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Framework Development of High Performance Work Systems (HPWSs) and Faculty Productivity: A Qualitative Approach

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Abstract: *The aim of this paper is to propose the relationship of High Performance Work Systems (HPWSs) with Faculty Productivity in higher education sector by using VRIO-LDN approach of Resource Based View (RBV). Researchers have used qualitative methodology where interpretivistic philosophy is applied to explore various models and comparative studies for framework development. Researchers have searched Emerald and Wiley-Blackwell databases using multiple keywords to identify relevant articles. The findings of this paper includes the Ability enhancing, motivation enhancing and opportunity enhancing HPWSs that impact the faculty productivity through the moderator i.e. VRIO-LDN approach of RBV. The current research has addressed the neglected area of higher education sector i.e. Faculty Productivity Enhancement by considering them valuable, rare, inimitable, organizational focus, low-tradable, durable and non-substitutable asset of the organization through the implementation of Resource Based view.*

Keywords: High performance work systems, faculty productivity; resource based view.

Introduction

Higher education sector acts as a backbone for the survival of any economy. Investment in education leads toward improved incomes (Kruss, McGrath, Petersen, & Gastrow, 2015). This is a yardstick to evaluate the quality of human resources being produced by the nations. Higher education sector provides knowledge workers to modernize the fields of sciences, humanities, engineering etc. In modern era, improvements in higher education sector set the direction of economies as Ron Lewis, an American politician explained it as "Ensuring quality higher education is one of the most important things we can do for future generations".

Progress of higher education sector depends upon quality infrastructure, faculty Productivity, Industry- Academia relationship and Institutions' governance. Among all above mentioned dimensions, faculty productivity is the most important one as without developing the faculty members all other dimensions may fail to support the growth. J. J. Lee and Rhoads (2004) describes that increase in the competencies and knowledge of the fac-

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ulty directly impacts the quality of the university. Tafreshi, Imani, and Ghashlag (2013) mentioned that productivity of higher education faculty is a step toward quality improvement.

Now days there are many researchers working on productivity enhancement tools for faculty members of higher education institutions (Guskov, Kosyakov, & Selivanova, 2018). Researchers have used different terms to evaluate their impacts on employee productivity e.g. knowledge workers, intellectual capital, high performance work practices systems, high commitment work practices systems and high involvement work practices systems. Relationship between HPWSs and organizational financial performance is established by many researchers (Obeidat, Mitchell, & Bray, 2016; Safavi & Karatepe, 2018). But still there is a huge gap in literature, particularly with reference to productivity in higher education in the lens of Resource Based View no study has been emerged so far. So the above mentioned situation motivated the researchers to cover the gap in current study.

In this research, researchers have classified and proposed the relationship of high performance work systems (HPWSs) with faculty productivity through mediated moderation of HR outcomes and Resource Based View (RBV). High performance work systems is a set of 17 HR practices i.e. Sophisticated recruitment, Off the job training, Performance related pay, Team work, Equal opportunities, Job security, Grievances Procedure, Performance Appraisal, Work-Life balance, High wage, employee ownership, Promotion from within and empowerment (Lv & Xu, 2018). HPWSs were elaborated by Datta, Deepak and Guthrie, James P and Wright, Patrick M (2005); Akbar, Rashid, and Farooq (2018) as a group of selected HR practices intended to promote employees' skills, abilities and productivity that ultimately lead the organization toward differential advantage. If these practices may be implemented perfectly, there are sufficient proves that employees' of any organization may develop perfectly to achieve the long term objectives.

Most important asset for any organization is its employees. Indeed, human resources are believed to be a key of competitive advantage for any organization (Boxall, Purcell, & Wright, 2007). A clear link between HPWSs and organizational performance is documented by many researchers in the Strategic HRM research history (Chuang & Liao, 2010; Sun, Aryee, & Law, 2007). Consequently, since then, tremendous efforts had been done to uncover the reason of above mentioned relationship (Liao, Toya, Lepak, & Hong, 2009). Although many of the researchers have already established the relationship between HPWSs and Organizational performance but still the gap exists between in terms of solidarity of the knowledge. Particularly, the intervening process that links the above mentioned relationship is far from complete.

Secondly many researchers have taken individual practices of HPWSs to draw their links with organizational performance (Hoque, Wass, Bacon, & Jones, 2018). But little efforts had been done on grouping the HPWSs into related practices for better understanding the whole phenomenon (Obeidat et al., 2016). Moreover, no efforts had been seen on evaluating the role of mediators and moderators simultaneously e.g. HR Outcomes or VRIO-LDN criterion of Resource Based View on the relationship of HPWSs and organizational performance.

