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The relative 'invisibility' or intangibility of human resource management knowledge dynamics: a perspective

CW CALLAGHAN

School of Economic and Business Sciences, University of the Witwatersrand

chris.callaghan@wits.ac.za

Abstract

Background: Given certain theoretical and definitional tensions within HRM and SHRM which arguably have the potential to fragment the field, this article argues SHRM should provide a unifying logic for HRM, by way of a focus on the contribution of increasingly heterogeneous and valuable knowledge investments to firm competitive advantage, in spite of methodological 'invisibility' of firm knowledge and performance effects.

Purpose/Objective: The purpose of this article is therefore to provide an argument the productivity enhancement legacy associated with industrial logics confounds the development of new theory in the wake of dramatic productivity enhancements of the knowledge era, as homogeneous labour and dominant capital relationships have given way to heterogeneous labour and dominance of increasing returns to knowledge (ideas and innovations) in the knowledge economy.

Methodology: This review article provides an analysis and offers arguments based on methodological shortcomings identified in HRM literature.

Recommendations: Specialist HRM and the influences of (methodologically) intangible knowledge dynamics are therefore increasingly key to organisational performance, and should be recognised for their roles in a context of increasing returns to knowledge.

Key phrases

intangibility; knowledge investments; methodology

1. INTRODUCTION

According to some human resource (HR) scholars, human resource management (HRM) and strategic human resource management (SHRM) currently face a theoretical crisis. Jackson, Schuler and Jiang (2014:5) argue the SHRM field has 'lost its way', or "clearly reveals a significant gap between the visions of strategic HRM's early pioneers and the field's current trajectory," problems particularly acute given the rising importance of HRM to firm performance. A gap exists between intended and implemented HR practices, which has to date rarely been explored systematically (Woodrow & Guest 2014).

Further, a contemporary lack of consensus around the content and composition of HRM systems is at the heart of serious methodological challenges facing the development of the SHRM field, according to Jackson *et al.* (2014:30), specifically in regard to the lack of knowledge of causal relationships between HRM systems and outcomes such as firm performance and customer satisfaction.

According to Jackson *et al*. (2014:2), therefore, "the broad aspirations apparent in the field's early seminal works have yet to be realised as the seeds of important conceptual ideas have been neglected, perhaps because rigorous empirical tests of the field's complex core concepts have proved extremely difficult to conduct."

Other voices also feel HRM has lost its way on account of its coupling with SHRM, but for different reasons. According to Marchinton (2015:176), some argue HRM as a field has sought legitimacy through linking itself to strategic objectives, and therefore "is likely to wither both in academic and practitioner circles." Kaufman (2014:196) also draws attention to the "number of distinct and partially incommensurate definitions of HRM" in contemporary HRM literature.

What seems to be evident from this body of literature is lack of justification for the relationship between HRM and SHRM, or a core rationale behind which scholars and practitioners can rally to develop the field going forward. In other words, it is argued here that while strategic logics are mooted to link HRM and SHRM, an overarching strategic logic for the development of the HRM field is lacking. It is therefore argued here one does exist, which places HRM at the core of organisational success, but that it is overlooked amidst the different emerging streams of the field due to intangibility of knowledge effects in firms.

A lack of an overarching rationale for the field which recognises the importance of knowledge dynamics imposes costs on constituencies and stakeholders associated with HRM.

*Firs*t, different bodies of theory, which predict different HRM policies and practices due to origins in different paradigms of work, continue to pose challenges for HRM as it is applied to knowledge work (Deadrick & Stone 2014:193). Until tensions between theory developed in response to the dramatic productivity enhancements of the industrial revolution versus other theory developed in response to the productivity enhancements of the knowledge revolution is resolved, theoretical confounds may persist.

The core tenet of this article is that HRM's relationship with SHRM should be premised on harnessing the productivity enhancements associated with the knowledge revolution, or the advent of technological advancements which offer the potential for increasing returns to firm knowledge investments, notwithstanding their methodological intangibility. Technological advancements are considered here to contribute to firm growth through their knowledge accumulation and application effects, akin to how economic growth is facilitated by technological progress versus the influence of capital (Romer 1990:S71).

A singular focus on knowledge accumulation and application in pursuit of increasing returns to knowledge would make moot many of the theoretical confounds which still plague the field, such as anti-managerial theory (Marchinton 2015:176), because the power relationships within which knowledge workers are nested are not of the same exploitative type experienced by industrial workers, or work associated primarily with the primary or secondary sector. Although the increasing potential of knowledge is not modelled mathematically here; conceptual analysis draws broadly from endogenous growth theory (Romer 1990:S71) which predicts the possibility of non-linear growth due to knowledge effects.

Second, in the absence of a clear and compelling rationale that couples HRM to firm performance, the disjuncture between practitioner and academic research (DeNisi, Wilson & Biteman 2014:219) might be deepened, as firms reject theory less helpful in their quest to maximise returns to knowledge investment in knowledge work. Unless the methodological 'blind spot' related to the almost invisible knowledge dynamics in firms is acknowledged and made explicit, returns to knowledge in firms will, arguably, remain under-researched in relation to more measurable dynamics.

