

2020-01-01

Achieving Effectiveness and Innovation in U.S. Public Organizations through Ability-Enhancing and Opportunity-Enhancing Soft/Commitment High Performance Work Practices

Kingshuk Saha
University of Texas at El Paso

Follow this and additional works at: https://scholarworks.utep.edu/open_etd



Part of the [Business Administration, Management, and Operations Commons](#), and the [Management Sciences and Quantitative Methods Commons](#)

Recommended Citation

Saha, Kingshuk, "Achieving Effectiveness and Innovation in U.S. Public Organizations through Ability-Enhancing and Opportunity-Enhancing Soft/Commitment High Performance Work Practices" (2020). *Open Access Theses & Dissertations*. 3031.
https://scholarworks.utep.edu/open_etd/3031

This is brought to you for free and open access by ScholarWorks@UTEP. It has been accepted for inclusion in Open Access Theses & Dissertations by an authorized administrator of ScholarWorks@UTEP. For more information, please contact lweber@utep.edu.

ACHIEVING EFFECTIVENESS AND INNOVATION IN U.S. PUBLIC ORGANIZATIONS
THROUGH ABILITY-ENHANCING AND OPPORTUNITY-ENHANCING
SOFT/COMMITMENT HIGH PERFORMANCE WORK PRACTICES

KINGSHUK SAHA

Doctoral Program in Business Administration

APPROVED:

Richard A. Posthuma, Ph.D., Chair

Gary L. Frankwick, Ph.D.

Santiago Ibarreche, Ph.D.

Stephen L. Crites, Jr., Ph.D.
Dean of the Graduate School

Copyright ©

by

Kingshuk Saha

2020

ACHIEVING EFFECTIVENESS AND INNOVATION IN U.S. PUBLIC ORGANIZATIONS
THROUGH ABILITY-ENHANCING AND OPPORTUNITY-ENHANCING
SOFT/COMMITMENT HIGH PERFORMANCE WORK PRACTICES

by

KINGSHUK SAHA, B.A., M.D.S

DISSERTATION

Presented to the Faculty of the Graduate School of
The University of Texas at El Paso
in Partial Fulfillment
of the Requirements
for the Degree of

DOCTOR OF PHILOSOPHY

Department of Marketing and Management
THE UNIVERSITY OF TEXAS AT EL PASO

May 2020

Acknowledgements

First of all, I want to thank Dr. Richard Posthuma for agreeing to be my dissertation advisor for this great and challenging journey at the University of Texas at El Paso. I deeply appreciate Dr. Posthuma's valuable time, incomparable advice and generous support. I want to thank the faculty at the Department of Marketing and Management who are very caring and most importantly for igniting the passion in me to conduct meaningful research in the last few years at this wonderful institution which has become my home.

I am greatly indebted to Dr. Gary Frankwick and Dr. Santiago Ibarreche for agreeing to be in my dissertation committee and help me complete my journey at the University of Texas at El Paso. I want to thank Dr. John Hadjimarcou, the Department Chair of Marketing and Management, who provided precious advice regarding teaching and research and gave me the opportunity to teach at the University of Texas at El Paso. I have been enormously inspired by the faculty here at the University of Texas at El Paso and I hope that I can live up to the high standards they set for me as I continue to grow intellectually and build my career.

In addition, I want to thank my entire fellow cohort in the PhD Suite who are amicable, helpful and bright. I am also indebted to my parents and my brothers who always encouraged me to work hard and excel.

Abstract

It is well-established in the management literature that HPWPs improve productivity in the private sector. But does HPWPs work in the public sector? A thorough literature search revealed only 45 HPWPs studies done in the public sector. The first purpose of this dissertation is a thorough literature review of these 45 studies. Out of these 45 studies, only 12 had samples obtained from the U.S. Hence, it can be argued that there is much to be discovered about HPWPs in the U.S. public sector. The second purpose of this dissertation is to categorize HPWPs in the U.S. public sector based on soft/hard HR and Ability, Motivation and Opportunity (AMO) Model. The third purpose of this dissertation is to develop theoretically sound hypotheses and test them empirically.

Five hypotheses were developed based on public service motivation (PSM) theory, AMO Model and new institutionalism theory and four other hypotheses were developed based on RBV and human capital theory. Two distinct samples were used to test the hypotheses (one based on U.S. public organizations and the other based on faculty data from U.S. and non U.S. universities). The results revealed that ability-enhancing HPWPs mainly training and development lead to higher productivity and fair pay and selective hiring actually lead to lower productivity. The moderating role of institutionalism was also uncovered in the aforementioned relationships. Also, the results showed slack (university endowment) was significantly related to university rankings and class size. More importantly, the results revealed that universities with higher implementation of HPWPs had greater innovation.

Table of Contents

Acknowledgements.....	iiv
Abstract.....	v
Table of Contents.....	vi
List of Tables.....	vivii
List of Figures.....	viii
1. Introduction.....	1
2. Literature Review.....	5
2.1 The articles and dissertations that covered U.S. public organizations.....	5
2.2 The articles that were both U.S. public organizations and non-U.S. public organizations.....	12
2.3 The articles that covered non-U.S. public organizations.....	13
3. HPWPs in U.S. Public Organizations: Theory and Hypothesis Development.....	36
4. HPWPs in Universities in the U.S. and other Countries: Theory and Hypothesis Development.....	44
5. Method Section.....	47
6. Results.....	52
7. Discussion, Limitations and Future Research.....	61
8. Conclusion.....	63
References.....	65
Vita.....	78

List of Tables

Table 2-1: Summary of key findings from the literature review.	29
Table 2-2: Main theories used by authors to decipher HPWPs in public organizations.....	33
Table 6-1: Factor analysis results of HPWPs in U.S. public organizations.....	52
Table 6-2: Means, standard deviations and correlations for U.S. public organizations data.....	53
Table 6-3: Regression estimates using GLM.....	54
Table 6-4: Hierarchical regression testing showing the moderating role of institutionalism using GLM.....	56
Table 6-5: Factor analysis results of HPWPS for faculty in U.S. and non U.S. universities	58
Table 6-6: Mean, standard deviations and correlations for university faculty data.....	59
Table 6-7: Multivariate regression using GLM (3 dependent variables).....	59

List of Figures

Figure 5-1: Breakdown and grouping of HPWPs in U.S. public organizations according to soft/hard HR and AMO (ability, motivation and opportunity) model.	49
Figure 5-2: Conceptual model for HPWPs in U.S. public organizations.	50
Figure 5-3: Conceptual model for HPWPs in universities (U.S. and other countries)	51

1. Introduction

Starting in the mid-1990s, there have been several publications such as Department of Labor (1993), Arthur (1994), Pfeffer (1994), Levine (1995) and most famously Huselid's (1995) seminal piece showing empirical evidence that High Performance Work Practices (HPWPs) can improve productivity and performance while reducing turnover, and that human resources can be used by a firm to develop sustained competitive advantage. The introduction of HPWPs has been a major development in the field of Strategic Human Resources Management (SHRM) and also Human Resources Management (HRM) in general. HPWPs can be seen as a product of the evolution of the field of HRM itself and manifested as the way forward to make organizations more efficient and productive. Even though scholars such as Kroon, Voorde, Veldhoven (2009), Godard (2001), Flores, Posthuma and Campion (2016) talk about the negative consequences of HPWPs and how to remedy it, the focus of this dissertation is that HPWPs will lead to positive outcomes such as improved organizational performance and innovation.

