

# High Performance Management Practices: Definition and Measurement

Abdul Raziq

Faculty of Management Sciences, Balochistan University of Information Technology  
Engineering & Management Sciences Quetta, Pakistan

## Abstract

*The purpose of this study is to analyze the definition and measurement of High Performance Management Practices (HPMP). The study analyze the definitions of HPMP that various authors have used in their studies. This study employs four criteria to select the studies for assessing the definitions of HPMP and identifying what practices constitute HPMP. The analyses indicate that recruitment, selection, training, compensation, performance appraisal and employee consultation are the most frequently analyzed practices used in defining and measuring HPMP. Finally based on the analyses, the study concludes with its own working definition of HPMP.*

**Keywords:** High Performance Management Practices; Recruitment; Selection; Training; Compensation; Performance Appraisal; Employee Consultation

Corresponding Author's email: [raziq@buitms.edu.pk](mailto:raziq@buitms.edu.pk)

## INTRODUCTION

The recent literature has used the term High Performance Management Practices (HPMP) in various ways. For example, high involvement (Bryson et al. 2005; Gollan 2005; Guthrie et al., 2002), high commitment (Whitener 2001), high performance work systems (Beltrán-Martín et al. 2008; Chow 2005; Datta et al. 2005; De Kok & Hartog 2006; Drummond & Stone 2007; Hartog & Verburg 2004; Murphy et al. 2007; Takeuchi 2009; Tsai 2006; Way 2002), high performance work practices (Bae et al. 2011; Connolly & McGing 2007; Huselid 1995; Zhang & Li 2009) and high performance management practices (Wiesner et al. 2007). Although various terms are employed and they are used interchangeably, they all refer to the same philosophy (Evans & Davis 2005; Pfeffer 1998; Wiesner et al. 2007).

The objective of this study is to analyze definition of HPMP used in prior studies. In this regard, studies from 1995 to 2011 are analyzed in the light of certain criteria such as the use of HR practices/approaches; managerial practice; HR outcomes/HR sustainability; firm performance/competitive

advantage. Moreover, this study also focuses on how HPMP is measured in various studies. Studies from 2000 to 2011 are analyzed by looking into the frequency of HR practices used.

## Defining HPMP

Various studies have been conducted across industries, identifying a number of specific HRM bundles. The 1980s era was represented by the collective use of specific personnel practices such as problem solving groups, job flexibility, team working and minimal status differences. The idea was that these variables would have a positive impact on sustainability outcomes (Wiesner et al. 2007). The idea of HPMP became very common during the 1990s. Osterman (1994) conducted a national study of work organizations in which he assessed the implementation of four important practices including TQM, quality circles, teams and job rotation. Becker and Huselid (1998) suggested several guidelines including, careful recruitment and selection, reward system and development strategies that emphasize training and development. Moreover, Lawler, Mohrman and Ledford (1995) conducted a study of 279 top 1000

Fortune manufacturing and service companies and found that employee involvement and TQM practices tend to improve the firms' performance.

The definitions that various authors have used in defining HPMP is presented in Table 1. These definitions have been used firstly to determine the particular emphasis that various scholars place in defining HPMP and to derive a working definition of HPMP in this study.

Consistent with the criteria used by Wall and Wood (2005), the researcher of this study employed four criteria to select the studies for assessing the definitions of HPMP and identifying what practices constitute HPMP. Firstly, studies were chosen based on highly reputable journals to ensure quality and frequency (highly cited) of studies (see for example Gollan 2005; Huselid 1995; Wood & Menezes

1998). Secondly, the selection was restricted to studies from 1995 onwards, when research on High Performance Management Practices initially started to emerge. Thirdly, only those studies were included, that covered the concept of 'High Performance Management System' or 'High Involvement Management' or 'High Commitment Management' or 'High Performance HR practices', or 'High Performance Management Practices' because the focus of this section is on assessing the definitions of HPMP and examining what practices constitute HPMP. Studies focusing merely on strategic human resource management or simple human resource management have been excluded. Finally, a focus of recent studies has been emphasised in order to see the latest views on the concept of HPMP. The selected studies are presented in Table 1.