Third, as the primary field which offers deep knowledge of the human resources (Swart, Kinnie, Van Rossenberg & Yalabik 2014) from which tacit knowledge (Polanyi 1973:12; Nonaka 1994:14) is inextricably inseparable, HRM should be part of strategic planning at the highest levels in firms as it can uniquely contribute to increase returns to knowledge; notwithstanding this logic, firms typically resist this and relegate HRM to lesser roles (Boudreau & Lawler 2014:232).

Fourth, in the absence of a strong guiding rationale such as increasing returns to knowledge in knowledge work (Swart *et al*. 2014), subordinate fields within HRM, such as human capital (Afiouni 2013:18) and talent management (Lewis & Heckman 2006) which explicitly embrace this goal might ultimately differentiate from HRM, which is in danger of being associated with 'the other' personnel management aspects not explicitly related to maximising returns to knowledge. Other functional areas such as finance do not have this problem.

The maximisation of returns to financial capital is a clear and compelling rationale for finance as firm strategic partner. It is perhaps time HRM took its place as a dominant value contributor in firms, given returns to heterogeneous knowledge investments (Swart *et al*. 2014) can be increasing, and returns to capital are typically linear and more difficult to leverage without interactions with knowledge (because of the relative homogeneity of capital it requires knowledge to create increasing returns).

Capital has little 'monopoly' power over and above relatively scarcity, and is easily substitutable. Knowledge, and particularly expert tacit knowledge (Nonaka 1994:14; Polanyi 1973:12), on the other hand, is heterogeneous (Swart *et al.* 2014), endowing individuals who possess it (and the firms they work for) competitive advantage which is potentially difficult to copy.

The article proceeds as follows. First, definitional and content-related challenges associated with the relationship between HRM and SHRM are discussed, and related to certain key arguments.

Next, certain methodological issues associated with knowledge intangibility and other aspects of knowledge dynamics are discussed. The analysis then concludes, summarising core arguments. Definitional issues relating to HRM and SHRM are now considered.

2. SHRM AND HRM: DEFINITIONAL UNDERSTANDINGS

SHRM has been defined as "ideas intended to increase the responsiveness of the human resource function to organisational goals" (Mesch, Perry & Wise 1995:385). For others, SHRM "… is about the relationship between human resource management ... and strategic management in an organisation", and "…covers broad organisational concerns related to structure, culture, management of change, organisational effectiveness, performance, competence, matching resources to future business requirements and employee development" (Nigam, Nongmaithem, Sharma & Tripathi 2011:148).

Despite the fact that "human resources are critical to the functioning of organisations in the service and knowledge economies" (Deadrick & Stone 2014:195), 'stubborn traditionalism' on the part of firms has kept HRM from recognition as a key strategic partner (Boudreau and Lawler 2014:232).

HRM has experienced legitimacy issues (DeNisi *et al.* 2014:219); some arguing HRM's attempt to link with SHRM is in response to perceptions of a lack of legitimacy (Marchinton 2015:176). Over time, the field has emerged from a low-status identity as personnel management to become HRM, but definitional issues still pose problems for the field (Kaufman 2014:196).

A useful way to conceptualise the role of HRM is in the form of systems, and in terms of HRM's effectiveness in managing systems to respond to firm goals (Jackson *et al*. 2014:2).

HRM systems are inextricably interconnected with other elements of an organisation (Monks, Kelly, Conway & Flood 2013), and interdependencies "bind HRM systems to the external environment in which they are embedded"; SHRM is therefore "inherently contextualised and dynamic" (Jackson *et al.* 2014:4).

Jackson *et al.* (2014:4) offer a review of the evolution of the concept of effectiveness in the SHRM literature:

> *Prior to the emergence of strategic HRM, HRM "effectiveness" was evaluated against technical criteria that had been established by the profession (e.g. validity), social criteria embodied in laws and regulations (e.g. fairness), and individual employee reactions (e.g. job satisfaction and job performance). The strategic HRM perspective shifted attention to effectiveness criteria used by other stakeholders.*

> *So far, the concerns of owners and investors have receive the most attention, but for the views of customers, members of the broader society, line managers, and other organisations are recognised as potentially relevant also. The ways in which HRM systems affect the full array of stakeholders are not yet fully understood, but interest in this issue appears to be increasing.*

Given complexity of these relationships, an underlying rationale for relationships between HRM and firm performance based on maximisation of returns to knowledge (Nonaka 1994:14) might act to re-configure logics of stakeholder relationships in firms. SHRM, however, does seem to be the vehicle for HRM to stress this primary rationale for more attention in the field (the maximisation of returns to knowledge in firms).

To further understand relationships between HRM and SHRM, however, it is necessary to understand methodological linkages between these areas.