The majority of the studies done on HPWPs have been done in the private sector particularly in manufacturing settings. There has been very little work done on public organizations. Following, Perry and Rainey (1988), an organization is considered public if it is owned and funded by the government and the reason for its existence is political in nature and not economic. A rigorous search of HPWPs in public organizations on Google Scholar and UTEP Library databases yielded only 45 studies (40 articles and 5 dissertations).

The second section of this dissertation is a thorough literature review of the identified 45 studies: What are the main findings of the authors? Which country was the research conducted? What theories did the authors use to build their arguments? What are some potential limitations

of these studies? These are some questions that will be looked into much deeper in this section. Out of the 45 studies found, only, 12 have samples obtained from the U.S. Hence, it can be argued there is still much to be discovered about HPWPs in U.S. public organizations. Thus, the focus of the third section of this dissertation will be solely on U.S. public organizations. This dissertation is important because the U.S. public sector is under pressure to improve productivity and provide better service to customers with much fewer resources. Government bodies in not only the U.S. but also worldwide (Vandenabeele, Leisink & Knies, 2013) are under increasing pressure as state incomes dwindle and state expenditures increase leaving much reduced funding for organizations in the public sector.

In addition, starting in the mid-1980s, with the introduction of New Public Management (NPM), the focus has been reinventing the public sector and making it more efficient and productive by adopting successful management practices from the private sector to the public sector (Hood, 1995). Hence, HPWPs can help the future of HRM in public organizations. Believers of NPM believe in universal application of HR policies with the presumption that public organizations are not much different than private ones. Hence, NPM can be argued to be in conflict with Public Service Motivation (PSM) according to which public sector employees are different from private sector employees in regards to what motivates them.

The purpose of the third section, HPWPs in U.S. public organizations, is three-fold: first, using soft/hard HR theory and AMO model, individual HPWPs will be categorized and divided into specific categories such as motivation-enhancing practices, ability-enhancing practices, and opportunity-enhancing practices under the two broad umbrellas of soft and hard HR respectively. The next purpose is to find out what is the structure of HPWPs in U.S. public organizations. Given, that public employees have different motivation than private employees will all the

dimensions of the HPWPs work in public organizations? The theoretical rationale is well-established that according to PSM, employees that join public service are indeed different in terms of motivations than those who join private service (Perry, 1996). With PSM theory, it can be argued that certain HPWPs such as pay for compensation will not work in U.S. public organizations whereas certain HPWPs such as training and development will work in U.S. public organizations.

The third purpose is to empirically test whether HPWPs now categorized under soft/hard HR and AMO model is related to organizational productivity. Based on PSM, I hypothesize that motivation-enhancing HPWPs will be less likely than ability-enhancing and opportunity-enhancing HPWPs to improve organizational productivity in U.S. public organizations. I also hypothesize that ability-enhancing HPWPs and opportunity-enhancing HPWPs will improve organizational productivity in U.S. public organizations. In addition, institutionalism will be explored as potential moderators in the aforementioned relationship based on new institutionalism theory.

The fourth section of the dissertation will focus on HPWPs in both public and private universities located in the U.S. and other countries. Knies and Leisink (2018) argue that both public and private universities fall under the umbrella of public organizations because of the social benefit and service these universities provide to students and the public. The purpose of this section is to examine how slack resources (university endowment) affect performance (university ranking) and innovation (no. of utility patents held by the university). I hypothesize that slack resources will have a curvilinear relationship with performance and innovation. I argue that class size will mediate the curvilinear relationships of slack on performance and innovation.

Using RBV theory and human capital theory, the role of HPWPs as a moderator will be tested in the relationships between slack on performance and innovation.

2. Literature Review

Using Google Scholar and UTEP Library databases, 40 articles and 5 dissertations were found that contained the term “High Performance Work Practices”, “High Performance Work Systems”, “public organization”, “public sector” or “Non-Profit”. Authors of these 45 studies either conducted qualitative and quantitative research. Many other articles were found which were omitted because they lacked any kind of empirical data and were essentially theory papers containing propositions. Of the 45 articles and dissertations, 12 used U.S. samples and 31 used non-U.S. samples and 2 were in between (1 examined an International Governmental Organization (IGO) which is a supranational organization spanning national boundaries and 1 was a meta-analysis containing both U.S. and non U.S. samples).

The U.S. samples were based from 1996 to 2015 whereas the non-U.S. samples were based from 2001 to 2019. All five dissertations were done with U.S. samples. The growing number of the studies done outside the U.S. shows the universal application of HPWPs across the globe. The non-U.S. samples were based in Australia (7), China (1), Egypt (3), India (3), Israel (2), Netherlands (4), New Zealand (1), Pakistan (2), Switzerland (1) and United Kingdom (7). Anglo countries except for the United States accounted for 15 studies and including the United States accounted for 27 studies (out of the total 45 studies). Europe as a region accounted for 12 studies, Asia accounted for 6 studies and the Middle East region accounted for 5 studies.

2.1 The articles and dissertations that covered U.S. public organizations

Delaney and Huselid (1996, p. 961) found that progressive human resources management practices (training, incentive compensation, grievance procedure, decentralized decision making and vertical hierarchy) positively and significantly predicted perceived organizational performance by analyzing a sample of 590 firms from both public and private sectors.

Furthermore, the authors found no evidence of interaction effects of the HR practices on perceived organizational performance (Delaney & Huselid, 1996).

Lowthert (1996) found that all ten high performance practices recommended by the Department of Labor (1994), “Road to High Performance, A Guide to Better Jobs and Better Business Results” were in use in all the nuclear power plants of the U.S. (n=70) (Lowthert, 1996, p. 30,54). Lowthert (1996) found that enactment of five work practices (3, 5, 6, 7 and 8) were related to better “NRC Systematic Assessment of Licensee Performance Rating” (Lowthert, 1996, p. 76). This rating from the Nuclear Regulatory Commission gauges each individual organization’s fitness to run the plant and also transmits feedback from the agency for safe operation of the plant (Lowthert, 1996).

Work Practice #3, “Workers are actively involved in problem solving, selecting new technology, modifying their product or service, and meeting with internal customers”, has weak correlation to nuclear safety (Lowthert, 1996, p. 59, 76). Work Practice #5, “Workers are organized into teams with substantial team authority”, has moderate correlation to nuclear safety (Lowthert, 1996, p. 62, 76). Work Practice #6, “Cross functional teams and other mechanisms are used to increase innovation across organizational boundaries”, has moderate correlation to nuclear safety (Lowthert, 1996, p. 63, 76). Work Practices #7, “Workers are partners in decision making on a range of issues (for example, new technology, quality and safety), has weak correlation to nuclear safety (Lowthert, 1996, p. 65, 76). Work Practice #8, “the plant organization has reduced layers of management”, has weak correlation to nuclear safety (Lowthert, 1996, p.67, 76). The moderate correlations of work practices 5 and 6 show that increasing use of teams with greater decision making authority along with cross functional and

boundary spanning teams, nuclear power plants have achieved higher Nuclear Regulatory Commission ratings (Lowthert, 1996).

