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Inside the "black box" and "HRM"

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Abstract

Purpose – This paper has two objectives. The first is to see whether "shared values" is an important intermediary, or part of the "black box" (along with organisational commitment and job satisfaction), between HRM practices and firm performance. The second is to assess whether the use of multiple levels of respondents produces different results compared with the usual practice of using senior HRM managers or, in lieu, another senior manager.

Design/methodology/approach – A survey methodology is used to obtain perceptual data on HRM practices and a variety of work-related attitudes. The sample comprises managers, supervisors and workers from 27 New Zealand firms. Statistical analysis, using SPSS, was performed at the firm and individual level.

Findings – At group-level there are wide differences in attitudes towards HRM activities. The desirability of using as many respondents as possible, and also respondents from different levels within organisations, was confirmed. "Shared values" is also deemed worthy of inclusion in the "black box" as it relates significantly to perceptions of HRM practices. However, organisational commitment and job satisfaction appear to have a stronger role.

Research limitations/implications – Current writings suggest that certain HRM practices can foster a system of shared values amongst the workforce. The study finds this indeed to be the case at the individual level. However, the supposition that a shared value system significantly contributes to the promotion of other desirable attitudinal outcomes has not been supported by the study's findings. A limitation of the study is that it did not explore the HRM-firm performance relationship in its entirety. Further research exploring all linkages in this relationship is now required.

Practical implications – The paper concludes that practitioners should be wary of pursuing an agenda that sees the development of a shared value system as the key to superior firm performance. Instead, it is suggested that the values of the organisation should be considered as the foundation from which a set of mutually reinforcing and supportive HRM practices is developed.

Originality/value – The paper provides much needed empirical data on shared values and their role in the HRM-performance relationship.

Keywords Human resource management, Attitudes, New Zealand

Paper type Research paper

Introduction

Human resource management (HRM) is a term used to "represent that part of an organisation's activities concerned with the recruitment, development and management of its employees" (Wall and Wood, 2005, p. 430). Whether, like Keenoy (1990, p. 363), one views HRM as a phenomenon that "seemingly fully-formed . . . made its appearance in Britain in the mid-1990s", or whether one is more prosaic, like Strauss (2001, p. 873), and sees HRM as "a relabelled (or at most repackaged) version of the old feisty field of personnel", it is indisputable that in the literature HRM has clearly overpowered personnel management as a desirable field of research and writing. However, as Paauwe and Boselie (2005, p. 69) observe, there "appears to be no consensus on the nature of HRM". Indeed there is no real consensus that it should be called HRM, with many referring to very similar processes as alternatively "strategic

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HRM" (Paauwe and Richardson, 1997), "High involvement management" (Guthrie, 2001), "High commitment management" (Parkes *et al.*, 2007) or "High performance work systems" (Ramsay *et al.*, 2000). No matter how it is labelled, as observed by Strauss (2001, p. 874), "Just as Moliere's M. Jourdain spoke prose without knowing it, so ... every organisation practices HRM, consciously or unconsciously. Autocratic or participative, HRM is still HRM". While the current and somewhat trendy current choice, "Strategic HRM", may mean something unique or special to some researchers, leading US writers Schuler and Jackson (2005, p. 13) state boldly that "among HR practitioners, the term 'strategic human resource management' is used broadly to signal the view that human resource management activities should (our emphasis) contribute to business effectiveness".

HRM research

In the late 1980s and early 1990s research on HRM focussed in particular on a number of issues. One was whether HRM was "hard" or "soft", or indeed whether "even if the rhetoric of HRM is 'soft,' the reality is almost always 'hard,' with the interests of the organisation prevailing over those of the individual" (Truss *et al.*, 1997, p. 70). Another was whether HRM should be "best practice" or "best fit" (see, for example, Boxall and Purcell, 2003). However the main issue for the 1990s was the impact HRM had on performance. A driving force for this research may well have been the fact that "the HRM function is in crisis, increasingly under fire to justify itself and confronted with the very real prospect that a significant portion of its traditional responsibilities will be outsourced" (Becker *et al.*, 1997, p. 39).

