. The professional norms and academic integrity generally supersedes any institutional policies or interests in the academic community, whereas non-academic staff are guided by corporate culture and a different set of normative forces. This separation and contradiction of the normative values between two significant communities (academic vs non-academic staff) in the HE sector create additional HR challenges. This tension is becoming more prominent as non-academic staff are gradually becoming as important as the academic staff from an operational point of view. According to recent reports and data available on the Australian HE sector, this is a significant transition in this industry.

4.2.3 Mimetic forces

In line with March and Olsen's (1976) conviction, DiMaggio and Powell (1983) contented that symbolic uncertainty in the environment, goal ambiguity and lack of understanding of technology may force the organisations operating within a similar set of environments to imitate each

other's policy and practices without much consideration or understanding of their strategic fit. According to Tsai (2010: 1692), "related to HRM, firms may apply, for example, practices of HPWS such as sophisticated selection, intensive training and performance-related pay, in order to cope with uncertain situations or to keep up with their competitors". These mimetic processes at a transitional phase or uncertain environment may lead to isomorphic adaptation of some counterproductive HR practices. In recent years, the Australian HE sector has experienced uncertainty from competition posed by various emerging forms of HE providers. Table 4 presents the various forms of HE providers in Australia according to the latest government reports.

Table 4: HE providers in Australia in 2016/2017

Name of the HE provider	Scope	Number
Universities	Traditional HE degree provider	43
Non-university higher education providers (NUHEPs)	Teaching intensive usually provides undergrad degrees or runs masters programs but no research higher degree programs	128
Non-profit NUHEPs		58
For-profit colleges owned by public universities		No specific figure is found.
For-profit HE institutions (mainly colleges)	Includes all types of for-profit HE providers except faith-based	34
Public institutions offering degrees	The Australian Film, Television and Radio School, the Australian Institute of Police Management, and the various TAFEs	No specific figure is found, but 9 TAFE programs are listed in the TEQSA report 2017
Multinational for-profit higher education companies operating in Australia	Only American private HE providers are operating in Australia now. Teaching intensive usually provides undergrad degrees or runs masters programs but no research higher degree programs	2

Source: Australian Bureau of Statistics website (2017) and TEQSA 2017 reports

According to the Australian Bureau of Statistics (2017), the private sector education and training industry exhibited strong growth reflected by

a 17.7% increase in the sales and service income and a 19.6% increase in earnings before interest, taxes, depreciation, and amortization. This growth of private for-profit HE institutes intensified the competition in the industry.

Traditionally, the teaching-oriented NUHEPs focus on their teaching aspects, while the universities rely on quality research. Essentially, the sharply contrasting strategic orientation across the private for-profit and public, non-profit H.E.s would elicit different work practices and HR outcomes to achieve their desired organisational outcomes. However, TEQSA is putting exceeding importance on the quality assurance aspect of NUHEPs that is driven by research and knowledge sharing (Marginson, 2013). Due to the scarcity of government funding and changes in local student fees and loan policy, most universities are forced to increase their revenue from student fees. The transition of the public and private sector (due to coercive forces) towards the same strategic space creates intense competition and uncertainty in the sector that exaggerated the mimetic and normative isomorphism in this sector (Goedegebuure & Schoen, 2014).

The transitional phase of higher education driven by the government policy, globalisation, I.T. integrated learning, and the changing nature of the market elicits a thorough understanding of the employee performance in this sector, leading to the strategically desired outcomes. To deal with the challenges posed by various reforms and complex demographic mix in the market, most of the high performing universities in Australia today tend to invest in fostering international engagement through collaboration with the industry and provide an inclusive culture for creating more significant impact and achieving sustainable development (Marginson, 2013).