Thirdly, many of the researchers have drawn linkages between HPWSs and organizational performance (Rhee, Oh, & Yu, 2018; Akbar et al., 2018) or the financial performance

(Safavi & Karatepe, 2018; Grant & Maxwell, 2018). But little work had been seen on the impact of HPWSs on individual performances (Ogbonnaya & Valizade, 2018), interestingly no work has been seen on the impact of HPWSs on faculty productivity in higher education sector.

Without establishing the above mentioned link, long term productivity in academia may not be achieved and HEIs may not be able to gain the competitive advantage in the modern era so above mentioned discussions highlights the importance of current research where researchers wants to propose the relationship between HPWSs and faculty productivity in the light of Resource Based View (RBV) as moderator where VRIO-LDN model is taken as tool while HR Outcomes are taken as mediator to propose the reasoning of HPWSs-Productivity relationship.

Literature Review

High Performance Work Systems (HPWSs) carrying various names in literature such as 'High Commitment Management (HCM)' (Marin-Garcia & Conci, 2012; Choi, 2014) and 'High-Involvement Management (HIM)' (Bayo-Moriones & Galdon-Sanchez, 2010) are the 'best fit' group of HR practices aimed to achieve synergistic impact on organizational outcomes (Della Torre & Solari, 2013; Rabl, Jayasinghe, Gerhart, & Kühlmann, 2014). Investigations prove that outcomes achieved through individual HR practices are far less than achieved through the selected best fit of related practices due to the synergistic impact (Boxall et al., 2007; Drummond & Stone, 2007). e.g. launching self-managed teams in organization without training reduces the expected results from teamwork (Kroon, Van De Voorde, & Timmers, 2013). So a smartly chosen combination of HPWSs makes organizations' more flexible and participative by transforming their structure to achieve greater strategic advantage (Kalleberg, Marsden, Reynolds, & Knoke, 2006).

HPWSs can facilitate employee involvement, skills enhancement and stronger motivation (Özçelik, Aybas, & Uyargil, 2016). Generally speaking, HPWSs is believed to be a combination of HR functions aimed to enhance skills, abilities and productivity for sustainable competitive advantage (Zhu, Liu, & Chen, 2018).

Although, HPWSs are group of HR practices that plays synergistic role in achieving individual performance (Wright & Kehoe, 2008), however, how to group high performance practices to make a system is unresolved (Jiang, Lepak, Hu, & Baer, 2012). Practically, a couple of HR practices selected to achieve synergy in an organization differs from another situated in different culture and context (Kroon et al., 2013). So researchers believe that a standardized group of HR practices for any context is not possible and it required the modifications in HPWSs for the particular environment (Ehrnrooth & Björkman, 2012). Such contextual modifications fall under the umbrella of contingency theory and it believes that success of a system depends upon many factors, including nature of external environment, coherence with internal environment and dynamic nature of the system (Ehrnrooth & Björkman, 2012). So the contingency theory support the above mentioned idea of "best fit" for selected high performance HR practices in a particular context as compared to one practice for everywhere also known as universalistic view.

Researchers have made tremendous efforts to identify the 'best fit' of HPWSs. Huselid (1995) has constituted two groups of HPWSs after analyzing number of HR functions i.e. employee skills and employee motivation. Further the same approach has been replicated by many authors (Jiang et al., 2012). There was another conceptualization done by Appelbaum, Bailey, Berg, Kalleberg, and Bailey (2000), he provided Ability, Motivation and opportunity (AMO) approach. Appelbaum et al. (2000) concluded that combined HR practices impacts the ability, motivation and opportunity of employees that ultimately influence organizational performance. Boxall et al. (2007) further explains that employees will have improved productivity when they are able, motivated and have sufficient environmental support. So AMO framework proposes that HPWSs may be categorized and explored through three dimensions i.e. ability enhancing HPWSs, motivation enhancing HPWSs and opportunity enhancing HPWSs. Here researcher will assume above mentioned three dimensions of HPWSs as a 'Best fit' of selected HR practices to evaluate their impact productivity.

There is overlap in 'best fit' bundle selection of high performance work systems. Best fit bundle of high performance HR systems vary in number and items used in each bundle. US Labor Department (1993) has used 8 HR practices as best fit bundle while Murphy (2006) used 14 HR practices while his bundle selection.

Theoretical Support

The study used two theories to propose the relationship of high performance work systems (HPWSs) with faculty productivity by explaining the moderating effect of Resource Based View.