HRM and performance

By the 1990s the bulk of the literature seemed to accept that HRM practices had a significant impact on organisational performance (Appelbaum *et al.*, 2000; Arthur, 1994; Becker and Gerhart, 1996; Guthrie, 2001; Huselid, 1995). The standard line was that "best" HRM practices:

> Increase employees' knowledge skills and abilities (KSAs). The result is greater job satisfaction, lower employee turnover, higher productivity, and better decision-making, all of which help improve organisational performances (Combs *et al.*, 2006, p. 502).

There were, however, some who were not so certain that HRM practices necessarily brought job satisfaction and commitment, and positive organisational performance outcomes. For example, Edwards and Wright (2001, p. 572) consider that there is "a good deal of evidence to support the view that changed productivity performance in the British economy in the 1980s reflected a 'fear factor' of job losses". In contrast to Combs *et al.*'s (2006) portrayal of lower turnover, Fernie and Metcalf (1995) found the reverse, with organisations using performance appraisal having a high quit rate. In these instances, job security and performance appraisals – both of which are best practices – do not appear to be considered the crucial determinants in the HRM-firm performance relationship.

The quality of the HRM-performance research has been questioned by Gerhart and Wright and various other colleagues in a number of papers published in *Personnel Psychology* (Gerhart *et al.*, 2000a, b, Wright *et al.*, 2001). They state:

> . . . before strategic HR researchers can credibly argue for the strong positive impact on firm performance, we must do a better job of gauging the impact of measurement error, both random and systematic, on our findings (Gerhart *et al.*, 2000a, p. 831).

Another area of concern relates to causality. Both Wright and Haggerty (2005) and Paauwe and Boselie (2005) point out that there could well be reverse causality and that when there is a correlation between HR practices and performance, it could be that "rather than HR practices causing economic success, success causes HR practices" (Wright and Haggerty, 2005, p. 169).

Indeed, some researchers claim there is no link between HRM and performance, or if there is, it is a somewhat dubious link. Thus Guest *et al.* (2003, p. 311) found that when using stricter tests there is "little or no association between HRM and performance". Similarly Wall and Wood (2005, p. 454), who analysed 25 previous studies, concluded that "it is premature to assume that HRM initiatives will inevitably result in performance gains". However, both Guest *et al.* (2003) and Wall and Wood (2005), acknowledge that the literature conveys a strong message that HRM does promote performance.

At the extreme, perhaps, is the super confidence of Combs *et al.* (2006), who categorically state:

> . . . by using meta-analysis to reduce the effects of sampling and measurement error, results lay to rest any doubt about the existence of a relationship, and more importantly, offers researchers a baseline estimate of its size. We estimate that organisations can increase their performance by 0.20 of a standardised unit for each unit increase in HPWP use (p. 524).

Whether or not it is taken as fact that HRM practices will improve performance, there are clearly other issues, which need consideration. Two in particular stand out. One is the "black box" through which HRM practices are supposed to convert to performance, and the second is the common practice of using a single respondent to measure HRM practices.

The black box

For a decade researchers have been observing that assuming HRM does influence performance, "there is little understanding of the mechanisms through which HRM practices influence effectiveness" (Delery, 1998, p. 289). This largely unexplained facet of the HRM-performance relationship has been labelled the "black box" (Boselie *et al.*, 2005).

There has been some work on the "black box", with some models having been developed which attempt to map the relationships, including intermediary ones, in the HRM-performance chain (see, for example, Paauwe and Richardson, 1997; Becker *et al.*, 1997). The intermediary phase of this relationship, at this stage, includes the outcomes of satisfaction, motivation, retention, social climate, involvement, trust and loyalty (Paauwe and Richardson, 1997). The list should not, however, be considered definitive or complete. For example, with respect to the former, Hope-Hailey *et al.* (2005), comment:

> . . . a primary issue in the development of conceptual models for research in this area is which variables should be included in making the step from HRM to firm performance (p. 50).

In relation to the latter, Boselie *et al.* (2005, p. 77) report that scant attention has been paid to examining the "linking mechanisms" and the "mediating effects of key variables" in this relationship. It therefore comes as no surprise that a recent study suggests there is a further item that may warrant inclusion in this list. Purcell *et al.* (2006) identify a strong organisation culture – a culture that emanates from its mission; is strongly embedded within the firm and all its stakeholders; and, most importantly comprises a set of organisation values that are collectively shared by all workplace members – as a key factor evident in firms with high performance. A lack of "consistent and widely shared values", on the other hand, is cited as a feature shared by "less successful organisations" (Ulrich, 1984, p. 122).