3. METHODOLOGICAL ISSUES WITH SHRM

Contemporary lack of consensus around content and composition of HRM systems (Monks *et al*. 2013) is at the heart of serious methodological challenges facing the SHRM field, according to Jackson *et al*. (2014:30), who summarise what they see as a current crisis facing the field as follows:

> *Yet, paradoxically, we also worry that a seemingly infinite desire for better measurement and stronger research designs could stall the field's progress on substantive issues. Rather than requiring near-perfection for any particular study, we hope strategic HRM scholars will support the proliferation of multiple measurement approaches and show an appreciation for replications conducted in diverse settings under a variety of environmental conditions, for a productive field is one in which a thousand flowers bloom and cross-pollinate.*
>
> *Alternatively, long-standing methodological arguments could stall the field's continued development if they demotivate a new generation of scholars.*

Methodological issues constrain SHRM on different fronts, such as the challenges associated with measuring knowledge effects, which are essentially intangible, and issues related to empirically testing relationships which are essentially endogenous, or where the directions of causality are difficult to establish. Such testing typically faces heterogeneity

(Cherry 1999:753; Jones & Landwehr 1988:41; Steyerberg & Eijkemans 2004:102) and endogeneity (Shaver 1998:571) biases, which can cause spurious findings in empirical testing of organisational variables.

The HRM-performance relationship has been approached from a host of different perspectives and methodologies, including work grounded in organisational behaviour, sociology, economics, industrial relations and organisational psychology, with a specific focus on how different HR practices influence different outcomes both at the individual and organisational level of analysis (Paauwe 2009:129).

However, evidence to support linkages between HR practices and performance has been mixed, with many previous studies vulnerable to inadequate research design (Paauwe 2009:130). Further challenges are associated with the measurement and testing of other important intangible effects, such as those explored in culture research (as an example of intangible effects which are key to SHRM dynamics). These difficulties are perhaps reflected in how the field has sought to deal with them.

Culture (defined here as shared understandings made manifest in act and artefact) comprises both values and practices (House, Hanges, Javidan, Dorfman & Gupta 2004:xv), and is key to organisational performance (Schein 1996:229). Management's HR beliefs and values have been found to affect high-performance work system adoption and the effectiveness of its implementation (Arthur, Herdman & Yang 2014). This is but one example of multiple channels and mechanisms through which values and culture can influence HR outcomes (for a review of others, see Callaghan (2013)).

Culture, or values research, builds primarily on two streams of theory; namely the organisational climate literature, which diverged from organisational culture literature over epistemological and ontological differences (associated with the 'paradigm wars' in the social sciences literature), before 're-converging' in the work of scholars like Hofstede (Denison 1996:619). Hofstede (2006:882) offers further example of methodological issues related to empirical study of culture, such as the difficulties inherent in validating cultural dimensions.

However, for a field to develop, the requirements for convergent and discriminant validity, Campbell and Fiske (1959:81) suggest that different methods of scientific enquiry are not necessarily incommensurate, but can offer complementary perspectives of phenomena, thus enhancing validity. The effects of knowledge accumulation and application in support of

increasing returns to firms may in many instances defy measurement, being methodological more difficult to research.

3.1 Methodological constraints to knowledge theory development

Methodological issues can constrain attempts to develop a unifying core value proposition for HRM through its strategic contribution to competitive advantage, especially if research neglects the transmission of knowledge (Nonaka 1994:14) to firm performance as a core focus of what HRM should do. It is not difficult to appreciate rapidly increasing standards of non-experimental empirical research, which require appropriate data standards to meet the assumptions of advanced statistical models. This trend toward more rigor in research aspires to research designs that produce findings at a standard comparable to experimental studies.

However, explicit causal measurements of knowledge assets and relationships around knowledge are resistant to these methodologies because of their fundamental *intangibility*. Arguably, in the same way as the metaphorical tail which wags the dog, what are considered more 'scientific' methodologies have shaped our field. Knowledge has perhaps lost out to capital in terms of analysis due to its intangibility. Thus perhaps denying firms a powerful source of new theory development.

Areas of study lending themselves to 'good' data then tend to gallop away and end up with higher status and more developed empirical literatures than other areas in which only proxies of the relationships under study can be empirically measured. Heated methodological debates (for example Maroun's (2012:2) critique of empiricism and the large body of work around the paradigm wars reviewed by Denison (1996:619)) reflect unease around these issues.

Similar issues can perhaps be seen in other fields where good primary and secondary sector data abounds, and dynamic panel data analysis or other elegant statistical methods can more easily be used; knowledge effects in organisations, however, offer serious methodological challenges to their study. Even with very large data sets, as stressed previously, problems of heterogeneity bias (Cherry 1999:753; Jones & Landwehr 1988:41; Steyerberg & Eijkemans 2004:102), endogeneity (Shaver 1998:571), and a host of other statistical problems can cause spurious results in quantitative study of organisational relationships with observed data.