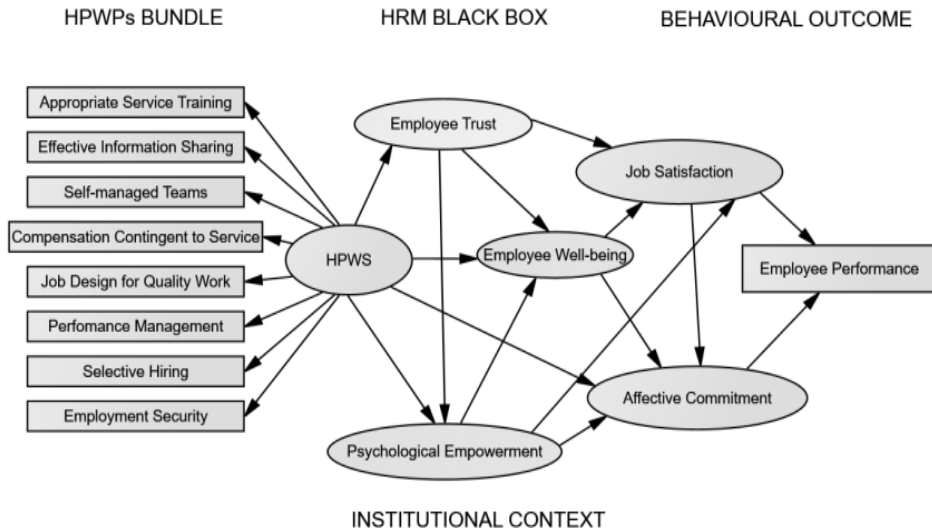
The sector faces several HRM challenges in attaining these strategic outcomes. Research shows that a quarter of its academic workforce is aged 55 and over, compared to 15 per cent for the rest of the workforce in Australia (Coates, Dobson, Edwards, Friedman, Goedegebuure, & Meek, 2009). The proportion of full-time and casual faculty members are also an important strategic issue in terms of the quality assurance aspect as the universities are becoming more consumer-driven and competitive. Universities today operate in a global environment and need a human resource with soft skills to effectively navigate this complexity, including engagement with governments, academic and research community and industry both nationally and internationally. This confirms the importance of the discretionary effort of human resources within the higher education sector to create the desired strategic outcome.

5. Discussion

This study was set out to propose a contextually configured HPWS framework for the contemporary Australian HE institutions. The findings from the critical review of HPWS literature revealed that HPWS has evolved into a well-developed concept over the years with some widely accepted underlying assumptions. We have directly incorporated three of these leading theoretical assumptions in our proposed HPWS framework for the Australian HE sector: (1)HPWS is a bundle of strategically aligned HR practices; (2) HPWS positively predicts strategic HR and organizational outcomes through the mediation of employees' attitudinal and behavioral outcomes; (3)HPWS composition and black box for each case study context is unique.

5.1 HPWS Framework for the Australian HE Sector

Based on the framework proposed by Pfeffer (1998), Zacharatos et al. (2005), and Liao, Toya, Lepak, and Hong (2009: 372) proposed extensive service training, information sharing, self-management service teams and participation, compensation contingent on service quality, job design for quality work, service-quality– based performance appraisal, internal service, service discretion, selective hiring, employment security, and reduced status differentiation in their HPWS composition to promote quality outcomes in service sectors. However, this list needs to be customised according to a selected case's internal and external contexts. We have extracted a range of frequently used words from the selected reports on Australian HE sector literature in NVivo as qualitative input. After cleaning up the words unrelated to the HPWS framework, we have selected contents such as training/development, hiring, pay/benefits, service, information, teams, security, a quality that seems relevant to the HPWS construct. After further analysis and use of NVivo trees and nodes (some examples in Figure 3), we have suggested eight relevant items for the HE sector in our proposed bundle of HPWP. These are (1) appropriate service training; (2) effective information sharing; (3) self-managed teams and participation; (4) compensation contingent on service quality; (5) job design for quality work; (6) service-quality– based performance appraisal; (7) selective hiring; and (8) employment security (Figure 2).

Figure 2: A proposed HPWS framework for the Australian HE sector

Psychological empowerment and employee trust are two widely used mediators in HPWS-performance links in extant literature. Some studies have shown that psychological empowerment positively predicts employee trust, while others indicated that employee trust could make them feel psychologically empowered and more committed. We have used the most popular assumptions about these links in our proposed framework and acknowledge that they could work differently in different case study contexts. We have used employee well-being in our proposed HPWS framework to represent employee's mental and physical health and outcome of less job stress and burnout in the Australian higher education sector. Figure 3 (Appendix) represents a few NVivo outputs that indicate significant visibility of stress, burnout and well-being issues in the contemporary Australian HE related reports and literature.

Emotional well-being is associated with the outcome of employees in HPWS studies. Bartram et al. (2012) contended that the strength of the positive relationship between emotional labor and burnout decreases as perceived HPWS increases. Emotional labor, occupational stress and burnout are significant determinants of career-change intentions in the service sector (Chau et al., 2009; Jourdain and Chenevert, 2010). The findings of the Bartram et al. (2012) study suggest that job security,

selective hiring, extensive training, teams and decentralized decision-making, information sharing, transformational leadership and high-quality work—depend on focused human resource management (HRM) action. Bartram et al. (2012) study provide suggestions for well-being for hospital nurses, which requires the unit managers to display transformational leadership with skills in information sharing and the ability to encourage teams and decentralize decision-making to reduce the adverse effects of emotional labor. HPWS literature predominantly confirms that in a wide variety of industries, the effective use of HPWS is positively related to employee attitudes and performance, unit-level outcome and organizational outcomes (Bartram et al., 2012; Bonias et al., 2010; Khan 2013).