One possible explanation for why shared values contribute to firm performance is that firms comprise sectional groups (these differences may result from structural boundaries such as separate departments/functions, or geographic location, among others) and these individuals and/or groups require unification so that "dysfunctional consequences" stemming from differential treatment are avoided (Kepes and Delery, 2006). A collectively held value system, on the other hand, is seen as the glue that binds different groups within the workplace together (Schneider, 1988). To elaborate, Kepes and Delery (2006) point out:

> . . . if every employee . . . shares the same perceptions of the firm's goals and the appropriateness of the HRM policies, practices and processes to achieve them, feelings of inequity and dysfunctional behaviour associated with them are less likely to arise . . . Instead, a positive organisational climate is reinforced and organisational effectiveness enhanced. This . . . creates a "strong situation" or "cultism", which guides employee behaviour (p. 63).

A second explanation is that a perceived desire to have the values of the firm transmitted through use of mutually supportive HRM practices may contribute to the uniqueness of the HRM system itself. In this regard Purcell *et al.* (2006), state:

> . . . successful firms thus combine, in unique ways, values, routines and policy-practice which affect both individuals and the collective endeavour. It is this "social complexity" which is so hard to copy (p. 14).

A collectively held value system is a state whereby organisation members perceive they share, and willingly work towards achievement of the firm's objectives and goals. It is strongly related to organisational identification which is defined as a state where "the goals of the organization and those of the individual become increasingly integrated or congruent" (Hall *et al.*, 1970, pp. 176-7), and also with the attitudinal dimension of organisational commitment (Mowday *et al.*, 1979). In line with the research findings on organisational identification and organisational commitment, a strong sense of shared values amongst firm members is considered to be the driver of the development of a unified, motivated and committed workforce (Ulrich, 1984).

Shared value development between individuals and the organisation is thought to be strongly related to HRM practice (Dorenbosch *et al.*, 2006), and can be viewed as both an antecedent and an outcome. As an antecedent, the values of the organisation are used to determine its policies and practices, which in turn support desirable behaviours amongst the workforce; and as an outcome, these policies and practices offer a platform whereby consistent and consensual messages are sent to the workforce which reinforce a certain value system. The latter occurs because implicit and/or explicit messages can be embedded within, and/or conveyed by, a particular set of

policies and practices. Notwithstanding this progress, the calls in 2007 have changed little from those of the 1990s. Sun *et al.* (2007), hope that HRM research in the future:

> . . . will reach to move beyond the demonstration of main effects to an examination of how . . . and why high performance human resource practices are related to organisational performance (p. 572).

Clearly, further attempts to clarify the contents of the "black box" are needed. This study aims to contribute to this research by exploring the value of "shared values", as well as the more widely accepted attitudinal outcomes of satisfaction and commitment, as potential "black box" items. Studies that examine those more traditional workplace attitudinal outcomes usually do so by aggregating and analysing individual-level data. However, an examination of "shared values" necessarily requires analysis to be completed both between and across a range of organisational actors. Use of this particular approach obviates a further criticism levelled at research on the HRM-firm performance relationship, namely the issue of single respondent selection. This has been identified as an important methodological issue and it is to this issue that the discussion now turns.

Single respondents

Gerhart *et al.* (2000a) point out that "the reliability of single raters is typically quite weak" (p. 807). Thus, even if the single respondent was considered knowledgeable, using just one person (typically a senior HR manager) is problematic. Given that it is also considered that in large diversified organisations it is "difficult for the senior VP of HR to accurately describe the practices that exist across the whole corporation" (Wright *et al.*, 2001, p. 876), the problem is considerably exacerbated. Similar concerns are voiced by Bowan and Ostroff (2004, p. 216) who consider that rather than relying on an HR executive, "a better alternative is to assess these characteristics of the HRM system from the employees themselves".