The Ability, Motivation and Opportunity (AMO) Theory

The AMO theory was initially suggested by Appelbaum et al. (2000) and later verified by Bailey (1999). This theory believes that employees' productivity in an organization is based upon his/her ability, motivation and opportunity to involve in organizational functions. Organizations may generate long term advantage by improving the employee's ability, enhancing their motivation and providing sufficient opportunities for growth, this ultimately leads toward improved productivity and higher organizational performance (Miller & Le Breton-Miller, 2005; Appelbaum et al., 2000). As AMO theory explains the functioning of HPWSs from individual employee's perspective so it is consistent with the researchers' proposed framework.

Resource Based View (RBV)

RBV believes that organizations differ in their unique bundles of resources and capabilities (Barney, 1991). Because of these differences, chances of being successful also vary from organization to organization. Thus, the organizations will make every effort to deploy existing resources and capabilities to maximize performance, and, at the same time,

further develop resources in order to remain competitive, trying to prevent competitors from imitating valuable resources (Teece, Pisano, & Shuen, 1997). Competitive advantage is the ability to grow faster than your competitors with the use of same amount of investment (Ming, Hong, Shuen, & Lim, 2004). The resource based view enlightens the unique aspects of an organization e.g. tacit knowledge that prevails within the organization and provides differential advantage (Barney, 1991). As the tacit knowledge is learned from experiences and not readily available in books so it is difficult to codify or write it down, not providing any opportunity for competitors to acquire or replicate it. Moreover, if a firm starts earlier than competitors, it may be able to build up advantages that they will have difficulty in overcoming. Resources of an organization must be evaluated on the bases of rareness (Barney, 1991), valuable (Amit & Schoemaker, 1993), in-imitable (Conner & Prahalad, 1996) and Non- substitutable (Conner & Prahalad, 1996). According to the RBV framework, Sustainable competitive advantage can only be achieved with the help of all four characteristics of resources (rareness, valuable, in-imitable and non-substitutable) (Barney, 1991). Resources with four unique characteristics should be used and promoted to enhance the long term organizational performance (Crook, Ketchen Jr, Combs, & Todd, 2008).

Faculty Productivity

Oxford dictionary defines the productivity as "A measure of the efficiency of a person, machine, factory, system, etc., in converting inputs into useful outputs" and this efficiency can be achieved by enhancing the capabilities of human resources of an organization.

Researchers' interest in faculty productivity of higher education institutions is enhanced in recent years due to the intense pressure for institutional rankings and attraction of funding for research projects. Various researchers have studied the factors that contributed to faculty productivity (Toutkoushian, Bellas, & Moore, 2007).

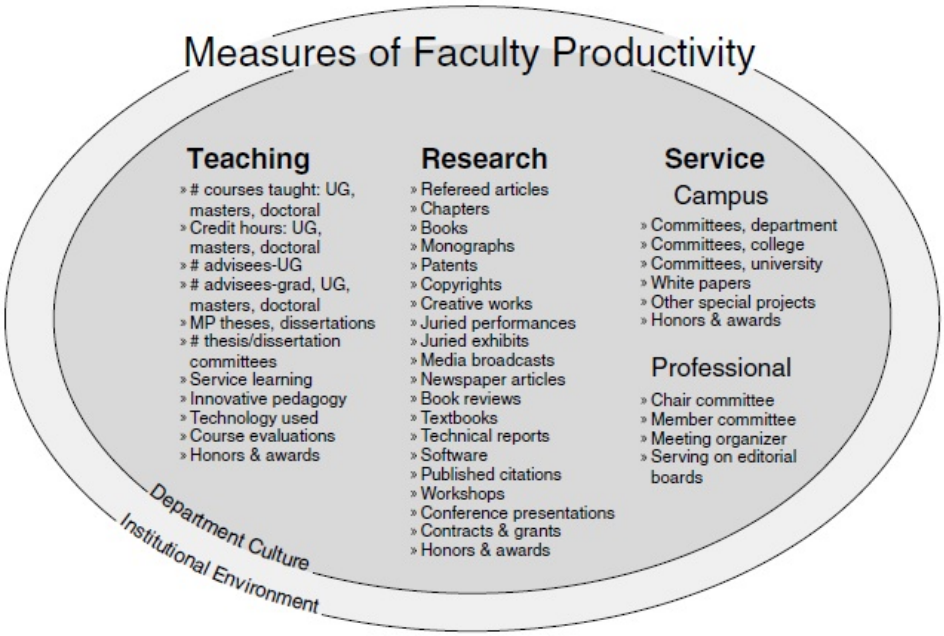
Measuring faculty productivity is a complex task as sometimes, they are involved in non- quantifiable assignments that vary across institutions and disciplines. To cover this need, researchers are involved in identifying and exploring the methods to precisely collect and use the faculty productivity data. To rank the higher education institutions officials need faculty productivity data such as classroom presentations, publications and patents obtained. In literature we have few indices available to measure the faculty productivity such as h-index by Hirsch (2005), but such indices rely on qualitative data. Faculty members of HEIs are involved in tasks such as teaching, advising, faculty governance and committee works. Among above mentioned tasks, few are easy to quantify such as number of students served or number of hours involved in conducting lectures but other tasks as efforts involved in preparations of lectures or using new instructional techniques are hard to quantify.