5.2 HPWS, Attitudinal Outcomes and Performance Outcomes

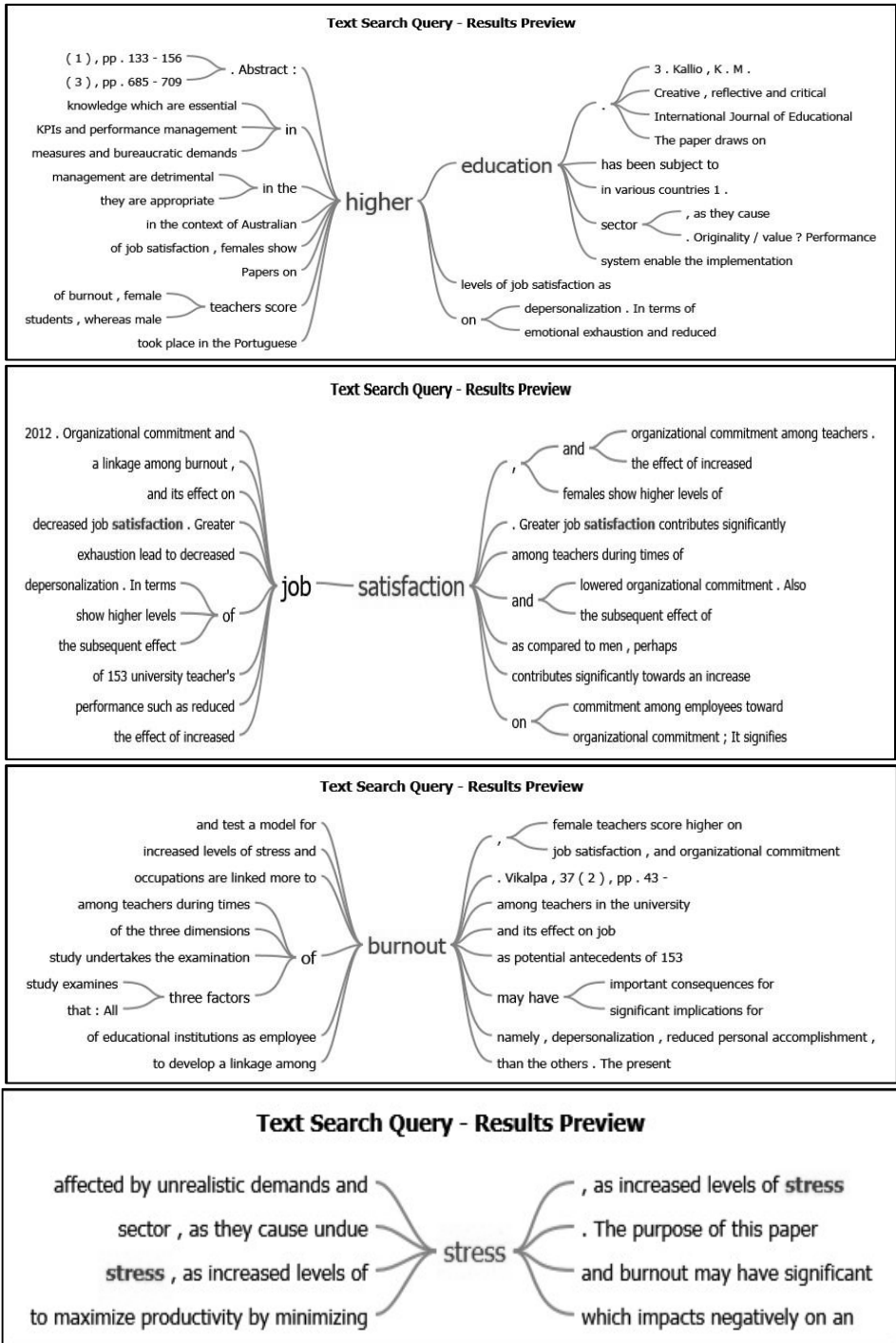
A performance-oriented organizational environment is best described when employees' well-being is essential and employees do not feel psychologically strained (Hartog and Verburg, 2004). Sparks et al. (2001) addressed occupation psychology in four significant areas in the workplace, such as job insecurity, work hours, control at work, and management style. These four aspects impact employee health and well-being, especially psycho-social health and mental health (Sparks et al., 2001). In terms of psycho-social manner, employee health and well-being can be vital for organizational performances (Hartog and Verburg, 2004; Sparks et al., 2001). Employees who have the freedom to choose their work-time schedule and have higher performance ratings reported less stress and better well-being (Sparks et al., 2001). Sparks et al.'s (1997) study has also found a relationship between pro-longed work hours and employees' mental and physical ill-health. Attempts at more in-depth theorization have applied the demand-control theory of stress associated with Karasek (1979), which hypothesizes that increased control or discretion for workers reduces psychological strain and enables them to cope better with higher demands. The study by Sparks et al. (2001) has provided various indications for future research that needs to be explored and investigated. These include social support and efficacy that supports employee well-being and providing healthy food, exercise, weight loss, and smoking and stress management techniques.