Reinforcing this call for multiple respondents is the view that employees' opinions are valuable in themselves and should be researched. As put by Guest (1999, p. 5) ". . . any concern for the impact of HRM should be as much with outcomes of relevance to workers as to business".

The only way to address these criticisms is to include multiple respondents in HRM studies. Three obvious stakeholder groups would seem to require inclusion: managers – who have a major influence on the organisation's value and belief systems through the design and development of HRM policy and for the purposes of this study this group comprises respondents holding middle and upper level management positions; supervisors – who are the group responsible for ensuring dissemination of value and beliefs systems through effective implementation and enactment of HRM policy into practice (Dorenbosch *et al.*, 2006) and in this study this group comprises job holders in low level management positions and who have direct responsibility for the work of others; and shop-floor workers – whose values and beliefs are considered malleable and subject to influence as a result of their consumerist experience of HRM policy and practice in which values are embedded. A self-classification system was used to group respondents into these three groups.

This study

The contribution this exploratory study hopes to make to the literature is to work on the two issues mentioned earlier; the "black box", and the usual practice of using single respondents to report on, or determine HR activities. With respect to the latter, this study adopts multi-actor, multi-level analyses, using three groups: managers, supervisors and shop-floor workers, from 27 firms. This approach is significant not only with regard to the single respondent issue, but also with respect to the "black box". Hope-Hailey *et al.* (2005) suggest any study examining potential "black box" phenomena requires different organisation actors to be included in the analysis as each have a different role to play.

This study sets itself two main objectives. The first is to examine the similarities or differences among perceptions and attitudes of managers, supervisors and shop-floor workers both across the sample, and when analysed within the same firm. The second is to examine the relationship between attitudes and HRM activities to ascertain what, if any, impact perceptions about HRM activities have on a range of attitudinal outcomes. It is intended this analysis will enable a determination as to whether "shared values" is worthy of inclusion in the "black box". To achieve these objectives, the following research questions have been developed:

(1) Are manager, supervisor and shopfloor workers' attitudes towards: shared values; organisational commitment; job satisfaction; and a range of HRM practices across the sample similar or do they differ significantly?

(2) Within-firms, are the manager, supervisor and shopfloor workers' attitudes towards: shared values; organisational commitment; job satisfaction; and a range of HRM practices similar or do they differ significantly?

(3) Are individual perceptions about the strength of HRM practices related to beliefs about a shared value system, organisational commitment and job satisfaction?

(4) If a relationship exists, to what extent do perceptions about HRM practices impact an individual's beliefs about a shared value system, organisational commitment and job satisfaction?

Methodology

The participant sample for this study was compiled by contacting a randomly selected sample of HR Managers from a range of small, medium and large organisations, listed in the *New Zealand Business Who's Who* (2004), from the four main cities of New Zealand – Auckland, Wellington, Christchurch and Dunedin. From the original sample of 60 organisations, who initially gave agreement to participate in this study, matched data sets covering managers, supervisors and workers, were obtained from 27 firms. The final sample is 417 respondents and contains individual-level and company-level data comprising 115 managers, 86 supervisors, and 216 workers from 27 firms. This is not a large number of firms – but compares very favourably with the 12 firms studied by Gerhart *et al.* (2000a, b) and Wright *et al.* (2001). Sample sizes for each of the three groups vary across firms. For managers, the sample size ranges from two to 24; for supervisors, the range is from one to ten; and for workers, the range is from two to 50. The demographic characteristics for the total sample are presented in Table I.

	(%)
Gender	
Male	55
Female	45
Ethnicity	
NZ/European	87
Maori	3
Samoan	3
Other	8
Occupation	
Professional	47
Semi-professional	15
Administration	18
Trades	13
Other	7
Sector	
Public	11
Private	89
Hours of work	
Full-time	92
Part-time	8
Length of service	
Less than one year	20
One to three years	29
Four to ten years	28
More than ten years	23
Firm size	
Small	23
Medium	51
Large	26
Age	
Under 20	4
21-34 years	35
35-49 years	36
50 years plus	25

Note: $n = 417$

Table I.
Sample demographics

Measures
The survey employed for data collection in this study comprised four parts, and was designed to be answered by managers, supervisors and shop-floor workers. Part one of the survey asked respondents to report on a range of demographic questions including sex, age, ethnicity, occupation, service, respondent's role in the organisation, and features of their organisation including industry, sector, and size.