The author found that four work practices 1, 2, 3 and 8 were positively significantly related to plant capacity factors (Lowthert, 1996). Implementation of these four work practices led the plant work at a greater capacity factor (Lowthert, 1996). Work Practice 1 is “Workers are actively involved in continuously improving their work process and redefining their jobs” and Work Practice 2 is “Workers modify their work processes to correct quality, production, safety or other procedures” (Lowthert, 1996, p. 56, 57). The author found no relationship between the ten HPWPs and “the cost of generation in mills per kilowatt of electricity produced” (Lowthert, 1996, p. 79). This is quite important because the author found that the ten HPWPs do not improve cost performance.

Luthans (1997) through an exploratory factor analysis of the non-profit U.S. rural electric sector found that HPWPs had three factors: Knowledge and Information, Procedural Justice and Rewards (Luthans, 1997). The author found that out of the eleven HPWPs, four HPWPs (“internal promotion”, performance appraisal”, “benefits and incentive-based compensation”) were significantly related to performance and combined these to form HPWP system measure (Luthans, 1997, p.72). The author mainly used resource based view (RBV) theory (Barney, 1991) to form his arguments (Luthans, 1997).

Ashbridge (2000) found 32 areas of non-congruence between supervisory and non-supervisory employees in regards to implementation of HPWPs by analyzing 93 surveys from first-line supervisors and those above along with 266 surveys from employees below the supervisory level from a nuclear power plant. The author provided solutions to increase the alignment (Ashbridge, 2000). The author by doing a principal component analysis found that

non-supervisory employees had two components- relationships and organizational policy and supervisory employees had three components- policy and structure, leadership and two-way employee engagement (Ashbridge, 2000).

Kalleberg, Marsden, Reynolds and Knoke (2006) found out that nonprofit and public organizations are more prone to use self-directed work teams and offline committees than for-profit organizations by analyzing HPWPs in different sectors. Public and non-profit organizations are much less prone to use performance incentives such as gain sharing and bonuses, which are mainly used by for-profit organizations as private firms are under much greater duress to balance their revenues and expenses than public and nonprofit organizations (Kalleberg et al., 2006). The authors found no sectoral difference between the use of multi-skilling practices such as cross-training, job rotation, introduction to distinct parts of the organization (Kalleberg et al., 2006). The authors argue that due to the influence of institutional theory, organizations will choose or adopt systems that have the most public appeal (Kalleberg et al., 2006).

Huff (2007, p. 95, 212) found that high performance was strongly predicted by “recruitment intensity index (quality), family-work index (commitment) job flexibility index and communication index (flexibility)” by analyzing the “Local Government Human Resource Functions 2000” covering 2,885 public local US municipalities. The author further found that practices from the private sector such as “decentralization, streamlining selection procedures, pay-for-performance and group incentives” do not lead to high performance in public organizations (Huff, 2005, p. 212). The author used expectancy theory (Guest, 1997), RBV (Barney, 1986; Barney & Hesterly, 1996) and public choice theory (Boyne, 1998) to build his arguments. This work by the author suggests that sectoral differences are prominent and leads

credit to the divergence hypothesis that public and private organizations are unique and different from each other.

Cho and Poister (2013) found that various high commitment HRM practices predict trust in authority at three different levels of the organization by analyzing the Georgia Department of Transportation (GDOT) survey (2007). Trust in departmental leadership was significantly and positively predicted by autonomy, compensation, career development, goal clarity and fairness (Cho & Poister, 2013, p. 831). Trust in leadership was significantly and positively predicted by communication, career development, goal clarity, fairness and negatively predicted by tenure (Cho & Poister, 2013, p. 831). Trust in one's own supervisor was significantly and positively predicted by communication, performance appraisal, and fairness; and negatively predicted by compensation (Cho & Poister, 2013, p.831).

Although Cho and Poister (2013) mention common method bias since both the dependent and independent variables were collected from the same source, I think one major area of concern is that the authors measured the dependent variables with only 1 item each. This leads to an uncertain reliability of the outcome measures. Hence, that explains unusual results such as compensation negatively predicting trust in one's supervisor. The authors used social exchange theory (Blau, 1964) to form their arguments.

Ko and Smith-Walter (2013, p. 216) found that six out of seven HR practices ("selection", "training and development", "performance related rewards", "communication", "empowerment", and "participation in decision-making") with the exception of "performance appraisal" positively and significantly influenced OCB with communication the strongest influencer. All seven HR practices were significant in their prediction of job involvement with employees with the most training and development reporting the greatest level of job

involvement but performance related rewards had a negative impact on job involvement (Ko & Smith-Walter, 2013).

Ko and Smith-Walter (2013) found that performance appraisal negatively affected organizational commitment (OC) whereas participation in decision-making, communication and empowerment positively affected OC (Ko and Smith-Walter, 2013). All seven HR practices were positively related to organizational performance (Ko & Smith-Walter, 2013). Worker attitudes of OC, OCB and job involvement mediated the relationship of HR practices and organizational performance with OCB as the strongest mediator (Ko & Smith-Walter, 2013). The authors used the “2011 Federal Employee Viewpoint Survey (FEVS)” done by the U.S. Office of Personnel Management (OPM) to conduct their analyses and utilized social exchange theory (Settoon, Bennett & Liden, 1996; Wayne, Shore & Liden, 1997) to form their arguments (Ko & Smith-Walter, 2013, p. 215).

Although Ko and Smith-Walter (2013) point out that the major contribution of their study is pointing out that performance appraisal and performance-related rewards do not work it is to be noted that they did measure performance appraisal with only 1 item “My performance appraisal is a fair reflection of my performance” (p. 217) which puts the findings of the study into doubt.

Selden, Schimmoeller and Thompson (2013) found that having a centralized recruitment program at colleges led to a 1.80 percentage fall in voluntary turnover. The authors did not find any support for signing bonuses (Selden et al., 2013). Compensation level, pay for performance, salary increases and group bonuses significantly predicted new hire turnover (Selden et al., 2013). The authors found mixed results regarding training and turnover; average amount spent on training per employee had no effect and the authors found a curvilinear relationship between

training and turnover (Selden et al., 2013). The authors used 42 human resources director of different American states as their final sample and collected unemployment data about those states from the Bureau of Labor Statistics (Selden et al., 2013). The authors used eleven HR practices based on five criteria: “recruitment and selection, compensation, training and development, performance appraisal, and information sharing” (Selden et al., 2013, p.310).

Selden et al. (2013) found weak support that job rotation led to decreased turnover. The authors found that three control variables (unionization, unemployment rate and size) significantly predicted new hire turnover (Selden et al., 2013). The authors used RBV (Barney 1991; Becker & Huselid, 1998; Huselid, 1995; Koch & McGrath, 1996; Wright et al., 2001) to form their arguments (Selden et al., 2013). In conclusion, the authors suggest that recruitment and selection, compensation, training and development are HPWPs that can significantly reduce new hire quit rates (Selden et al., 2013). The authors further suggest that performance appraisals and information sharing are not important predictors (Selden et al., 2013). The sample size used by the authors is of particular concern (n=42) and they did not do probabilistic sampling but rather chose to send links of their online questionnaire to HR directors of the fifty states of America (Selden et al., 2013).