Table 1: Definitions of HPMP and the main themes in these definitions

S.No	Study	Year	Definition of HPMP	Main themes in definitions			
				HR practices/ approach	Managerial practices/ (wider interpretation)	HR outcomes/HR sustainability outcomes	Firm performance/ competitive advantage
1	Huselid	1995	High performance work practices affect employee outcome (turnover, productivity) and financial performance	✓		✓	✓
2	Kling	1995	Specific practices such as training, alternative pay system and employee involvement are correlated with higher productivity	✓			✓
3	Wood and de Menezes	1998	High commitment management (HCM) is characterized by the use of such personnel practice s as information dissemination, problem-solving groups, minimal status difference s, job flexibility, and team working; and commitment on the part of employers to employees based on the conception of them as assets.	✓	✓		
4	Way	2002	HPWS consist of practices such as staffing, compensation, flexible job assignment, team work, training and communication expected to achieve low turnover and high labour productivity	✓		✓	✓
5	Batt	2002	High-involvement HR practices allow a firm to build firm-specific human capital, which in turn influences organisational performance in two ways: <i>directly</i> , via its effect on employee performance, and <i>indirectly</i> , via employee attachment to the firm	✓		✓	✓

## High Performance Management Practices: Definition and Measurement

S.No	Study	Year	Definition of HPMP	Main themes in definitions			
				HR practices/ approach	Managerial practices/ (wider interpretation)	HR outcomes/HR sustainability outcomes	Firm performance/ competitive advantage
6	Harley	2002	HPWS is a set of practices such as performance related pay, training and team-based work- when used in combination are said to be mutually reinforcing and to generate superior organisational performance	✓		✓	✓
7	Cunha & Cunha	2004	High performance work systems, which include training, incentive systems, high selectivity, flexible job assignments and performance management, in concert, contribute to improve employee and company performance, namely by increasing the level of productivity.	✓		✓	✓
8	Hartog&Verburg	2004	High performance work practices are defined as a distinctive approach to employment management which 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. Such practices are likely to increase organisational performance.		✓	✓	✓
9	Gollan	2005	High involvement management is designed to improve employee relations and increase organisational performance and profitability through quality communication and consultation between management and employees.		✓	✓	✓
10	Bryson, Forth & Kirby	2005	High involvement management (HIM) represents the combination of task related practices, which aim to maximise employees' sense of involvement in their work, and human resource management practices that aim to maximise employee's commitment to the wider organisation.		✓	✓	✓
11	Chow	2005	A high-performance work system is defined as a system consisting of a set of complementary HR practices that can give a firm a competitive advantage. Or A system of practices that gives employees the skills, information, and motivation to help the company gain a competitive advantage over its competitors.	✓		✓	✓
12	Datta, Guthrie & Wright	2005	High-performance or high-involvement human resource systems, which are systems of human resource practices designed to enhance employees' skills, commitment, and productivity.	✓		✓	✓
13	Benson, Young & Lawler	2006	High involvement work practices are a specific set of human resource practices that focus on employee decision-making power, access to information, training, and incentives. These practices have the potential to increase productivity and organisational performance.	✓		✓	✓

## High Performance Management Practices: Definition and Measurement

S.No	Study	Year	Definition of HPMP	Main themes in definitions			
				HR practices/ approach	Managerial practices/ (wider interpretation)	HR outcomes/HR sustainability outcomes	Firm performance/ competitive advantage
14	De Kok& Den Hartog	2006	A high performance work system can be defined as a set of distinct but interrelated HRM practices that together select, develop, retain and motivate a workforce (1) that possesses superior abilities (2) that applies their abilities in their work-related activities (3) whose work-related activities result in these firms achieving superior intermediate indicators of firm performance and sustainable competitive advantage.	✓		✓	✓
15	Denton	2006	High performance work systems are those organisations that employ a fundamentally different approach to managing than the traditional piecemeal approach. These work systems sometimes go by other names like high involvement or high commitment organisations. The essential characterise of such organisations are: employment security, selective hiring of new personnel, use of self-managed teams and decentralization, and of decision making, high compensation that is contingent on organisational performance, extensive training of personnel, reduced status distinctions and barriers, including dress, office arrangements and wage differences across all levels and extensive sharing of financial and performance information within the organisation.	✓			
16	Shih, Chiang & Hsu	2006	HPWS refers to a set of HRM practices that can enhance firm performance that is an economically and statistically significant impact on employee turnover, productivity, or corporate financial performance	✓		✓	✓
17	Tsai	2006	HPWS are associated with a higher organisational performance than that achieved under a control system: for example, HPWS enhance workers' skills and competence by providing training and job-rotation practices; and skilled and knowledgeable employees are motivated and empowered by the decentralization of managerial decision making, the setting up of formal participation mechanisms, and the provision of proper rewards.	✓	✓	✓	✓
18	Zheng, Morrison & O'Neill	2006	High performance HRM practices such as performance-based pay, participatory decision-making, free market selection, and performance evaluation generates better HRM outcomes and, in turn, better HRM outcomes contribute positively to firm Performance	✓		✓	✓