HRM practice
Part two of the survey measured perceptions about HRM practice. Delaney and Huselid (1996, p. 967) have pointed out that "the relevant literature is distinguished by the fact

that virtually no two studies measure HRM practices in the same way". However, the differences are usually slight with considerable similarities. This study used a version of the measure ($a = 0.801$) developed by Wood (1995). In total, 12 statements were included (examples include: job design is such that skills and abilities are used to their fullest extent; the predominant system of organising work in this organisation is team-working). Using a five-point Likert scale (1 = strongly disagree; 5 = strongly agree), respondents were asked to indicate the extent to which they agree each practice occurs in their organisation (Delery, 1998).

Employee attitudes

Three employee workplace attitudes are measured – perceptions about shared values; job satisfaction; and organisational commitment. Three statements are used to measure perceptions about shared values ($a = 0.564$). The first statement required respondents to indicate the extent (using a five-point Likert scale: 1 = strongly disagree; 5 = strongly agree) they believed congruence exists between organisation and employee goals in their workplace (in this organisation, staff members share the overall goals of management and willingly work towards achievement of these goals). While use of a single overt statement is a relatively common phenomenon in attitudinal studies (see for example, Thozhur *et al.*, 2006; Bonache, 2005), this study also asked respondents to indicate agreement or disagreement with the following two statements – the principal objectives and interests of management and workers are more or less similar; and in this organisation management and workers work together as a team. For aggregation purposes, data from item one were subsequently collapsed to fit data obtained from the dichotomous statements.

Organisational commitment was measured using three statements ($a = 0.759$) drawn from the measure developed by Mowday *et al.* (1979). Examples include, I nearly always agree with this organisation's policies on important matters relating to its employees; my work environment allows me to contribute to my full potential; I intend to stay working for this organisation for a long time. For these two measures, respondents were asked to indicate the extent to which they agreed with each of the statements, using a five-point Likert scale (1 = strongly agree and 5 = strongly disagree). Job satisfaction was measured using three statements ($a = 0.824$), taken from a measure developed by Warr *et al.* (1979) (how satisfied are you with your job itself; how satisfied are you with the opportunities provided by your organisation to effectively use your abilities; how satisfied are you with your organisation's employment policies and practices).

Data analysis

The dataset comprises 27 firms, and includes aggregated data from the three main HRM stakeholder groups located within these firms – managers, supervisors and shop-floor workers. All data collected were perceptual and analysed using SPSS 13.00.

This form of data collection enables data to be viewed at three distinct levels. The first encapsulates information at the firm level. The second level is the stakeholder level. The third, and for the purposes of this study, most important level is the variability, within firms, of data obtained from the three different HRM stakeholder groups. Conducting a group-level analysis at the firm level is both appropriate and logical. This is because at the firm level there is potential for a wide variation in HRM practices (Wright *et al.*, 2001), so this means at a group level there is no logical reason

why views on HRM practice or the attitudinal outcomes (especially that of shared values) of members belonging to any of the three HRM stakeholder groups should be either consistent or consensual with each other across a range of firms. Instead, given the importance of "shared values" lies in the degree of consensus both within and among stakeholder groups within a firm – not across a range of firms – a controlled group level analysis is considered most suitable.

For this group level analysis, consensus between roles was assessed by examining the standard deviations for all of the variables across each of the firms participating in the study. The analysis used correlation data for relationships between variables, chi-square for testing the within-firm differences between the three role groups, and regression for exploring the degree of impact among the variables. The focus of this analysis is, as stated, on the group level data, so the firm is only included as control variable.

Descriptive and correlation data for all variables are reported in Table II. All items, with the exception of item one (i.e. values), which uses three dichotomous statements; use five-point Likert scales.

Results

Research question one explores the extent to which attitudes across the sample towards: shared values; organisational commitment; and job satisfaction, as well as perceptions towards a range of HRM activities are similar or different according to role classification.