Watty-Benjamin (2013) found that HPWPs did not predict turnover intentions or OCB by analyzing a final sample of 185 public employees from the U.S. Virgin Islands. The author used social exchange theory (Gillis, 2008; Lee, 2007; Moideenkutty, 2009) to form his arguments (Watty-Benjamin, 2013). The author measured HPWPs with 13-items from Huselid, (1995) (Watty-Benjamin, 2013).

Chen and Rainey (2014) found statistical support that high levels of personnel formalization in the U.S. public sector led to the implementation of HPWPs especially team

work and hence goes against the current public administration literature that argues personnel formalization results in red tape and employee frustration. The authors used the “US National Organizational Survey (NOS) 2002” dataset to test their hypotheses (n=516) (Chen & Rainey, 2014, p. 954). The authors measured their dependent variable, teamwork, with only 1 item “When core function workers do their job, are they involved in work teams?” with a dichotomous response of yes or no (Chen & Rainey, 2014, p. 955).

Selden and Sowa (2015) found that five HPWPs (onboarding, competencies, leadership succession, compensation, and employee relations) significantly predicted voluntary turnover. The authors used a sample of executive directors of non-profit organizations from eight states as their final sample (Selden & Sowa, 2015). Competencies was the only one out of the five HPWPs that resulted in a positive sign meaning hiring employees with strong competencies was associated with a higher level of turnover (Selden & Sowa, 2015). Onboarding and employee relations were the strongest with one-unit increase in them leading to a 2.44% decrease in voluntary turnover (Selden & Sowa, 2015). The authors used RBV (Barney, 1991; Huselid, 1995; Koch & McGrath, 1996; Becker & Huselid, 1998; Wright, Dunford & Snell, 2001) to form their arguments (Selden & Sowa, 2015).

2.2 The articles that were both U.S. public organizations and non-U.S. public organizations

El-Ghalayini (2017) tested the effect of four HPWPs (staffing and recruitment, performance appraisals, compensation and rewards, training and development) on four employee attitudes (employee commitment, satisfaction, motivation, and intention to quit). Staffing and recruitment had no effect on the four employee attitudes (El-Ghalayini, 2017). Performance appraisal positively influenced commitment and satisfaction whereas compensation and rewards positively influenced satisfaction and motivation (El-Ghalayini, 2017). Training and

development positively influenced commitment and satisfaction and negatively influenced intention to quit (El-Ghalayini, 2017).

El-Ghalayini (2017) used 234 employees (67.8 per cent male) of a large international governmental organization (IGO) as his final sample. In addition, the author mentions that future moderator variables need to be identified since the adjusted R square for the two dependent variables, motivation and intention to quit is reasonably small. The author used social exchange theory (Blau, 1964), psychological contract (Newman, Thanacoody & Hui, 2011) and PSM (Brewer, 2000; Perry & Wise, 1982) to develop his arguments (El-Ghalayini, 2017).

Blom, Kruyen, Heijden, and Thiel (2018) did the first meta-analysis to find out sectoral differences between HR practices and individual performance. The final dataset of the authors included 262 effect sizes obtained from 66 samples of 64 articles (Blom et al., 2018). The authors found that very few differences exist between private firms and public organizations (Blom et al., 2018). Employees react similarly to ability-enhancing, motivation-enhancing and opportunity-enhancing HR practices irrespective of being in the private or public sector (Blom et al., 2018). Although the authors did find that opportunity-enhancing HR practices have a higher impact on general performance in the private sector (Blom et al., 2018). Semi-public organizations (education institutions and hospitals) do stand out from public and private organizations and were characterized by high effects of opportunity-enhancing HR practices and little effects of motivation-enhancing HR practices (Blom et al., 2018).

2.3 The articles that covered non-U.S. public organizations

Harel and Tzafrir (2001) found out that Israeli public sector organizations due to very high rates of unionization put greater emphasis on HRM instruments that target employee selection and grievance practices where as private firms focus on pay for performance and

employee growth. The authors found that sectoral differences did not influence progressive HRM practices such as training, motivation and participation activities but turbulent environment did affect the implementation of these practices (Harel & Tzafrir, 2001). The authors argue that with time, public organizations are growing closer to private organizations by selecting HPWPs from the private sector (Harel & Tzafrir, 2001). The authors use RBV and universalistic perspective to form their arguments (Harel & Tzafrir, 2001).

Boselie, Paauwe, and Richardson (2003) found that the effect of HRM practices were lower in hospitals and local government bodies (public sector marked by high institutionalism) than in hotels (hospitality sector with much less institutionalism) by analyzing three different Dutch sectors. The authors used control versus commitment HR theory (Walton, 1985; Arthur, 1994) and new institutionalism (DiMaggio & Powell, 1983) to build their arguments (Boselie et al., 2003).

Gould-Williams (2003) found that HR practices point to superior organizational performance, significantly predicted systems and interpersonal trust and also positively predicted employee satisfaction, OC and employee effort (Gould-Williams, 2003). In addition, systems trust positively predicted differences in employee satisfaction, OC, and organizational performance (Gould-Williams, 2003). The author used 191 UK public workers (39.3 per cent male, 60.7 per cent female, 75.7 per cent union members) as his final sample (Gould-Williams, 2003).

Gould-Williams (2003) used a plethora of theories to form his arguments. The theories include: Steer's (1977) model of three antecedent categories of commitment with extensions provided by Mowday, Porter and Steers (1982) and Guest (1992); normative HRM theories (Walton, 1985; Guest, 1987; Pfeffer, 1994, 1995); expectancy theories of motivation (Porter &

Lawler, 1968); social exchange and mutual obligation theories (Rousseau, 1989) and RBV that human capital can be a source of sustained competitive advantage (Barney, 1995) (Gould-Williams, 2003).

Gould-Williams (2004) found that eight out of ten high commitment HRM practices affected four individual employee attitudes (satisfaction, motivation, commitment and intention to quit). 'Team working' positively influenced motivation and commitment while negatively influenced intention to quit (Gould-Williams, 2004). 'Training provision' positively affected commitment and satisfaction (Gould-Williams, 2004). 'Job variety' positively affected intention to quit, 'communication' and 'status' negatively affected commitment, and 'performance related pay' negatively affected intention to quit (Gould-Williams, 2004). 'Involvement' was positively related to motivation and commitment whereas 'empowerment' was positively related to satisfaction and motivation (Gould-Williams, 2004). 'Job security' and 'rigorous selection process' were two HRM practices that had no effect on the four individual employee attitudes (Gould-Williams, 2004).

Gould-Williams (2004) characterized UK public sector as paternalistic (health, security and well-being of workers having higher prominence than employee efficiency), work standardization, collective approach to industry relationships (greater unionization) and model employers (focus on staff development and equal opportunities). The author used normative theories of HRM to develop his arguments (Gould-Williams, 2004). The sample analyzed by the author had final sample size of 206 individuals and is the same dataset used in his 2003 study (Gould-Williams, 2003, 2004). One big limitation of the study is that the author uses only 1-item each to measure the ten high commitment HRM practices and two employee attitudes, intention

to quit and job satisfaction, which makes the result of the study questionable (Gould-Williams, 2004, p. 71).