## High Performance Management Practices: Definition and Measurement

S.No	Study	Year	Definition of HPMP	Main themes in definitions			
				HR practices/ approach	Managerial practices/ (wider interpretation)	HR outcomes/HR sustainability outcomes	Firm performance/ competitive advantage
19	Boxal&Macky	2007	HPWSs are systems of managerial practices that increase the empowerment of employees and enhance the skills and incentives that enable and motivate them to take advantage of this greater empowerment (wider than just HR practices)		✓	✓	
20	Connolly &McGing	2007	High performance work practices provides organisations with the necessary competitive edge				✓
21	Drummond & Stone	2007	High performance work system is defined as set of complementary work practices covering three broad areas or bundle of practices. (1) Self-directed teams, quality circles and sharing of company information (2) recruitment process, performance appraisals and mentoring (3) reward and commitment practices, embracing financial rewards, family friendly policies, job rotation and flexible working.	✓			
22	Beltran-Martin et al	2008	HPWS comprise practices aimed at enhancing the firm's human capital, under the premise that employee potential is not fully utilized and can be enhanced through the appropriate means	✓		✓	
23	Luna-Arocas& Camps	2008	HPMP are set of distinct but interrelated HR practices that, taken together, select, develop, retain and motivate a work force. These practices are also linked to firm performance.	✓		✓	✓
24	Hui et al.	2009	HPWS is a system of HR practices designed to enhance employees' competencies, motivation, and performance in providing high-quality service to external customers	✓		✓	✓
25	Messersmith& Patel	2011	HPWS may be viewed as strong systems comprising internally coherent practices that send reinforcing messages and cues to employees which in turn affect unit-level performance	✓		✓	✓
26	Lawler et al.	2011	HPWSs comprise three complementary principles to enhance workforce abilities; to enhance employee motivation; and to create avenues that allow workers to have a significant say in problem-solving or decision-making processes.			✓	
27	Ait Razouk	2011	HPWS are a source of better performances because it is set of practices which has an effect on employees' commitment and involvement; it is an internal resource able to produce a competitive advantage; and finally, because it constitutes a set of internally complementary practices.	✓		✓	✓

It is clear from Table 1 that four main themes emerged in the analysis of the definitions. These include the use of HR practices/approaches; managerial practice (wider interpretation); HR outcomes/HR sustainability; firm performance/competitive advantage. For the first theme, 21 out of 27 studies have used HR practices in their definitions of HPMP. This shows the importance of HR practices/approaches in defining HPMP. For the second theme, only six studies have used the concept of managerial practices. For the third theme, the majority of studies (22/27) used HR outcomes in defining HPMP. Finally, for the firm performance theme, most of the research articles (21 out of 27) employed this concept.

### Measuring HPMP

The discussion now turns to what particular HR practices and/or managerial practices have been identified as constituting HPMP

or what concepts have been used to measure HPMP. It is clear from Table 2 that the HPMP research studies show a lack

of consistency in what HPMP practices they include in the measurement of the concept. In other words they have used a diverse set of HPMP in their studies. However, there seems to be consensus regarding some specific sets of practices such

as recruitment, selection, training and development, performance appraisal, compensation, and consultation. The frequency of individual components of HPMP

in prior research work (from 2000 to 2011) is presented in Table 2.