Arguably, these problems are compounded when not only are many effects within organisations intangible, but perhaps also non-recursive, or are causally multidirectional. Studying organisational culture (Deal & Kennedy 1982:30; Schein 1996:229), and its effects can expose a researcher to a veritable methodological nightmare, as each step of analysis is effectively a path through a methodological minefield, given the perhaps infinite interactive effects associated with measuring culture (and some argue that this is not possible). Jackson *et al*.s' (2014:2) cautionary arguments lie at the heart of serious methodological issues which, arguably, need to be resolved before a unifying logic for the strategic contribution of HRM can properly take root if maximising returns to HR effort is to be possible.

3.2 Heterogeneity and methodological challenges

The argument made here is that the development of a core strategic rationale for the value proposition of HRM (which relates to the management of increasingly heterogeneous endowments of knowledge in pursuit of competitive advantage) is not without methodological implications.

Heterogeneity of knowledge itself (Nonaka 1994:14) poses problems of generalisability, by definition. And the need to 'thread' out the different channels through with knowledge attains its returns through its impact on competitive advantage makes advanced statistical methods difficult to apply; heterogeneity of knowledge endowments is at the heart of their value, as they are more difficult to copy by other firms.

Whereas conditions of perfect competition seem a perfect fit with sophisticated statistical methods, the 'monopoly' conditions firms create through taking recourse to the heterogeneity of their knowledge assets and their quest for unique competitive advantage have serious implications for empirical methods that are premised on generalisability, or at least result in the rejection of empirical work that does not meet certain standards of generalisability.

A further issue in HRM research relates to heterogeneity in size of organisations and firms. Many are relatively small; sample sizes constrained by organisational size are often not large enough to offer journals the statistical rigour of larger studies. Anecdotally, colleagues acknowledge that in many instances, to get empirical work published, it has to relate to a 'big' study, or an 'involved' research design.

To understand the effects of HRM in organisations, and to understand the multiple and complex systems (Monks *et al*. 2013) through which heterogeneous knowledge endowments contribute to competitive advantage, 'small data' needs to be accepted as a necessary aspect of HRM research. This argument, however, puts HRM research at odds with the global trends toward rarefied and increasingly sophisticated methods requiring big data sets and high generalisability, which have perhaps been embraced as an exclusionary paradigm by academic journals, and which might stall the field's development, as argued by Jackson *et al*. (2014:2).

Over and above the issues associated with 'long-standing methodological arguments', according to Jackson *et al.* (2014:30), three other methodological issues dominate in the HR literature: (i) the difficulty scholars have in reaching consensus on the specific elements comprising the content of HRM systems, particularly as they relate to HRM philosophies and processes; (ii) challenges in combining specific elements of HRM systems and knowledge of the complexity of their additive versus interactive effects; and (iii) dynamic, reciprocal processes typically associated with HRM systems, which make it difficult to demonstrate causal outcomes and to understand how HRM systems co-evolve "with other aspects of organisation."

> *Arguably, these methodological issues have at their root complexity associated with the heterogeneity of knowledge endowments and in the way they transmit to competitive advantage.*

4. CONTEMPORARY AND NEW DIRECTIONS FOR SHRM

Certain scholars have critiqued SHRM and have suggested new directions for the field. Jackson *et al.* (2014:31/36) suggest new directions for SHRM should include a focus on (i) systems thinking and the environment, (ii) complexities of international, or global, business, (iii) needs of diverse stakeholders, (iv) workforce segmentation, and (v) knowledge that has practical usefulness, describing "how to do it, not just what to do."

Arguably, Jackson *et al.*s' (2014:36) notions of workforce segmentation are echoed in attempts to differentiate the contributions of individuals to competitive advantage, or in differences in the contributions of investments in people and organisational outcomes. Lewis and Heckman (2006:143) stress "the link between HR investments and practices and

organisational outcomes" is an area of research "broadly known as strategic human resource management." This perspective, focused on maximising returns to human resource knowledge investments, may offer an effective grounding framework for SHRM.

However, despite the development of SHRM as a research field, certain challenges remain, such as the use of cross-sectional and retrospective research designs which fail to establish causal direction of flows of effect between HR practices and organisational outcomes. Collings and Mellahi (2009:306) argue conceptual boundaries between relatively new subfields like talent management and SHRM remain unclear, and that clarifying SHRM's conceptual boundaries is "helpful in helping to differentiate strategic management from strategic human resource management." Collings and Mellahi (2009:306) explain this further as follows:

> *In this regard we argue that in contrast to strategic human resource management, which while recently recognising the differing contribution of different groups of employees within the firm, generally focuses on all employees within an organisation; strategic talent management focuses on those incumbents who are included in the organisation's pivotal talent pool and who occupy, or are being developed to occupy, pivotal talent positions.*

The heterogeneity of returns to human resources (Swart *et al*. 2014), or talent, is stressed here as a rationale to support the differentiation of strategic talent management (STM) from SHRM, which is framed as a fundamentally important aspect of SHRM.