Tzafrir (2005) found that organizations with high managerial trust of employees invested more in training, used pay for performance, had greater employee participation, and recruited and promoted from within the organization. The author also found that these firms had greater organizational performance (Tzafrir, 2005). The author defined trust as “as the willingness to increase the resources invested in another party, based on positive expectations resulting from past positive mutual interactions” and measured it using the three dimensional model of organizational trust (Tzafrir & Dolan, 2004) with the three components being harmony, reliability and concern (Tzafrir, 2005, p.1601).

Tzafrir (2005) used perceived organizational performance relative to its rivals as his dependent variable and found that perceived organizational performance was significantly correlated with actual measures of performance such as perceived market performance and current ratio. The author used social exchange theory (Blau, 1964; Gouldner, 1960) and competitive advantage (Barney, 1991) to build his arguments (Tzafrir, 2005). The author used 104 Israeli public and private firms with more than 200 employees as his final sample (Tzafrir, 2005).

Harley, Allen and Sergent (2007, p. 608) found that HPWS mainly lead to positive employee outcomes such as OC and job satisfaction and is suitable for both low skilled and high skilled workers in the service sector. The authors also found that HPWS are negatively related to “psychological strain and turnover intention and pace of work” (Harley et al., 2007, p. 616). The authors used a sample of 1318 Australian nurse and personal care workers in the “aged-care sector” as their final sample (Harley et al., 2007).

Bashir and Khattak (2008) found that compensation practices and promotion evaluation practices affected perceived employee performance and performance evaluation practices had insignificant effect on perceived employee performance. The authors used a sample of 333 lower tier public employees from Pakistan as their final sample (Bashir & Khattak, 2008).

Danford, Richardson, Stewart, Tailby, and Upchurch (2008) argue that HPWS are replacing lean production model because of its inherent advantages such as greater employee involvement and empowerment. The authors want to investigate how HPWS affect employee attitudes such as job satisfaction, employee commitment and stress of employees (Danford et al., 2008). The authors used samples from six organizations which have greatly adopted HPWS (two large Aerospace firms, one finance firm, one insurance firm, one local authority and one NHS trust) from the United Kingdom as their final sample (Danford et al., 2008).

Danford et al. (2008) point out in their control variables that men usually feel low job satisfaction from the adoption of HPWS and people in lower occupational classes and younger workers display lower job satisfaction with the adoption of HPWPs (Danford et al, 2008). This is quite important because it highlights the fact that gender, occupational class and age acts as a moderator between HPWS and employee attitudes, behaviors and performance. The authors reveal that HPWS do not create more satisfied and committed workers who are skilled and in the lower age group (Danford et al., 2008). On one hand, workers displaying lower levels of job satisfaction feel greater levels of stress whereas on the other hand, greater job responsibilities and work hours lead to higher amounts of stress (Danford et al., 2008). The authors also discover that highly satisfied workers are more prone to assign favorable reviews to the performance of their unions (Danford et al., 2008).

Macky and Boxall (2008) found that difference between private and public sectors arose in rewards, internal labor markets, information provision and selective hiring. Private firm employees feel more rewarded for their efforts than public organization employees (Macky & Bowall, 2008). Private firm employees especially professionals, technicians and associate professionals report being much more informed than those in the public sector (Macky & Boxall, 2008). Private firm employees also report of having higher chances of being promoted in their own organizations (Macky & Boxall, 2008). The authors found similarities between the two sectors in terms of autonomy, level of training, skill development opportunities and the extent of teamwork (Macky & Boxall, 2008).

Macky and Boxall (2008) also found that employees represented by unions recognize more opportunities for training and development. Firm size matters only to the extent that employees feel they have a bigger internal market but employees in large firms do not experience more HPWPs (Macky & Boxall, 2008). Tenure matters as employees with longer tenure experience greater autonomy and rewards and are highly informed (Macky & Bowall, 2008). In conclusion, the authors found that New Zealand workers irrespective of sectoral differences are particularly empowered with high degrees of authority and decision-making (Macky & Boxall, 2008). The authors used PIRK model of high-involvement (Lawler, 1986) to build their arguments. The authors used a sample of 1004 New Zealand employees (60.8% female; 42.3% public employees) as their final sample (Macky & Boxall, 2008).

Lindorff (2009) found out an interesting finding by surveying 1414 managers from Victoria, Australia (274 from the public sector). Lindorff (2009) found out that male managers in the public sector were quite dissatisfied with the introduction of HPWPs compared to female public managers and both male and female private sector managers. This finding shows the

importance of gender in regards to perceptions of HPWPs. The author also found out that female public managers showed the greatest enthusiasm about HPWPs followed by female private sector managers, male private sector managers and lastly the male public sector managers (Lindorff, 2009). This divide between female and male public sector managers is quite huge as if they are from different worlds. The author used the violation of psychological contract theory (Rousseau, 1995) to develop her arguments (Lindorff, 2009).

Lindorff (2009) also pointed out the longer working hours of males and meager public sector pay as justification for the dissatisfaction of male managers (Lindorff, 2009). On the other hand, the growing satisfaction of female public sector managers is the result of the series of changes to the Australian public sector that encouraged the greater participation of women and minorities in the public sector (Lindorff, 2009). The major leaps in the changes can be summarized with the removal of marriage bar for women in 1966, reduction of unfair pay and anti-discrimination practices in the 1970s, introduction of affirmative action in the 1980s together with work and family balance initiatives and encouragement of a diverse work force in the 1990s (Lindorff, 2009).

Young, Bartram, Stanton, and Leggat (2010) found that social identification acted as a mediator in two relationships: HPWS and affective commitment, HPWS and job satisfaction. The authors did triangulation and conducted both qualitative and quantitative research (Young et al., 2010). For the qualitative part, the authors conducted interviews and focus group meetings with different levels of management at the rural hospital (Young et al., 2010). The authors used Bowen and Ostroff's model (2004) in the qualitative part to gauge how HPWS were conceptualized and implemented across the entire organization (Young et al., 2010). The authors used social identity theory (Tajfel, 1982; Tajfel & Turner, 1986; Mael & Ashforth, 1992;

Ellemers et al., 2004) to build their arguments in the quantitative section (Young et al., 2010). The authors used a sample of 68 employees from a rural Australian hospital as their final sample (Young et al., 2010).

Boselie (2010, p. 47) found that large scores on perceived HPWPs that increase abilities of employees (“e.g. skills training, general training, coaching”) are positively associated to greater affective commitment of employees. The author also found that large scores on perceived HPWPs that increase opportunities to participate lead to greater levels of OCB (Boselie, 2010). The author mainly used AMO model (Boxall & Purcell, 2003, p. 20), Allen and Meyer’s three component model of commitment (Allen & Meyer, 1996) and social exchange theory (Blau, 1964) to develop his arguments (Boselie, 2010). The author used 119 women and 38 men of one Dutch general hospital as his final sample.