Table 2: Frequency of individual HPMP in prior research studies from 2000 to 2011

S.No	HPMP	Frequency with which the term is used	Source
1.	Recruitment	51	Ahmad & Schroeder 2003; Bae & Lawler 2000; Barnard & Rodgers 2000; Bjorkman & Xiucheng 2002; Bosile, Pauwe & Jansen 2001; Brynjolfsson, Hitt, Yang, Bailly & Hall 2002; Collins, Smith & Stevens 2001; Gould-Williams 2003; Guthrie 2001; Guthrie, Spell & Nyamori 2002; Harel, Tzafir & Baruch 2003; Huang 2000; Huang 2001; Khatri 2000; Lepak & Snell 2002; Michie & Sheehan 2003; Rogg et al 2001; Sheppeck & Militello 2000; Way 2002; Whitener 2001; Zheng 2001; Apospori et al 2008; Aragon-Sanchez & Sanchez-Marin 2005; Barret & Mayson 2007; Beltran-Martin et al 2008; Bryston, Forth & Kirby 2005; Chand & Katou 2007; Chang & Huang 2005; Chow, Huang, & Liu 2008; Chow 2005; Connolly & McGing 2007; Cunha & Cunha 2004; Datta, Guthrie & Wright 2005; De Kok & Den Hartog 2006; Drummond & Stone 2007; Fabi, Raymond & Lacoursiere 2009; Fleetwood & Hesketh 2008; Hartog & Verburg 2004; Katou & Budhwar 2007; Katou & Budhwar 2006; Lepak & Shaw 2008; Khandekar & Sharma 2005; Lytras & Ordenez de Pablos 2008; Nguyen & Bryant 2004; Rose & Kumar 2006; Shih, Chiang & Hsu 2006; Tsai 2006; Verburg, Hartog & Koopman 2007; Wood & de Menezes 2008; Wood, Holman & Stride 2006;
2.	Selection	51	Ahmad & Schroeder 2003; Bae & Lawler 2000; Barnard & Rodgers 2000; Bjorkman & Xiucheng 2002; Bosile, Pauwe & Jansen 2001; Brynjolfsson, Hitt, Yang, Bailly & Hall 2002; Collins, Smith & Stevens 2001; Gould-Williams 2003; Guthrie 2001; Guthrie, Spell & Nyamori 2002; Harel, Tzafir & Baruch 2003; Huang 2000; Huang 2001; Khatri 2000; Lepak & Snell 2002; Michie & Sheehan 2003; Rogg et al 2001; Sheppeck & Militello 2000; Way 2002; Whitener 2001; Zheng 2001; Aragon-Sanchez & Sanchez-Marin 2005; Baptiste 2008; Barret & Mayson 2007; Beltran-Martin et al 2008; Boxal & Macky 2007; Chand & Katou 2007; Chang & Huang 2005; Chow, Huang, & Liu 2008; Chow 2005; Connolly & McGing 2007; Cunha & Cunha 2004; Datta, Guthrie & Wright 2005; De Kok & Den Hartog 2006; Denton 2006; Fleetwood & Hesketh 2008; Hartog & Verburg 2004; Jimenez & Sanz-Valle 2008; Katou & Budhwar 2007; Katou & Budhwar 2006; Khandekar & Sharma 2005; Lepak & Shaw 2008; Lytras & Ordenez de Pablos 2008; Rose & Kumar 2006; Sels et al 2006; Tsafir 2006; Tsai 2006; Verburg, Hartog & Koopman 2007; Wang & Zang 2005; Wood, Holman & Stride 2006; Zheng, O'Neill & Morrison 2009
3.	Compensation	71	Ahmad & Schroeder 2003; Agarwala 2003; Allen, Schore & Griffith 2003; Bae & Lawler 2000; Batt 2002; Batt, Colvin & Keefe 2002; Bjorkman & Xiucheng 2002; Black & Lynch 2001; Colvin, Batt & Katz 2001; Delery, Gupta, Shaw, Jenkins & Ganster 2000; Fey & Bjorkman 2000; Fey, Bjorkman & Pavlovskaya 2000; Gould-Williams 2003; Guthrie 2001; Guthrie, Spell & Nyamori 2002; Harel, Tzafir & Baruch 2003; Huang 2000; Huang 2001; Khatri 2000; Laursen 2001; Laursen & Foss 2003; Lepak & Snell 2002; Li 2003; Meyer & Smith 2000; Michie & Sheehan 2003; Miller & Lee 2001; Shah, Gupta & Delery 2002; Teo & Waters 2002; Way 2002; Whitener 2001; Zheng 2001; Akhtar, Ding & G.E 2008; Aragon-Sanchez & Sanchez-Marin 2005; Bacon & Hoque 2005; Baptiste 2008; Barret & Mayson 2007; Benson, Young & Lawler 2006; Beltran-Martin et al 2008; Boxal & Macky 2007; Bryston, Forth & Kirby 2005; Chand & Katou 2007; Chang & Huang 2005; Chow, Huang, & Liu 2008; Chow 2005; Cunha & Cunha 2004; Conway, & Monks 2009; Datta, Guthrie & Wright 2005; De Kok & Den Hartog 2006; Denton 2006; Drummond & Stone 2007; Fleetwood & Hesketh 2006; Fleetwood & Hesketh 2008; Hartog & Verburg 2004; Jimenez & Sanz-Valle 2008; Katou & Budhwar 2007; Katou & Budhwar 2006; Khandekar & Sharma 2005; Lepak & Shaw 2008; Lytras & Ordenez de Pablos 2008; Rose & Kumar 2006; Sels et al 2006; Shih, Chiang & Hsu 2006; Subramony 2006; Tsafir 2006; Tsai 2006; Verburg, Hartog & Koopman 2007; Wang & Zang 2005; Wood & de Menezes 2008; Zheng, Morrison & O'Neill 2006; Zheng, O'Neill & Morrison 2009; Ait Razouk 2011.