Table III reports the mean scores and standard deviations for each of the three groups. Also reported in Table III is the ANOVA test result. Large variations in mean scores across groups are evident and many of the mean scores are relatively low, both for attitudes and HRM activities. Statistically significant differences exist for two attitudes (shared values and organisational commitment) and six HRM activities (training and development, promotional prospects, job design, flexibility and security and egalitarianism). As this study is particularly concerned with assessing the value of "shared values", as an attitudinal outcome, a closer inspection of the raw data was warranted. Interestingly, here it is found that some 73 per cent of managers ($X^2 = 17.274, p = 0.000$) report they share the values of the firm, compared with only 52 per cent of supervisors and similarly shop-workers reportedly holding this view. This discrepancy in views was not evident for organisational commitment ($X^2 = 7.090, p = 0.131$) or job satisfaction ($X^2 = 6.694, p = 0.153$).

Next the analysis turns to examine within-firm similarity or difference across these three roles. The standard deviations presented in Table III highlighted relatively large within-group differences for perceptions about HRM activities (these range from 0.87 to 1.7). However, this was not the case for attitudes (standard deviations range from 0.46 to 0.61). Thus, it seemed likely that along with the role differences around across the sample, within-firm differences would also be evident. However, this was not the case.

To test for within-firm differences, separate analyses using the chi-square test, were conducted for each firm. Out of the 27 firms analysed, only three were found to have statistically significant attitudinal or perceptual differences across the three roles examined. The first of these firms had role differences in the areas of training and development ($X^2 = 9.909, p < 0.05$), personal goals ($X^2 = 15.652, p < 0.05$), performance appraisal ($X^2 = 3.504, p < 0.05$), job flexibility ($X^2 = 6.900, p < 0.05$),

Table II. Relationship between attitudes and HRM activities – descriptive statistics and correlations

	Mean[a]	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Shared values (three items)	0.57	0.496														
2. Organisational commitment (three items)	2.52	0.575	0.374*													
3. Job satisfaction (three items)	2.53	0.570	0.382*	0.697*												
4. Training and development	3.38	1.212	0.312*	0.435*	0.470*											
5. Personal goals	3.01	1.305	0.314*	0.364*	0.404*	0.606*										
6. Promotional prospects	2.77	1.334	0.181*	0.294*	0.383*	0.425*	0.467*									
7. Performance appraisal	3.79	1.582	0.205*	0.263*	0.284*	0.391*	0.431*	0.339*								
8. Teamworking	3.25	1.077	0.261*	0.286*	0.269*	0.364*	0.339*	0.300*	0.249*							
9. Job design	3.61	1.128	0.325*	0.444*	0.481*	0.534*	0.537*	0.430*	0.406*	0.322*						
10. Communication	3.64	1.285	0.243*	0.217*	0.240*	0.381*	0.426*	0.290*	0.356*	0.400*	0.440*					
11. Job flexibility	3.64	1.179	0.240*	0.313*	0.299*	0.298*	0.305*	0.271*	0.256*	0.274*	0.407*	0.314*				
12. Participation	3.17	1.322	0.316*	0.372*	0.363*	0.423*	0.474*	0.335*	0.349*	0.375*	0.458*	0.439*	0.445*			
13. Job security	3.31	1.589	0.090	0.167*	0.101**	0.113**	0.118**	0.169*	0.098	0.123**	0.117**	0.168*	0.048	0.152**		
14. Egalitarianism	3.39	1.652	0.102**	0.095	0.096	0.091	0.120*	0.101**	0.085	0.145**	0.147**	0.061	0.108**	0.174*	0.191*	
15. Work/life balance	3.37	1.141	0.385	0.449*	0.467*	0.356*	0.335*	0.252*	0.203*	0.296*	0.372*	0.318*	0.317*	0.337*	0.117**	0.188*

Notes: Control variables: Gender, Age, Ethnicity, Occupation; Hours of work; Service; Role; Organisation; $n = 400$; n is smaller than total sample as a result of missing demographic data across some variables; [a]Scales: Item 1: 0 = Do not share values and 1 = Do share values; Items 2-15: 1 = Strongly disagree to 5 = Strongly agree. * $p < 0.001$; ** $p < 0.05$