Seymour, Gould-Williams, and Gatenby (2010) found that six individual context variables affected job commitment, seven individual context variables affected job satisfaction, three context variables affected quit intentions, two context variables affected stress and four individual context variables affected organizational performance. The six context variables that affect job commitment are “Performance Related Pay (PRP) schemes”, “job appraisals”, “Training and Development”, “high involvement/high trust climate”, “high trust climate” and “positive Industrial Relations (IR) climate (Seymour et al., 2010, p. 773, 775). The seven individual context variables that affect job satisfaction are the context variables plus “control climate measure” (Seymour et al., 2010, p. 773). The three context variables affecting quit intentions are “training and development, high involvement and high trust climate” (Seymour et al., 2010, p. 775). Only two context variables predict stress (“job appraisals and training and development”) (Seymour et al., 2010, p. 775). Lastly, four context variables predicted perceived

organizational performance (“training and development, high involvement, high trust climate and favorable IR climate”) (Seymour et al., 2010, p. 775). The authors used a sample of 3,165 government employees from numerous United Kingdom public organizations as their final sample.

However, the main point of the study as pointed out by the authors is the interaction effects between teamwork and context variables on five dependent variables (OC, job satisfaction, quit intentions, stress and perceived organizational performance) (Seymour et al. 2010). The authors only found interaction effects for OC and stress (“Teams X Appraisal” and “Teams X Control” climate) (Seymour et al., 2010, p. 773). Thus, the main contribution of the study is that even though the interactions of teamwork and job appraisals as well as teamwork and control climate measure increase OC, they also increase worker stress. The authors used “AMO theory” (Appelbaum et al., 2000) to build their arguments. Several limitations of this paper are pointed out by the authors themselves which are common method variance since their independent and dependent variables come from the same source (the employees) and also several of their key variables are measured using only 1-item (Seymour et al., 2010).

Bashir, Jianqiao, Zhang, Ghazanfar, Abrar, and Khan (2011) found that based on a sample of 616 academics from 22 public universities in Pakistan that HPWS had a statistically significant and positive relationship with OC. The authors found that academic faculty with regular tenure were more committed than faculty that were on contract (Bashir et al., 2011). The authors found that high experienced faculty were more committed than less experienced faculty (Bashir et al., 2011). The authors also found that gender moderates the relationship between HPWS and OC (Bashir et al., 2011).

To measure HPWS, Bashir et al. (2011) used five HR practices: highly selective staffing, performance based pay, empowerment, internal career opportunity, and result oriented appraisal (Bashir et al., 2011). The authors used items from Bae and Lawler (2000), and Delery and Doty (1996), to measure the HR practices (Bashir et al., 2011). One of the main problems with this study is that the authors do not mention common source bias even though they measure both the dependent variable and independent variables from the same source. The authors should have conducted Harman's single factor test to determine if common method bias was an issue or not. In addition, the authors mention no theory to back their arguments and hypotheses.

Leggat, Bartram, and Stanton (2011) found that HPWS do affect perceived quality of care and psychological empowerment mediates this relationship (Leggat et al., 2011). The authors also identified a "policy and practice gap" since many of the public hospitals in Australia do not have HPWS in place (Leggat et al., 2011, p. 281). Furthermore, the authors identified another incongruity between the CEOs and the HR managers and other managers with CEOs reporting high levels of strategic HRM and the HR managers and other managers reporting a unique lack of HPWS in their opinions (Leggat et al., 2011). The authors used survey results from 201 nurses in a large regional Australian hospital as their final sample size (Leggat et al., 2011). The authors also conducted three in-depth case studies and obtained results from seven previous studies (Bartram et al., 2007; Leggat et al., 2005, 2006, 2008, 2010; Young et al. 2010; Stanton et al., 2010).

Messersmith, Patel, Lepak, and Gould-Williams (2011) found that HPWS at the department level is positively related to job satisfaction, OC, and psychological empowerment of employees (p. 1105). The individual employee attitudes in turn increases department performance through "partial mediation" on OCB (Messersmith et al. 2011, p.1113). Hence, the authors try to

demystify how the utilization of HPWS leads to increased departmental performance. The authors mainly use social exchange theory (Blau, 1964) to develop their arguments (Messersmith et al., 2011). The authors at first mention RBV and its popularity with macro HR scholars along with its wide prevalence in the SHRM literature but point out that the theory works at a very basic level of apprehension and fails to provide solid evidence regarding how HPWS affect performance (Messersmith et al., 2011). The authors used a large sample of Welsh public-sector employees (n=1372) as their final sample.

Blackman, Buick, O'Donnell, O'Flynn, and West (2013) conducted case studies on seven Australian public service agencies and collected data through documentary analysis, secondary data, semi-structured interviews (n=90), and focus groups (n=136). The authors recommend seven suggestions from their findings for effective use of HPWPs in the Australian public sector: clarity, alignment and integration, mutuality and motivation, adaptability and progress, evidence and data, pragmatism, and capabilities (Blackman et al., 2013).

Giauque, Anderfuhren-Biget, and Varone (2013, p. 123) found that four HRM practices are positively and significantly related with PSM and individual perception of organizational performance. Out of the four HRM practices that have significant relationships with PSM and perceived organizational performance, three are intrinsic work motivators ("job enrichment", "individual appraisal" and "professional development") and one is extrinsic work motivator ("fairness") (Giauque et al., 2013, p. 136, 137). The authors also found that PSM has a frugal direct effect on organizational performance with OC moderating the relationship (Giauque et al., 2013). The authors used social exchange theory (Blau, 1964; Homans, 1961) to explain their results (Giauque et al., 2013). The authors used a sample of 3,131 "Swiss cantonal public employees" as their final sample (Giauque et al., 2013).

Jensen, Patel, and Messersmith (2013) found that job control moderated two relationships: HPWS and anxiety; HPWS and role overload. The authors found that employees with higher degree of job control and higher perceived HPWS reported less anxiety and role overload than employees with lower degree of job control. In addition, the authors found evidence of partial mediation of anxiety and role overload in the relationship “between the interaction of HPWS perception and job control on turnover intentions” (Jensen et al., 2013, p. 1714). The authors used “Job demands-control theory” (Karasek, 1979) and stress-strain relations (Jex & Beehr, 1991) to build their arguments (Jensen et al., 2013). The authors used a sample of 1755 Welsh public employees as their final sample (Jensen et al., 2013).

Vanhala and Stavrou (2013) found intriguing findings by examining the Cranet comparative survey (conducted by Cranfield University, United Kingdom) of HRM policies and practices covering twelve countries and three distinct cultures: Anglo, Germanic and Nordic. The sample size was 3611 firms (65 per cent private and 35 percent public) (Vanhala & Stavrou, 2013). The authors found that HR practices are much more developed in private organizations than in public organizations irrespective of societal clusters (Vanhala & Stavrou, 2013). The most intriguing finding is that the authors found moderation effect of sector only in the highly individualistic and short-term Anglo countries and for service quality only (Vanhala & Stavrou, 2013). Another intriguing finding is that HRM and performance link is stronger in the public sector even though HRM is weaker in the public sector compared with the private sector (Vanhala & Stavrou, 2013). In addition, the authors found that in terms of productivity, sectoral differences are minimal be whether public or private (Vanhala & Stavrou, 2013). The authors used universal best practices, contingency and configurational models (Delery & Doty, 1996) to form their arguments.