## High Performance Management Practices: Definition and Measurement

S.No	HPMP	Frequency with which the term is used	Source
4.	Training	69	Ahmad & Schroeder 2003; Agaarwala 2003; Batt, Colvin & Keefe 2002; Bjorkman&Xiucheng 2002; Bosile, Pauwe& Jansen 2001; Brynjolfsson, Hitt, Yang, Baily & Hall 2002; Collins, Smith & Stevens 2001; Das, Handfield, Calantone&Shosh 2000; Fey & Bjorkman 2000; Fey, Bjorkman&Pavlovskaya 2000; Gould-Williams 2003; Guthrie 2001; Guthrie, Spell & Nyamori 2002; Harel, Tzafir& Baruch 2003; Huang 2000; Huang 2001; Hunter & Laikas 2003; Khatri 2000; Konard&Mangel 2000; Lepak& Snell 2002; Meyer & Smith 2000; Michie& Sheehan 2003; Miller & Lee 2001; Rogg et al 2001; Shah, Gupta & Delery 2002; Sheppeck&Militello 2000; Teo& Waters 2002; Way 2002; Whitener 2001; Zheng 2001; Akhtar, Ding & G.E 2008; Apospori et al 2008; Aragon-Sanchez & Sanchez-Marin 2005; Baptiste 2008; Barret&Mayson 2007; Beltran-Martin et al 2008; Benson, Young & Lawler 2006; Boxal&Mackey 2007; Bryan 2006; Chand & Katou 2007; Chang & Huang 2005; Chow, Huang, & Liu 2008; Chow 2005; Connolly & McGing 2007; Conway, & Monks 2009; Datta, Guthrie & Wright 2005; De Kok& Den Hartog 2006; Denton 2006; Fabi, Raymond & Lacoursiere 2009; Hartog&Verburg 2004; Jimenez & Sanz-Valle 2008; Katou&Budhwar 2007; Katou&Budhwar 2006; Lepak& Shaw 2008; Khandekar& Sharma 2005; Nguyen & Bryant 2004; O'Regan, Sims & Ghobadian 2005; Rose & Kumar 2006; Sels et al 2006; Shih, Chiang & Hsu 2006; Tsafirir 2006; Tsai 2006; Verburg, Hartog&Koopman 2007; Wang & Zang 2005; Wood & de Menezes 2008; Wood, Holman & Stride 2006; Zheng, Morrison & O'Neill 2006; Zheng, O'Neill & Morrison 2009;
5.	Performance Appraisal	45	Agaarwala 2003; Bjorkman&Xiucheng 2002; Fey & Bjorkman 2000; Huang 2001; Hunter & Laikas 2003; Khatri 2000; Lepak& Snell 2002; Meyer & Smith 2000; Rogg et al 2001; Sheppeck&Militello 2000; Whitener 2001; Zheng 2001; Akhtar, Ding & G.E 2008; Apospori et al 2008; Aragon-Sanchez & Sanchez-Marin 2005; Bacon & Hoque 2005; Baptiste 2008; Barret&Mayson 2007; Beltran-Martin et al 2008; Boxal&Mackey 2007; Chow, Huang, & Liu 2008; Chow 2005; Conway, & Monks 2009; Connolly & McGing 2007; Datta, Guthrie & Wright 2005; De Kok& Den Hartog 2006; Denton 2006; Drummond & Stone 2007; Fabi, Raymond & Lacoursiere 2009; Fleetwood & Hesketh 2006; Hartog&Verburg 2004; Jimenez & Sanz-Valle 2008; Katou&Budhwar 2007; Katou&Budhwar 2006; Khandekar& Sharma 2005; Lepak& Shaw 2008; Nguyen & Bryant 2004; Rose & Kumar 2006; Sels et al 2006; Verburg, Hartog&Koopman 2007; Wang & Zang 2005; Wood, Holman & Stride 2006; Wood & de Menezes 2008; Zheng, Morrison & O'Neill 2006; Zheng, O'Neill & Morrison 2009; Ait Razouk 2011