Zacharatos et al. (2005) investigated the relationship between human resource management practices and safety performances at the organizational level. The study then explored factors that mediate the relationship between the high-performance work system and safety performance. HPWS predominantly focuses on employees' perspectives regarding organizational performance and outcome. Employees' attitudes, behavior, or other psychological issues are also explored to comprehend

HPWS in an organization better. Hartog et al. (2004) explored the link between high-performance work systems, firm performance and organizational culture from the management point of view. Hartog et al. (2004) study found that the manager's role in rewarding, training and developing the employees works as a motivation for their psychological and physical well-being. Psychological well-being is also mentioned in various studies in recent years in regards to HPWS. The perspective of HPWS aimed to create a competitive advantage for organizations that often tends to neglect the individual employee that results in an increased role overload, burnout and increasing pressure for individuals (Barney and Wright, 1998). Employee outcomes are either ignored or used as an intermediate variable to enhance performance ultimately.

We did not include organizational performance in our proposed framework as many authors consider that link a distal approach (Boxall & Macky, 2009). Nonetheless, organizational performance is connected to the psychological well-being of the employees. Gulzar et al. (2014) contended that employee psychological outcomes (anxiety, burn out and role overload) could serve as a potential mediating link that has been neglected in HPWS studies. We have found overwhelming traces of job stress and burnout in the contemporary Australian HE reports (Figure 3). Chowdhury (2009) has suggested that HPWS can reduce strains, anxiety, frustration, burnout, and overload caused by intensity and stress in the workplace. Gulzar et al. (2014) study found that employees working under pressure can have physical (headache, long term pathology and increased blood pressure), behavioral and psychological effects linked to counterproductive behavior at workplaces. Our proposed HPWS framework has incorporated the variables suggested by the HPWS for the service industry that seems relevant to the contemporary Australian HE sector reports.

Figure 3: Selected NVivo output on some of the key components of HPWS framework



Data Source: Extant Australian HE reports and literature

Research Gap in the Extant Literature

Posthuma et al. (2013) suggested various future directions for researchers in the HPWS area, such as attracting, retaining and reducing employee turnover in an organization. On a similar note, future research based on national culture using different HPWS of local labor market conditions such as wages and unskilled labor pool has been suggested by Posthuma et al. (2013). Posthuma et al. (2013) indicated some understudied aspects of HPWS: planning, incentives system, strategy, job security, and turnover rate. These issues have considerable implications on academic staff performances, university ranking, and student outcomes (Bell et al., 2012).

Moreover, a handful of studies have examined employee well-being related to work-life balance, job stress, physical and mental health issues, and employee performances within the area of HPWS in the higher education sector (Bell, Rajendran & Theiler, 2012). Gulzar et al. (2014) recommended qualitative research using one-to-one interviews to explore the insights and perceptions of HPWS to develop a holistic framework for positive employee behavior at workplaces. Gulzar et al. (2014) study also recommended employee well-being as one of the variables to include in future studies of HPWS.

Despite its importance, there is a research gap in exploring the appropriate bundle of HPWS and its impact on employee well-being and performance. Our proposed framework will help future researchers to address this gap in the higher education sector in Australia.

6. Conclusion and Scope for Future Researchers

The extant literature predominantly supports the configurational view as opposed to the universalistic view in defining HPWS. This approach emphasizes the study of context to strategically configure HPWS composition and unveil the HR black box that links these systems to the desired employee and organizational outcomes. Despite the economic significance of the Australian HE sector, no study to date has explored the impact of the recent transformative changes on the HPWS configurations in the Australian HE industry. Due to the multidimensional and somewhat contradictory performance outcomes, the inherent complexity makes this context more interesting for HPWS research. This study provided the basic HPWS framework that can be tested empirically by future researchers. Based on the critical review of HPWS literature and Australian HE reports, we have proposed eight strategically linked bundles of HPWPs. This composition should positively predict strategic HR and organisational outcomes through the complex mediation of attitudinal outcomes such as

employee well-being, job satisfaction, affective commitment, psychological empowerment and employee trust. This study leaves room for future researchers in the education and management field to design empirical research to explain further or revise this proposed HPWPs bundle and the HRM black box to ensure a better internal and external strategic fit to their selected case study context. The results from further HPWS studies will motivate the HR practitioners and strategic decision-makers of the Australian HE sector to apply innovative HR practices for promoting decent work and achieving sustainable competitive advantage.

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