Arguably, the disproportionate nature of returns to heterogeneous knowledge should be a central focus of HRM research into organisational competitive advantage. Arguably, the fact that this notion is not sufficiently framed as a dominant focus of SHRM might derive from other methodological challenges facing the field.

Persistent methodological challenges faced by the field include overreliance on one-source self-reports and it is difficult to gauge the size of HR practice/outcome effects; lack of clarity also persists as to appropriate levels of HR effectiveness data collection, issues of temporal stability of HR practices and outcomes, and omitted variable bias (Lewis & Heckman 2006:139).

Studies also often fail to investigate how choice of practices relates to strategy; although much literature is published in this area, it has tended to simply reflect differences by

industry, competitive climates, geographic regions or socio-economic variables (Lewis & Heckman 2006:139).

The establishment of TM as a strategic and value-added term does not offer much in the way of understanding how "highly functioning" HR departments operate (Lewis & Heckman 2006:143). Instead, Lewis and Heckman (2006:144) argue the architectural analogy in the literature (as it relates to TM) advanced by Jackson and Schuler (1990:223) offers a "systems-level strategic perspective that makes the TM concept one that adds value and opens new research possibilities." Examples of this kind of research include efforts to more strategically link different typologies of talent to strategy, such as replacement scarcity and value added, particularly with regard to technological advancement (Zuboff 1988:11).

High value talent pools that are hard to replace have been termed human capital (Stewart 1997:27), but this literature nevertheless fails to address how TM can shape strategy rather other than to simply adapt to "the implications of strategy" or the imperatives of implementation (Lewis & Heckman 2006:145). Following Lewis and Heckman's (2006:145) logic, going a step further, it is argued here that the differential contributions of knowledge to competitive advantage should shape strategy, and that this should be a complementary focus of SHRM.

5. A BRIEF HISTORY OF SHRM

SHRM has long been criticised for its atheoretical nature (Delery & Doty 1996:802), and its focus on a 'laundry list' of issues, lacking a coherent underlying rationale. Over time, other theoretical perspectives were incorporated into SHRM literature, including systems theory, role theory, institutional theory, human capital theory and social capital theory (Jackson *et al*. 2014:5).

Theorising in SHRM, however, has been limited in its ability to develop longitudinal research, complex causal understandings or a focus on multi-level phenomena (Wright & Haggerty 2005:164). Knowledge of the causal path dependencies of knowledge and its returns in firms may be uniquely vulnerable to methodological issues which fail to capture these effects.

Wright and Haggerty (2005:164) argue historical SHRM literature across the fifteen year period 1990-2005 advanced through developing metatheories offering rationales for the

relationship between HRM and performance, as well as middle-level theories explaining how these are related.

Prior to this period, the field's atheoretical development was exacerbated by a tendency to import metatheories (for example resource-based theory, the behavioural approach, open systems theory, control theory, population ecology and critical theory), according to Wright and McMahan 1992:295). The development of the field was therefore held back, although resource-based theory remained dominant due to its relationship with strategy theory and ability to link HRM to performance (Wright & McMahan 1992:295).

The central tenet of this work is the linkage between HRM and performance (through the competitive advantage channel) should be a key rationale for the further unification of the HRM field, expressed through the lexicon of SHRM.

5.1 Process understandings

Notwithstanding historical developments in the field, lacking at the time was knowledge of process understandings, or of mediating processes linking HRM to performance, and micro-mediation has become an issue for SHRM theorists (Wright & Haggerty 2005:164). Micro-mediation occurs when relationships between any two process mechanisms are continually taken to "be more specifically described by many more specific sub-processes" (Wright & Haggerty 2005:166). What seems to be at the heart of these issues is the fundamental nature of path dependencies in relationships between HRM and competitive advantage, or how heterogeneous knowledge assets are leveraged for unique competitive advantage.

Complexities associated with highly valuable but heterogeneous knowledge assets (Nonaka 1994:14; Polanyi 1973:12), or resources, pose methodological challenges (Callaghan 2016:8), and HRM research is often not accorded sufficient legitimacy by managers (DeNisi *et al.* 2014:219). Adding to this complexity are relationships between knowledge endowments and values configurations (Callaghan 2015:33), as well as organisational culture (Dean & Kennedy 1982:30; Schein 1996:229), which can enable or constrain innovative behaviour in organisations (Callaghan 2013:7).

The SHRM literature has also come to acknowledge managing highly innovative units of an organisation, or 'skunk works', necessarily requires different HRM systems from other units, a conception contesting notions of universal 'best practices', and that developmental stages

of HRM systems should match the organisation's developmental stages (Jackson *et al*. 2014:6).

Again, we argue that at the heart of such differences is how knowledge is leveraged (Swart *et al*. 2014) for competitive advantage (to maximise its returns) by different units and different individuals. Differentiation is key to this, as knowledge is heterogeneous, which is key to unique competitive advantage.