Some researchers have focused on one or two factors of productivity such as Bailey (1999) examined the self efficacy and motivation of teachers to measure their productivity through teaching, research and service. Crosta and Packman (2005) examined productivity through number of doctoral students supervised by faculty members. While other researchers have taken productivity in broader sense and suggested that faculty produc-

tivity is based upon the combination of individual and institutional factors. Porter and Umbach (2001) concluded that faculty productivity is the combination of five groups' i.e. demographics, career status, career preferences, teaching workload, and faculty specifications such as knowledge, skills and abilities.

Basis (2011) provided three dimensional framework to measure faculty productivity through quantitative terms as shown in figure below;

Figure 1
Framework to Measure Faculty Productivity Webber (2011)



Researchers have used above mentioned three dimensional framework i.e. indicators related to teaching, indicators related to research and indicators related to campus and professional services to consider the faculty productivity.

High Performance Work Systems

High performance work systems (HPWSs) is the combination of HR functions that impacts the core employees of an organization and leads to higher performance (Agha et al., 2016). HPWSs can facilitate employee involvement, skills enhancement and stronger motivation . However, believing as a new idea, the meanings of HPWSs are not yet clear among researchers. Generally speaking, HPWSs is believed to be a combination of HR functions aimed to enhance skills, abilities and productivity for sustainable competitive advantage (Zhu et al., 2018).

HPWSs are group of HR practices that plays synergistic role in achieving individual performance (Wright & Kehoe, 2008). However, how to group high performance practices to make a system is unresolved (Jiang et al., 2012). Researchers have made tremendous efforts to identify the dimensions of HPWSs. Huselid (1995) has constituted two groups after analyzing number of HR functions i.e. employee skills and employee motivation. Further the same approach has been replicated by many authors (Jiang et al., 2012). There was another conceptualization done by Appelbaum et al. (2000), he provided Ability, Motivation and opportunity (AMO) approach. Appelbaum et al. (2000) concluded that HR practices impacts the ability, motivation and opportunity of employees that ultimately influence organizational performance. Boxall et al. (2007) further explains that employees will have improved productivity when they are able, motivated and have sufficient environmental support. So AMO framework proposes that HPWSs may be categorized and explored through three dimensions i.e. ability enhancing HPWSs, motivation enhancing HPWSs and opportunity enhancing HPWSs. In this researcher, researcher will assume above mentioned three dimensions of HPWSs and evaluate their impact productivity.

The ability enhancing HPWSs is the group of HR practices responsible for improvement of the knowledge, skills and abilities of employees (Wright & Kehoe, 2008). HR practices such as recruitment, selection and training positively impacts employees' ability to perform (Katou & Budhwar, 2010).

The motivation enhancing HPWSs is the group of HR practices responsible for motivating employee's behavior (Wright & Kehoe, 2008). Motivation of employees may be impacted by formal performance appraisal and competitive compensation systems (Boxall et al., 2007). The opportunity enhancing HPWSs' dimensions relates to those HR practices that intend to provide opportunities to employees for better decision making (Wright & Kehoe, 2008). This dimension may be achieved through effective communication tools, information sharing, flexible work assignment and quality circles.

Relationship of HPWSs and Faculty Productivity

Based upon above discussions researchers have proposed following relationships;

P_1: Ability enhancing HPWSs are positively and significantly related to Faculty Productivity.

P_2: Motivation enhancing HPWSs are positively and significantly related to Faculty Productivity.

P_3: Opportunity enhancing HPWSs are positively and significantly related to Faculty Productivity.

Role of Moderator i.e. Resource Based View in HPWSs and Faculty Productivity

As discussed in initially, Resource Based View is a tool used to measure the strategic resources available to an organization. By using this theory, key resource of an organization are marked as strategic for long term sustainable advantage (Wernerfelt, 1984). The RBV is a strategic phenomenon that elaborates firm's long term competitiveness based

on strategic assets that are rare, non-imitable, non-substitutable and provides competitive advantage to the firm (Amit & Schoemaker, 1993).