Bartram, Karimi, Leggat, and Stanton (2014) found that perceived HPWS lead to psychological empowerment and this relationship was mediated by social identity. The authors also found that psychological empowerment led to higher quality of patient care (Bartram et al., 2014). The authors used social identity theory (Tajfel & Turner, 1986) to develop their arguments (Bartram et al., 2014). The authors used 254 clinicians of a large Australian hospital as their final sample size (Bartram et al., 2014). Two possible limitations identified by the authors are common method variance and cross-sectional nature of the data (Bartram et al., 2014). This paper is unique in a sense as it goes further in uncovering the black box through which HPWS lead to improved performance, employee attitudes, and outcomes.

Jyoti, Rani, and Gandotra (2014) found that emotional exhaustion partially mediates the relationship between bundle of HPWPs and intention to quit by analyzing survey responses from 231 teachers from professional colleges in Jammu and Kashmir, India. So, the authors added to the black-box of how HPWPs affect employee attitudes and outcomes with the discovery of the mediating role of “emotional exhaustion”. The authors also found that the individual HPWPs “empowerment, recognition, extensive training, competence development, performance-based compensation and performance management” lead to lower emotional exhaustion of teachers and also lowered intention to quit (Jyoti et al., 2014, p. 436, 437, 444). The authors used social exchange theory (Bursch, 1999) to form their arguments (Jyoti et al., 2014). The authors themselves point out that common source variance is an issue since the dependent variable, independent variables and the mediator were collected from the same source, i.e. the teachers.

Mostafa and Gould-Williams (2014) investigating the Egyptian public sector found out that HPWPs have a positive relationship with P-O fit, job satisfaction and OCB. The authors also found that P-O fit had a positive relationship with job satisfaction and OCB through partial

mediation of the relationship between HPWPs, job satisfaction and OCB (Mostafa & Gould-Williams 2014). The authors use AMO theory (Appelbaum et al., 2000) and attraction-selection-attrition (ASA) framework (Schneider, 1987) to develop their arguments (Mostafa & Gould-Williams, 2014). The authors disassembled HPWPs into the AMO model. Selection, training and development were divided into ability-enhancing HR practices; job security, promotion and performance-related pay were grouped into motivation-enhancing HR practices and autonomy and communication formed opportunity-enhancing HR practices (Mostafa & Gould-Williams, 2014).

Shen, Benson, and Huang (2014) found that Quality of Life (QWL) acted as a partial mediator between the relationship of HPWS and the in-role performance and extra-role behavior of the teachers by analyzing a sample of 1051 school teachers from Guangdong Province of China. The authors developed a multi-level mediation model and conceptualized HPWS at the organizational level and QWL and in-role performance and extra-role behavior of the teachers at the individual level (Shen et al., 2014). The authors avoided common method variance by getting the HPWS and QWL measures from the teachers and in-role performance and extra-role behavior measures from the supervisors (Shen et al., 2014). The authors used RBV (Barney, 2001) to form their arguments.

Vermeeren, Kuipers, and Steijn (2014) found that job satisfaction mediated the relationship between HR practices and organizational performance. The authors also found that leadership style has an effect on the utilization of HR practices with “stimulating leadership” style having a positive effect whereas “correcting leadership” having no effect (Vermeeren et al., 2014). The authors used Theory X and Theory Y (McGregor, 1960) and AMO Model

(Appelbaum et al., 2000) to build their arguments. The authors used a sample of 6,253 Dutch public employees as their final sample (Vermeeren et al., 2014).

Mostafa, Gould-Williams, and Bottomley (2015) found out that PSM partially mediates the relationship between HPWPs and affective commitment and OCBs of employees. The authors analyzed a sample of public service employees from Egypt (n=671, 53.5% Male) (Mostafa et al., 2015). The authors used twenty items from existing studies to measure five HPWPs and intentionally focused on soft and developmental HR practices such as training and development, job security, autonomous work design, communication and promotion, which according to the authors should increase employee commitment (Mostafa et al., 2015). The authors used social exchange theory (Barnard, 1938; March & Simon, 1958) and process theory (Perry, 2000) to build their arguments (Mostafa et al., 2015).

Robineau, Ohana, and Swaton (2015) did a qualitative study with one case study (a non-profit with 47 employees in the UK) to discover how HPWPs can improve non-profits to become more efficient and productive and how HPWPs can be implemented. The authors carried out five semi-structured interviews with key figures of the non-profit organization (Head of HR, a manager, high tenure employees and low tenure employees) (Robineau et al., 2015). The authors also did an in-depth analysis of the HR handbook of the organization to find answers to their questions (Robineau et al., 2015). The authors determined that five HPWPs are suitable for non-profits and need to be studied further: “staffing, compensation, training and personal development, flexibility of job assignments, communication” (Robineau et al., 2015, p. 104). The authors mainly talked about these five HPWPs with their five informants and examined the HR handbook to find answers. To increase the contribution of their study, the authors should have conducted triangulation and collected some quantitative data regarding the five HPWPs and

match it with an outcome variable. In addition, one case study with only five semi-structured interviews makes the findings weak.

Mostafa (2016) found that HPWPs had a positive effect on P-O fit and P-O fit had significant negative associations with work-related stress and quit intentions by analyzing a sample of governmental health workers (doctors, nurses and physicians) from Egypt (n=340; 38.2 per cent male). P-O fit fully mediated the relationship between HPWPs and the two negative outcomes hence uncovering the mechanism through which HPWPs work (Mostafa, 2016). 47.3 per cent of the variance in P-O fit was explained by HPWP, a much higher number than previously reported in Japan or Netherlands (Mostafa, 2016). The author used ASA framework (Schneider, 1987) to develop his arguments (Mostafa, 2016).

Muduli, Verma, and Datta (2016) found that employee engagement acted as a mediator between the relationship of HPWS and organizational performance by analyzing a sample of 521 employees from four public banks and four private banks in India. The authors found that in the Indian context, HPWS was strongly associated with organizational performance (Muduli et al., 2016). The authors used AMO Model (Huselid, 1995) to build their arguments and universalistic theory of SHRM to justify their results in the Indian context.

Borst and Lako (2017) found that HPWPs accounted for only 3.4% change in variance of pride of public workers by analyzing a survey done by the Dutch government in 2010 (“Personnel and Mobility Monitor MWM2, 2010”) (p. 880). Whereas, job and personal resources from the job demand and resources model accounted for 13.9% in the variance of pride (Borst & Lako, 2017). The authors themselves acknowledge the limitations of using secondary data as many of their items including the key independent variable “professional pride of public servants” was measured using only 1 item.

Pradhan, Dash, and Jena (2019) found that employee engagement acts as a mediator between the relationship of HR practices and job satisfaction by analyzing a sample of 393 executives from the Indian public sector. The authors used social exchange theory (Blau, 1964) and signaling theory (Casper & Harris, 2008) to build their arguments (Pradhan et al., 2019). The results suffer from common method variance since all three variables were collected from the same source (public employees).