This characteristic of knowledge is particularly salient for how knowledge contributes to innovativeness in organisations. We would go so far as to argue, following Nakata and Sivakumar (1996:61), that organisational processes exhibit most variance along an axis of 'initiation' (innovativeness) versus 'implementation' (non-innovative control), a differentiation echoing Schwartz's (2007:3) values theory axis from 'openness to experience' to 'conservatism'. At the heart of SHRM complexity, however, is the heterogeneity of knowledge.

Although a host of 'symptoms' of values configuration tensions seem present in the literature, improvements in SHRM methods over time have allowed for a better focus on these 'symptoms'. The "past decade has seen a growing interest in understanding the boundary conditions (moderators) that constrain and amplify the effects of HRM systems" (Jackson *et al.* 2014:28).

Particularly relevant to maximising, or optimising, returns to knowledge, is knowledge of the role of values systems interactions with knowledge capabilities, given previous research highlighting relationships between research and development and cultural values systems (Kedia, Keller & Julian 1992:9). Arguably, knowledge interactions pose a challenge to empirical research as they seem difficult to directly measure and test; metaphorically, a 'perfect storm' of interactional effects. Tracking the development of the SHRM literature offers some evidence of this.

5.2 Notions of 'fit'

Wright and Snell (1998:756) acknowledge tensions in SHRM literature at the end of the 1990s, particularly between desirability of strategic fit versus organisational flexibility. Previous attempts at reconciliation of this tension took the form of orthogonal perspectives (that these are opposite poles of a continuum, and, hence, not compatible) versus

complementary perspectives (that continual adaptation to external environment is necessary) (Wright & Snell 1998:756). These differences, however, possibly reflect differences in perspectives of time frames and goals, fit as at a point in time, and flexibility as a flow concept (Milliman, Von Glinow & Nathan 1991:318).

Values configuration theory builds on theory differentiating different types organisational fit, for example horizontal versus vertical fit (values configurations typically constrain or enable innovation, or new knowledge application) (Callaghan 2013:7).

However, although notions of fit (Delery 1998:289) characterise historical development of SHRM, *little consideration has been given to the fit between different types of knowledge and their interactions and competitive advantage*. It is possible, due to the intangibility of knowledge and its generation of returns to its operations, it has remained in a methodological 'blind spot' as empirical research picks up proxy effects related to its interaction with more measurable components of processes. Arguably, gaps between intended and implemented HR practices (Woodrow & Guest 2014) can result from lack of evidence-based precedent.

Evidence of support, however, for horizontal or vertical fit frameworks by the late 1990s was scant (Delery 1998:289). Horizontal fit represents alignment of HR practices within organisation to work synergistically, or complement each other, and vertical fit refers to alignment of HR practices with organisational context (Delery 1998:289). The problem in locating specific configurations of HR practices leading to superior performance is expressed in the notion of equifinality, which suggests that high performance outcomes can be achieved through the use of (any) different HR practices permutations (Delery 1998:289).

Certain practices, however, may require support from others (Delery 1998:289); it is possible that path dependency poses a challenge to performance, and knowledge of linkages between HR practices is therefore necessary, particularly of which practices support others and can maximise returns to knowledge and contribute to competitive advantage.

A compound capability can be developed through vertical and horizontal fit between these knowledge capabilities (Callaghan 2013:7) transmitting to competitive advantage (and not easily copied, due to path dependencies). Mapping this type of fit may be useful for organisations. Knowledge of how to implement this type of 'knowledge-fit' is also important.

One might have effective planning systems and practices, but without the capacity to implement them performance cannot be attained.

5.3 Knowledge processes and HR practices

If ability is normally distributed in human populations then skills and knowledge in general as well as those required to implement HR systems are scarce (Delery 1998:289). Constraints to organisational performance reflect core shortages of human capacity, as individuals are inextricably inseparable from human tacit knowledge (Polanyi 1973:12). Human capacity is thus a necessary but not sufficient condition for effective SHRM.

Nevertheless, it is argued the maximisation of human capacity, and generation of compound (inimitable) knowledge, as well as its transmission to competitive advantage should be a core complementary tenet of HRM's contribution to organisational strategy, or SHRM; in short an additional unifying rationale for SHRM. Locating the diverse (and typically unfocused) SHRM literature around this broad rationale might offer a stable and useful base for its further theoretical development, given the methodological difficulties in measuring knowledge effects in firms.

HRM practices (and knowledge endowments) relate to each other, and their contribution to competitive advantage, in different ways. Certain practices act additively, others interactively, and some might be substitutable, in that there is no gain from having a practice as well as its substitute, as duplication is costly (Delery 1998:289).

Practices or behaviours are the route through which knowledge transmits to competitive advantage. Such practices, or behaviours, are particularly important, as are their synergistic designs, taking into account the need to create compound and unique knowledge configurations contributing to competitive advantage. HR practices can, however, be synergistically positive or synergistically negative, or have positive and/or negative consequences for performance. Having team HR processes together with individual-only reward structures is an example of potential negative synergy (Delery 1998:289).