There is lack of clarity in the literature for evaluation of resources by using RBV. Different researchers have discussed diverse dimensions of resources to gain sustainable competitive advantage (Amit & Schoemaker, 1993; Chakraborty, 1997; Priem & Butler, 2001). By reviewing all previous researches (Jugdev, 2003) developed VRIO-LDN criteria. The acronym VRIO-LDN believes that organizational resources should be evaluated in terms of valuable, rare, inimitable, organizational focus, low-tradable, durable, and non-substitutable. VRIO-LDN criteria represent a combination of characteristics of strategic assets that interrelate to produce a sustained competitive advantage. Researchers have considered above mentioned criteria while considering RBV as moderator and proposed following statements';

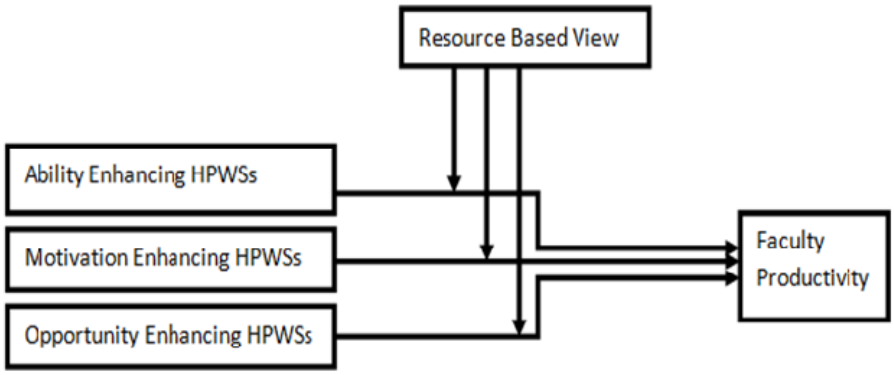
P_4: RBV moderates the relationship between Ability Enhancing HPWSs and HR Outcomes.

P_5: RBV moderates the relationship between Motivation Enhancing HPWSs and HR Outcomes.

P_6: RBV moderates the relationship between Opportunity Enhancing HPWSs and HR Outcomes.

Combining the 3 classes of HPWSs with Faculty Productivity and Resource Based view by supposing the 6 propositions mentioned above (P1 to P6) Figure 1 demonstrates the relationship of HPWSs with Faculty productivity in HEIs, where Resource Based View acts as a moderator.

Figure 2
Research Framework



Research Methodology

This paper is based upon the Interpretivism epistemological approach. Interpretivism is a subjective approach that respects the difference between people and the objects of natural

sciences (Bell & Bryman, 2007). Interpretivists belief that "knowledge consists of rich, idiographic descriptions of experiences within their contexts" (N. Lee & Lings, 2008).

The target population of this theoretical paper is the faculty members of higher education sector. To propose the relationship among above mentioned variables researchers have explored the databases that publish the studies related to Strategic HRM, Productivity and general management issues. Researchers have searched the Emerald and Wiley-Blackwell databases using multiple keywords to identify relevant articles. Researchers have also taken the help of Mendeley to explore recent articles from above mentioned areas. Researchers have classified the articles in two groups i.e. Faculty Productivity and High Performance Work Systems (HPWSs).

Conclusion and Future Directions

A number of studies examined the HPWSs, Faculty Productivity and Resource Based View. This study summarizes the previous researches and suggests a relationship between HPWSs with faculty Productivity for further empirical investigations. As discussions shows, by implementing the 3 classes of HPWSs i.e. Ability Enhancing, Motivation Enhancing and Opportunity Enhancing HPWSs, faculty productivity of HEIs may be enhanced through the Moderation effect of Resource Based View. This conceptual paper is the 1st step of a broader research work where researchers will apply descriptive research to empirically test the above mentioned propositions.

Theoretical and Practical Implications

This research will help the investigators to empirically test the propositions (P1 to P6) for the possible relationship of HPWSs and Faculty Productivity with the lens of Resource Based Approached, as this is the 1st study of its kind where it has been proposed that HPWSs may also be treated as valuable, rare, inimitable, organizational focus, low-tradable, durable and non-substitutable assets of the organization.

For policy makers, this research will help to incorporate 3 sets of HPWSs (i.e. ability oriented, motivation oriented and opportunity oriented) in higher education institutions to achieve the long term and irreversible productivity and output.

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