6.	Consultation	41	Ahmad & Schroeder 2003; Allen, Schore&Griffeth 2003; Appleyard& Brown 2001; Bae& Lawler 2000; Batt 2002; Black & Lynch 2001; Bosile, Pauwe& Jansen 2001; Das, Handfield, Calantone&Shosh 2000; Delery, Gupta, Shaw, Jenkins & Ganster 2000; Fey & Bjorkman 2000; Fey, Bjorkman&Pavlovskaya 2000; Guest & Pecci 2001; Guthrie 2001; Guthrie, Spell & Nyamori 2002; Harel, Tzafir& Baruch 2003; Khatri 2000; Laursen 2001; Laursen& Foss 2003; Mendelson 2000; Richard & Johnson 2001; Sheppeck&Militello 2000; Zheng 2001; Akhtar, Ding & G.E 2008; Baptiste 2008; Chow, Huang, & Liu 2008; Chow 2005; Connolly & McGing 2007; Conway, & Monks 2009; De Kok& Den Hartog 2006; Denton 2006; Fabi, Raymond & Lacoursiere 2009; Gollan 2005; Katou&Budhwar 2007; Katou&Budhwar 2006; Lepak& Shaw 2008; Sels et al 2006; Subramony 2006; Tsafirir 2006; Zheng, Morrison & O'Neill 2006; Zheng, O'Neill & Morrison 2009;
7.	Employment security	16	Denton 2006; Fleetwood & Hesketh 2008; Shih, Chiang & Hsu 2006; Tsai 2006; Wood & de Menezes 2008; Ahmad & Schroeder 2003; Batt 2002; Bayo-Moriones& Huerta-Arribas 2002; Fey, Bjorkman&Pavlovskaya 2000; Gould-Williams 2003; Li 2003; Michie& Sheehan 2003; Akhtar, Ding & G.E 2008; Bryston, Forth & Kirby 2005; Chow, Huang, & Liu 2008; Conway, & Monks 2009
8.	Sharing Information	17	Burton & O'Reilly 2000; Collins, Smith & Stevens 2001; Das, Handfield, Calantone&Shosh 2000; Fey & Bjorkman 2000; Gould-Williams 2003; Guthrie 2001; Guthrie, Spell & Nyamori 2002; Mendelson 2000; Michie& Sheehan 2003; Richard & Johnson 2001; Teo& Waters 2002; Way 2002; Denton 2006; Drummond & Stone 2007; Ahmad & Schroeder 2003; Bjorkman&Xiucheng 2002; Ait Razouk 2011
9.	Growth opportunities	01	Allen, Schore&Griffeth 2003
10.	Skill development	08	Appleyard& Brown 2001; Agaarwala 2003; Batt 2002; Colvin, Batt & Katz 2001; Fey, Bjorkman&Pavlovskaya 2000; Li 2003; Michie& Sheehan 2003; Spell, C.S. 2001
11.	Career planning & development	04	Agaarwala 2003; Fey, Bjorkman&Pavlovskaya 2000; Meyer & Smith 2000; Richard & Johnson 2001