	Role	Mean	SD	ANOVA *F*-statistic	Sig.
1. Shared values (three items)	Manager	0.69	0.46	8.914	0.000
	Supervisor	0.53	0.50		
	Worker	0.51	0.50		
2. Organisational commitment (three items)	Manager	2.62	0.50	3.145	0.044
	Supervisor	2.51	0.57		
	Worker	2.47	0.60		
3. Job satisfaction (three items)	Manager	2.56	0.51	0.837	0.434
	Supervisor	2.54	0.59		
	Worker	2.49	0.61		
4. Training and development	Manager	3.55	1.1	3.483	0.032
	Supervisor	3.43	1.0		
	Worker	3.25	1.2		
5. Personal goals	Manager	3.16	1.1	1.859	0.157
	Supervisor	2.96	1.4		
	Worker	2.93	1.3		
6. Promotional prospects	Manager	3.05	1.1	3.809	0.023
	Supervisor	2.51	1.3		
	Worker	2.70	1.4		
7. Performance appraisal	Manager	3.94	1.3	2.693	0.069
	Supervisor	3.49	1.6		
	Worker	3.47	1.6		
8. Teamworking	Manager	3.90	0.87	2.629	0.073
	Supervisor	3.82	1.0		
	Worker	3.68	1.2		
9. Job design	Manager	3.50	0.99	5.396	0.005
	Supervisor	3.29	1.0		
	Worker	3.08	1.2		
10. Communication	Manager	3.73	1.0	2.093	0.125
	Supervisor	3.68	1.1		
	Worker	3.48	1.4		
11. Job flexibility	Manager	3.84	0.94	5.908	0.003
	Supervisor	3.79	1.1		
	Worker	3.44	1.2		
12. Participation	Manager	3.37	1.1	2.715	0.067
	Supervisor	3.24	1.3		
	Worker	3.01	1.4		
13. Job security	Manager	3.75	1.2	10.070	0.000
	Supervisor	3.41	1.4		
	Worker	3.03	1.7		
14. Egalitarianism	Manager	3.92	1.2	11.468	0.000
	Supervisor	3.32	1.7		
	Worker	3.13	1.7		
15. Work/life balance	Manager	3.37	1.0	0.130	0.878
	Supervisor	3.41	1.2		
	Worker	3.35	1.1		

Notes: Scales: Item 1: 0 = Do not share values and 1 = Do share values; Items 2-15: 1 = Strongly disagree to 5 = Strongly agree; [2]Sample size – managers = 115, Supervisors = 86 and Shopfloor workers = 216

Table III.
Similarity and difference in attitudes and perceptions by role across firms

job security ($X^2 = 6.431, p < 0.05$) and work/life balance ($X^2 = 6.086, p < 0.05$). The second firm had role differences in relation to perceptions concerning shared values ($X^2 = 10.548$, $p < 0.05$), participation ($X^2 = 8.621$, $p < 0.05$) and job design ($X^2 = 11.375, p < 0.05$), and the third, in performance appraisal ($X^2 = 6.357, p < 0.05$), egalitarianism ($X^2 = 6.912, p < 0.05$) and participation ($X^2 = 9.845, p < 0.05$). Examination of the standard deviations for each of the three groups across all variables included in this study reveal a relatively high degree of consensus (ranging from zero to 1.96) to be evident.

Question three looks at whether individual perceptions about the strength of HRM practices are related to beliefs about a shared value system, organisational commitment and job satisfaction. These results are reported in Table II. Values are found to be highly and statistically significantly correlated with all practices with the exceptions of job security and work/life balance. Values were most strongly related to participation. Organisational commitment and job satisfaction are also found to be highly-related to HRM activities. Interestingly, the exception for both here is views towards egalitarianism. Training and development, job design and work/life balance are found to have the strongest relationships with these two attitudinal outcomes.

The final research question examined the extent to which perceptions about HRM practices impacted an individual's beliefs about a shared value system, organisational commitment and job satisfaction. Regression analyses were conducted to ascertain impact, and here it was found when all variables were entered simultaneously that HRM activities accounted for around 21 per cent of the variance in attitudes about "shared values"; 36 per cent of the variance in organisational commitment; and around 39 per cent of the variance in job satisfaction. HRM activities were then entered into a stepwise regression. These results suggest a particular bundle of practices may impact more than others. In particular work/life balance, job design, and to a lesser extent participation and training and development seem to account for most of the variance in these three attitudinal outcomes.