Another dimension of fit well considered in the historical literature is 'strategic types' (Wright and Snell 1998:756) a body of theory building on early seminal work (Miles and Snow 1984; Schuler and Jackson 1987) which culminated in empirical tests of strategy-HRM relationships (Huselid 1995). According to Wright and Snell (1998:36), strategy-HRM

practices fit, strategy-employee skills fit, and strategy-employee behaviour fit are three dominant conceptions of fit in historical SHRM literature. At this nexus, returning to Wright and Haggerty's (2005:164) conception of micro-mediation, and attempts to develop theory in ever finer detail, we introduce a further perspective of the interactions between values and knowledge in contributions to competitive advantage.

Micro-mediation issues (Wright & Haggerty 2005:166) need to be taken into account in any attempt to theorise about knowledge configurations of HRM systems. Akin to how fine grained photographs comprise subordinate pixels, if one 'focuses down' sufficiently using one frame of reference one might perceive a different structure of relationships at different levels, as a photograph reduces to a sea of circular dots under magnification. Substantively different causal structures and mechanisms operate at different levels of analysis, with implications for the flow of knowledge, and how it is leveraged to create a compound and inimitable advantage. Values interactions with knowledge complicate this process.

Study of knowledge flows and their synergies and heterogeneous path dependencies within organisations is made difficult due to their inherent intangibility. Research (Hofstede 1980:6; Schwartz 2007:10; House *et al*. 2004:16) based on quantitative analysis of values, such as by House *et al.* (2004:16), specifically differentiates cultural values from practices at organisational as well as societal levels.

Developing 'micro-theory' linking values and practices is critically important if the SHRM field is to make explicit claims about linkages at different levels of organisational processes, particularly if intangible aspects like values are fundamental units of analysis in these processes, given the importance of values configurations in unlocking and motivating human effort. Individual and group values configurations therefore mediate linkages between knowledge investments and performance.

The SHRM literature has tested moderators of relationships between HRM systems and organisational outcomes, such as, for example, business strategy, culture/climate, organisation biography, internal environment and industry characteristics (Jackson *et al*. 2014:4). In its focus on culture and cultural values as moderators of the relationships between HRM systems and organisational outcomes, the literature has made significant progress.

Values contestation is a fundamental aspect of values configuration theory (Callaghan 2013:9), contributing variance along the entire HRM systems-organisational outcomes chain, or linkage. However, the key relationship in the HRM theory development should be the knowledge-competitive advantage dynamic. Key to further theory development in this area, however, is the notion of temporality.

Temporality is an important dimension in the SHRM literature because temporal precedence is a precondition to the inference of causal relationships (Wright & Haggerty 2005:164). Mill's causal criteria, namely the need for covariance between two variables, temporal precedence of the causal factor as well as the elimination of alternative explanations, is insufficient in SHRM research; indeed, "research on the impact of HR practices on economic success has precluded drawing firm causal conclusions regarding this relationship, and in fact, may support a reverse causation hypothesis, with economic success leading to better HRM" (Wright & Haggerty 2005:168).

5.4 The need to traverse individual and organisational levels

Wright and Haggerty (2005:171) stress "theories and research on issues such as schemas/cognitive processes, social information processing, individual differences, and motivational theories can provide valuable explanation to the individual processes that are being triggered by organisational level HRM practices." Wright and Haggerty (2005:171) summarise theoretical development in SHRM (by 2005) as follows.

Middle level process theories embedded within larger meta-theories such as the Resource Based View of the firm have provided an essential foundation for further theoretical advances. We believe that advances can come though extending the current work to examine the concepts of time, cause, and individuals more thoroughly. Such theoretical examination can serve as an essential starting point for building a more robust empirical base that will significantly increase our knowledge of the relationship between HRM and economic performance.

Multilevel models offer more comprehensive perspectives of how HR practices can be related to performance (Wright & Nishii 2006:2). Consideration of temporality in SHRM literature has typically also been inadequate, considering tensions between fit and flexibility to be nothing more than "multiple successive fits" of a single point in time (Wright & Haggerty

2005:168). *Arguably, a more intensive focus on 'surfacing' knowledge effects and their returns in the face of methodological challenges provides an organising rationale*, which if surmounted can provide a more robust empirical base to theory development, differentiating the resource based view into a decomposition of variance in competitive advantage, with the latter's emphasis on knowledge returns.

As argued throughout this article, by decomposing and building theory around the different configurations of causal effects within firms which either enable or constrain contributions of knowledge investments to competitive advantage, the field of HRM, and its relationship with SHRM could be more clearly articulated. Further, the greatest value proposition of the field going forward may be fundamentally related to its potential to facilitate potentially increasing returns to knowledge assets within a context of relatively linear returns obtained by financial assets, or investments in capital without knowledge-returns components to differentiate them. Whereas Romer's (1990:S71) endogenous growth theory is premised on economy-wide relationships, its adaptation to within-firm growth might be a useful step forward for further theory development in the field.