12.	Job design	07	Bae& Lawler 2000; Lepak& Snell 2002; Chand & Katou 2007; Chow, Huang, & Liu 2008; Conway, & Monks 2009; Jimenez & Sanz-Valle 2008; Katou&Budhwar 2007;
13.	Organisation change	01	Bacon & Blyton 2001
14.	Team working	07	Bryston, Forth & Kirby 2005; Jimenez & Sanz-Valle 2008; Tsai 2006; Bacon & Blyton 2001; Batt 2002; Gould-Williams 2003; McNabb & Whiffeld 2001
15.	Union	14	Batt, Colvin & Keefe 2002; Bayo-Moriones& Huerta-Arribas 2002; Black & Lynch 2001; Colvin, Batt & Katz 2001; Delery, Gupta, Shaw, Jenkins & Ganster 2000; McNabb & Whiffeld 2001; Zheng 2001; Bacon & Hoque 2005; Katou&Budhwar 2007; Katou&Budhwar 2006; Tsafirir 2006; Tsai 2006; Zheng, Morrison & O'Neill 2006; Zheng, O'Neill & Morrison 2009
16.	Internal promotion	08	Barnard & Rodgers 2000; Bosile, Pauwe& Jansen 2001; Fey, Bjorkman&Pavlovskaya 2000; Guthrie 2001; Guthrie, Spell & Nyamori 2002; Baptiste 2008; Datta, Guthrie & Wright 2005; Hartog&Verburg 2004
17.	Improvement groups/quality circle	11	Bayo-Moriones& Huerta-Arribas 2002; Hunter & Laikas 2003; Laursen& Foss 2003; McNabb & Whiffeld 2001; Bacon & Hoque 2005; Bryston, Forth & Kirby 2005; Chand & Katou 2007; Drummond & Stone 2007; Fleetwood & Hesketh 2006; Lepak& Shaw 2008; Wood & de Menezes 2008
18.	Empowerment/decentralization	15	Ahmad & Schroeder 2003; Bae& Lawler 2000; Bosile, Pauwe& Jansen 2001; Guest & Pecci 2001; Mendelson 2000; Richard & Johnson 2001; Sheppeck&Militello 2000; Boxal&Mackey 2009; Connolly & McGing 2007; Hartog&Verburg 2004; Jimenez & Sanz-Valle 2008; Lepak& Shaw 2008; O'Regan, Sims & Ghobadian 2005; Rose & Kumar 2006; Tsai 2006
19.	Self-managed teams	02	Denton 2006; Mendelson 2000
20.	Cross functional teams	03	Wood, Holman & Stride 2006; Das, Handfield, Calantone&Shosh 2000; Mendelson 2000
21.	Formal planning	05	Bacon & Hoque 2005; Barret&Mayson 2007; Wood, Holman & Stride 2006; Huang 2000; Huang 2001
22.	Grievance procedures	03	Chow 2005; Connolly & McGing 2007; Datta, Guthrie & Wright 2005
23.	Health & Safety	03	Katou&Budhwar 2006; Katou&Budhwar 2007; Lepak& Shaw 2008
24.	Job rotation	08	Datta, Guthrie & Wright 2005; De Kok& Den Hartog 2006; Drummond & Stone 2007; Fleetwood & Hesketh 2006; Lepak& Shaw 2008; Bayo-Moriones& Huerta-Arribas 2002; Laursen& Foss 2003; Mendelson 2000
25.	HR planning	05	Bosile, Pauwe& Jansen 2001; Chand & Katou 2007; Harris & Ogbonna 2001; Khatri 2000; Richard & Johnson 2001