Discussion

The results of this study suggest that, at the group-level, large differences exist in attitudes towards a range of HRM activities. While these perceptual differences appear to transcend firms and roles, they do not however seem to be strikingly different within firms. Managers, as a group, more strongly supported the view a particular HRM activity was practised in their firm, than did respondents from the supervisor or worker groups. The only exception to this was in the case of supervisory ratings in relation to work/life balance.

The differential in perceptions across HRM activities is strongly indicative of bias, and this is likely to be dependent on the perspective (i.e. implementation or consumption) from which the individual is responding. Data presented in Table III shows managers are systematically more positive than supervisors and employees. This is an interesting finding and can perhaps be best explained by the framework developed by Wright and Nishii (2007), which, distinguishes between intended, actual and perceived practices. According to this framework it is possible that manager respondents are more focused on the intended practices (policies), supervisors on the actual practices (implementation) and employees' views signify their reactions to these practices.

In relation to attitudes, managers as a group also tended to perceive shared values to be a feature of their organisations, whereas supervisors and workers were less likely to perceive this to be the case. While this is not surprising, given a shared value system is often posited as being a key driver underpinning much of an organisation's HRM activity, this coupled with the potential bias noted above supports a research approach that segregates and analyses respondent data according to:

- role; and also
- firm.

In doing so, trends across organisations can then be used as the basis for drawing inferences.

A strong relationship is found between all three attitudes examined and the range of HRM activities – the strongest of these relationships are between attitudes and job design and work/life balance. The extent of this impact varied, with HRM activities accounting for nearly twice the variance on job satisfaction than was the case for shared values. Consistent with the strength of the correlations, job design and work/life balance are also the two practices that feature as strong predictors for all three attitudes.

Conclusion

This exploratory study set itself two main objectives. The first was to see whether "shared values", a construct that has recently been identified in the literature as a characteristic of successful firms, should be included as an intermediary attitudinal outcome (i.e. the black box) in the HRM-firm performance relationship. Clearly, we believe it does warrant inclusion. It is highly related to, and appears to be impacted by, a range of activities generally considered to comprise best-practice HRM. We therefore conclude it should feature in the development of new models exploring HRM and firm performance.

The second objective was developed in response to studies that use a single respondent to assess HRM activities within a firm. It aimed to ascertain if the role of the respondent had a significant impact on an individual's perceptual evaluations. Again, this study found that it did. Paradoxically, the degree of difference amongst the various stakeholder groups, within-firms, was not marked. The implication of these findings suggests that "usual practice" HRM research, in which senior HRM managers from a large number of firms give their view, is not "best practice" HRM research. The design of future HRM studies needs to take into account the multiple sets of actors that comprise an organisation and data must necessarily be collected from all groups.

The study has limitations, which should be considered in future research. First this study uses cross-sectional self-report data for both the dependent and independent variable and this can lead to issues in relation to common method variance. To minimise this effect survey statements were randomly ordered. Second aggregated data should only be used when high construct reliability has been demonstrated (Bliese, 2000). All scales, with the exception of the "shared value" scale, had reliability scores above the level usually considered acceptable (Hair *et al.*, 1998).

We conclude a more accurate picture of the impact of HRM is likely to stem from studies that analyse group-level data collected from multiple respondents across multiple firms in different industry and geographic locations (see Table IV).

	R^2 adj	F-Statistic	Predictors: HRM practices (stepwise)[1]	Model	R^2 adj
Shared values	0.212*	10.193	Work/family life balance	1	0.127*
			Participation	2	0.184*
			Job design	3	0.205*
			Personal goals	4	0.212*
Organisational commitment	0.361*	20.219	Job design	1	0.219*
			Work/family life balance	2	0.305*
			Training and development	3	0.337*
			Participation	4	0.347*
			Job security	5	0.355*
			Communication	6	0.364*
Job satisfaction	0.388*	22.853	Job design	1	0.247*
			Work/family life balance	2	0.341*
			Training and development	3	0.376*
			Promotion	4	0.386*

Note: * Statistically significant at the $p < 0.001$ level or above

Table IV. Regression – impact of HRM activities on attitudes

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