6. THEORETICAL LIMITATIONS

According to Jackson *et al*. (2014:4), the "interdependence that characterises elements of an HRM system extends to the organisational players who enact the system through their daily work", as HRM systems "come alive in social interactions among organisational members, including those involved in formulating, communicating, and responding to elements of the HRM system."

It is within this interdependent system that we argue an integrative theory is lacking, or a theory explaining the extent to which knowledge endowments (or investments) enhance specific linkages. The centrality of knowledge endowments interactions (Nonaka 1994:14) to organisational performance requires an argument for the importance of the human factor, and human resources in organisational performance, and its management. Jackson *et al.* (2014:4) offer this rationale as follows:

> *Traditionally, HR professionals designed formal HRM policies in response to business plans, supervisors transformed policies into daily practices, and employees reacted to how they were treated. But these roles are changing: HR professionals have become*

more actively involved in the business planning process; formal policies have become more subject to interpretation by individual managers as they strive to respond to specific and rapidly changing situations; and the high-talent employees often negotiate personalised employee contracts and working conditions.

With human resources, and therefore SHRM, centre-stage in the management of organisations, weaknesses in SHRM theoretical frameworks will be reflected in a lack of understanding which does not only have consequences for HRM but for the management of organisations generally. Arguably, failure of SHRM to sufficiently foreground different contributions of knowledge to competitive advantage, or capture potentially increasing returns, can be based on assumptions of homogeneity of human resources.

A core premise of strategic management is organisational effectiveness derives from 'most' optimal fits between organisations and their external environments (Jackson *et al.* 2014:4). However, strategic payoffs at multiple levels of the organisation accrue to different sets of stakeholders, each with a different and heterogeneous knowledge configuration. The core methodological limitation in HRM is perhaps its failure to better establish causal directionality in relationships between HR effects and performance, which may be at the heart of methodological problems in the field (Paauwe 2009:129).

Without appropriate methodological tools and techniques, testing theory will inevitably be constrained by the methodological challenges associated with quantifying intangible relationships around contributions of knowledge to performance. Whereas finance offers the firm important insights as to how capital investments contribute to performance, HRM should increase its role in doing the same for knowledge investments.

7. RECOMMENDATIONS FOR THEORY AND PRACTICE

This article sought to stress the importance of identifying and maximising the contributions of intangible knowledge endowments to organisational performance. This was taken to be particularly important given the interactive nature of these knowledge endowments, which may act and interact in multidirectional ways (and across vertical and horizontal levels, while being causally inseparable from human values and behaviours).

It was argued intangibility of knowledge relationships in firms can lead to underestimation of the contribution of knowledge dynamics to performance, and that certain methodological limitations in measuring and testing these effects exacerbate these challenges.

Further research is therefore recommended, in order to provide further insight into the *relative* contributions of knowledge endowments and dynamic effects to *specific areas* of firm performance, and to develop methods which can better track these flows and establish directional causality in these effects.

Further qualitative research, using causal mapping techniques, might offer better insight into these relationships. Theory building which explicitly considers these relationships might go a long way to offering organisations insight into how knowledge can better leverage all investments toward organisational goals.

In terms of practice, it is recommended that firms develop systems for accounting for knowledge endowments and flows, in much the same way that financial assets and flows are accounted for in organisations, and that path dependencies of knowledge relationships are mapped. In doing so, it is argued organisations may be able to obtain improved returns to knowledge investments, which may ultimately exceed those of capital.

8. CONCLUSIONS

The objective of this article was to offer an argument, within the context of theoretical crisis within HRM, that SHRM currently lacks a unifying conception, or rationale for relationships between HRM and SHRM based on the dynamics of knowledge in firms and their contribution to firm performance, due to the methodological intangibility (or relative invisibility of knowledge dynamics).

First, certain tensions were identified; between theory developed as a consequence of industrial productivity process enhancements (industrial processes) versus theory developing in the wake of knowledge productivity enhancements. More specifically, it is concluded legacy effects in HRM, such as the use of specific job descriptions and hierarchical power relationships persist, where in many instances these do not support knowledge sharing and maximisation of contributions of knowledge to performance.

Second, the argument was made that HRM, through its focus on human beings in organisations, should develop further theory around its core value contribution to competitive

advantage, namely the way it can uniquely facilitate increasing returns to knowledge within firms, notwithstanding the methodological invisibility of certain knowledge dynamics. It was also concluded further theory development might benefit from drawing insights from other literatures, such as endogenous growth theory, which might stimulate new thinking around how to maximise organisational returns to knowledge.

Given multiple channels of causal directionality and heterogeneity of valuable tacit knowledge endowments in relationships with competitive advantage characterised by high levels of permutations of interactions, including with values, it was argued that these relationships offer what can be described as a methodological 'perfect storm'. Nevertheless, with respect to invisible/intangible knowledge dynamics, a unifying rationale might need to broadly underlie further theory development. Arguably, if such knowledge dynamics were as visible (measurable) as financial flows, HRM would not continue to be underutilised in its role in a context in which competitive advantage is increasingly knowledge-driven.

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