It is evident from Table 2 that recruitment, selection, training, compensation, performance appraisal and employee consultation are the most frequently analyzed practices in research studies.

## CONCLUSION

The objective of this study was to analyze the definition and measurement of HPMP used in various prior studies. Within the context of definition of HPMP, studies from 1995 to 2011 were analyzed in the light of certain criteria such as the use of HR practices/approaches; managerial practice; HR outcomes/HR sustainability; firm performance/competitive advantage. Thus, based on this analysis, it can be concluded that researchers view HR practices; HR outcomes and firm performance as the most important components of the concept of HPMP while managerial practices are considered less important in research studies when defining HPMP. Moreover, this study also focused on how HPMP was measured in various studies. Studies from 2000 to 2011 were analyzed by looking into the frequency of HR practices used. The analyses also found that most of authors have used recruitment, selection, training, compensation, and performance appraisal and employee consultation as frequently analyzed practices in defining and measuring HPMPs. Finally, the study concludes with the following working definition of HPMP. HPMP is a set of human resource management practices (Recruitment, Selection, Training, Remuneration, and Performance Appraisal) and managerial practices that enhance employee involvement and participation, which positively impact upon HR outcomes and organizational performance and/or competitive advantage.

## REFERENCES

- Bae KS, Chuma H, Kato T, Kim DB, Ohashi I. (2011). High Performance Work Practices and Employee Voice: A Comparison of Japanese and Korean Workers', *Industrial Relations: A Journal of Economy and Society*. 50:1-29.
- Becker BE and Huselid MA. (1998). High performance work systems and firm performance: A synthesis of research and managerial implications', *Research in Personnel and Human Resources Management*. 16:53-101.
- Beltran MI, Roca PV, Escrig TA, & Bou LJC. (2008). Human Resource Flexibility as a Mediating Variable Between High Performance Work Systems and Performance. *Journal of Management*. 34(5):1009-44.
- Bryson A, Forth J, Kirby S. (2005). High-involvement management practices, trade union representation and workplace performance in Britain. *Scottish Journal of Political Economy*. 52(3):451-91.
- Chow HIS. (2005). High-performance work systems in Asian companies. *Thunderbird International Business Review*. 47(5):575-99.
- Connolly P, McGing G. (2007). High performance work practices and competitive advantage in the Irish hospitality sector. *International Journal of Contemporary Hospitality Management*. 19(3):201-10.
- Datta DK, Guthrie JP, Wright PM. (2005). Human resource management and labor productivity: Does industry matter? *Academy of Management Journal*. 48(1):135-45.
- De Kok J and Hartog D. (2006). *High Performance Work Systems, Performance and Innovativeness in Small Firms*, EIM Business and Policy Research.
- Drummond I and Stone I. (2007). Exploring the potential of high performance work systems in SMEs. *Employee Relations*. 29(2):192-207.



- Evans WR and Davis WD. (2005). High-performance work systems and organizational performance: The mediating role of internal social structure. *Journal of Management*. 31 (5):758-75.
- Gollan PJ. (2005). High involvement management and human resource sustainability: The challenges and opportunities', *Asia Pacific Journal of Human Resources*. 43:18-33.
- Hartog DND and Verburg RM. (2004). High performance work systems, organisational culture and firm effectiveness. *Human Resource Management Journal*. 14:55-78.
- Huselid MA. (1995) The impact of HRM on turnover, productivity, and corporate financial performance. *Academy of Management Journal*. 38(3):635-72.
- Lawler EE, Mohrman SA, Ledford GE. (1995). *Creating High Performance Organizations: Survey of Practices and Results of Employee Involvement and TQM in Fortune 1000 Companies* Wiley, John & Sons Incorporated.
- Murphy KS, Dipietro RB, Murrmann S. (2007). A Proposed Research Agenda for the Refinement of the High Performance Work System Construct in the U.S. Restaurant Industry. *International Journal of Hospitality & Tourism Administration*. 8(4):99-116.
- Osterman P. (1994). How common is workplace: transformation and who adopts it', *Industrial and Labor Relations Review*. 47(2):173-88.
- Pfeffer J. (1998). Seven practices of successful organizations. *California Management Review*. 40(2):96-123.
- Takeuchi N. (2009). How Japanese manufacturing firms align their human resource policies with business strategies: testing a contingency performance prediction in a Japanese context. *The International Journal of Human Resource Management*. 20:34 - 56.
- Tsai CJ. (2006). High performance work systems and organizational performance: an empirical study of Taiwan's semiconductor design firms. *The International Journal of Human Resource Management*. 17(9):1512-30.
- Wall TD and Wood SJ. (2005). The romance of human resource management and business performance, and the case for big science. *Human Relations*. 58(4):429-62.
- Way SA.( 2002). High Performance Work Systems and Intermediate Indicators of Firm Performance Within the US Small Business Sector. *Journal of Management*. 28(6):65-85.
- Whitener EM. (2001). Do "high commitment" human resource practices affect employee commitment? A cross-level analysis using hierarchical linear modeling. *Journal of Management*. 27(5):515-35.
- Wiesner R, McDonald J, Banham HC. (2007). Australian small and medium sized enterprises (SMEs): A study of high performance management practices. *Journal of Management and Organization*. 13(3):227-48.
- Wood S and Menezes L. (1998). High commitment management in the U.K: Evidence from the workplace industrial relations survey, and employer's manpower and skills practices survey', *Human Relations*. 51(4):485-515.
- Zhang YC and Li SL. (2009). High performance work practices and firm performance: evidence from the pharmaceutical industry in China', *International Journal of Human Resource Management*. 20(11):2331-48.