Table 2-1: Summary of key findings from the literature review

Author (year)	Sample Country	Findings
Delaney & Huselid (1996)	U.S.	Progressive HRM practices positively and significantly predict perceived organizational performance.
Lowthert (1996)	U.S.	All 10 HPWPs recommended by the U.S. Department of Labor are in use in all U.S. nuclear power plants; 5 HPWPs are related to better NRC ratings; 4 HPWPs are related to plant capacity factors; none of the 10 HPWPs are related to cost performance.
Luthans (1997)	U.S.	HPWPs have 3 factors: knowledge and information, procedural justice and rewards. Out of 11 HPWPs, 4 are related to performance
Ashbridge (2000)	U.S.	32 areas of non-congruence between supervisory and non-supervisory employees in regards to HPWPs; Supervisory employees have three components: policy and structure, leadership and two-way employee engagement. Non-supervisory employees have two components: relationships and organizational policy
Kalleberg et al., (2006)	U.S.	Nonprofit and public organizations use more teams and offline committees and use less performance incentives such as gain sharing and bonuses than private firms. No sectoral differences exist between the use of multi-skilling practices.
Huff (2007)	U.S.	HPWPS from the private sector do not lead to greater performance in public organizations.
Cho & Poister (2013)	U.S.	Five high commitment HRM practices predict trust in authority at three different levels of the organization (department, team and supervisor).
Ko and Smith-Walter (2013)	U.S.	6 HPWPs positively and significantly relate to OCB; 7 HPWPs significantly relate to job involvement; 1 HPWP negatively affect OC whereas 3 HPWPs positively affect OC. All 7 HPWPs positively relate to organizational performance.
Selden et al., (2013)	U.S.	HPWPs such as recruitment and selection, compensation, training and development can significantly reduce new hire quit rates; job rotation weakly predicts new hire turnover;

		performance appraisals and information sharing have no effect on new hire turnover.
Watty-Benjamin (2013)	U.S.	HPWPs do not predict turnover intentions or OCB.
Chen & Rainey (2014)	U.S.	High levels of personnel formalization leads to the implementation of HPWPs especially teamwork in public organizations.
Selden & Sowa (2015)	U.S.	Five HPWPs (onboarding, competencies, leadership succession, compensation and employee relations) significantly predict voluntary turnover.
El-Ghalayini (2017)	IGO(International governmental organization); Supranational	Three out of four HPWPs (performance appraisal, compensation and rewards, training and development) influence four individual employee attitudes (commitment, satisfaction, motivation, intention to quit). Staffing and recruitment is the fourth HPWP that has no effect.
Blom et al. (2018)	Meta-analysis (262 effect sizes, from 66 samples of 64 articles)	Very few differences exist between public organizations and private firms in regards to HR practices and individual performance; opportunity-enhancing HR practices have a greater impact on general performance in the private sector; semi-public organizations (education institutions and hospitals) are characterized by high effects of opportunity-enhancing HR practices and low effects of motivation-enhancing HR practices.
Harel & Tzafrir (2001)	Israel	Public sector firms with high rates of unionization put greater emphasis on HRM instruments that target employee selection and grievance practices whereas private firms focus on pay for performance and employee growth; little sectoral difference in regards to progressive HRM practices such as training, motivation and participation activities but turbulent environment did affect the implementation of these practices.
Boselie et al., (2003)	Netherlands	Effect of HRM lower in hospitals and government bodies (existence of high institutionalism in the public sector) than in hotels (existence of low institutionalism in the hospitality sector)
Gould-Williams (2003)	U.K.	HR practices lead to superior organizational performance, significantly predict systems and interpersonal trust and also positively predict employee satisfaction, OC and employee effort.
Gould-Williams (2004)	U.K.	Eight out of ten high commitment HRM practices affect four individual employee attitudes (job satisfaction, motivation, organizational commitment and intention to quit).
Tzafrir (2005)	Israel	Organizations with high managerial trust of employees invest more in training, use pay for performance, have greater employee participation, and recruit and promote from within the organization; these organizations also have greater organizational performance.

Harley et al., (2007)	Australia	HPWS lead to positive employee outcomes such as OC and job satisfaction; HPWS suitable for both low skilled and high skilled workers; HPWS negatively relate to psychological strain, turnover intention and pace of work.
Bashir & Khattak (2008)	Pakistan	Compensation practices and promotion evaluation practices affect perceived employee performance.
Danford et al., (2008)	U.K.	Male employees, employees in lower occupational classes and younger workers feel low job satisfaction from the introduction of HPWPs.
Macky & Boxall (2008)	New Zealand	Difference between the private sector and public sector come to light in respect to rewards, internal labor markets, information provision and selective hiring; similarities between the two sectors arose in terms of autonomy, level of training, skill development opportunities and the extent of teamwork.
Lindorff (2009)	Australia	Male managers in public organizations are dissatisfied with the introduction of HPWPs.
Young et al., (2010)	Australia	Social identification acts a mediator in 2 relationships: HPWS and affective commitment; HPWS and job satisfaction.
Boselie (2010)	Netherlands	Perceived HPWPs that increase abilities are positively related to high affective commitment; perceived HPWPs that increase opportunities are positively related to OCB.
Seymour et al., (2010)	U.K.	2 interactions: teamwork and job appraisals, teamwork and control climate measure increase OC at the expense of increased worker stress.
Bashir et al., (2011)	Pakistan	Gender moderates the positive relationship between HPWS and OC.
Leggat et al., (2011)	Australia	Psychological empowerment mediates the relationship between HPWS and perceived quality of care; CEOs report high levels of HPWS whereas HR managers and other managers report a unique lack of HPWS.
Messersmith et al., (2011)	U.K.	HPWS at the department level positively relate to job satisfaction, OC, and psychological empowerment of employees; individual employee attitudes (job satisfaction, OC and psychological empowerment) act as a partial mediator between the relationship of HPWS, OCB, and departmental performance.
Blackman et al., (2013)	Australia	Seven suggestions for the effective use of HPWPs in the public sector: clarity, alignment and integration, mutuality and motivation, adaptability and progress, evidence and data, pragmatism, and capabilities.
Giaque et al., (2013)	Switzerland	Four HRM practices (job enrichment, individual appraisal, professional development and fairness) are positively and significantly related to PSM and individual perception of organizational performance; OC acts a moderator between the relationship of PSM and organizational performance.

Jensen et al., (2013)	U.K.	Job control acts as a moderator between two relationships: HPWS and anxiety, HPWS and role overload.
Vanhala & Stavrou (2013)	U.K.	HR practices are much more developed in private firms irrespective of societal clusters; moderation effect of sector only found in the highly individualistic and short-term Anglo countries; HRM and performance link is stronger in the public sector even though public organizations have weak HRM; in terms of productivity, sectoral differences are minimal.
Bartram et al., (2014)	Australia	Social identity acts a mediator between the relationship of perceived HPWS and psychological empowerment; psychological empowerment leads to higher quality of patient care.
Jyoti et al., (2014)	India	Emotional exhaustion acts a partial mediator between the relationship of HPWPs and intention to quit.
Mostafa & Gould-Williams (2014)	Egypt	HPWPs have a positive relationship with P-O fit, job satisfaction and OCB; P-O fit also acts as a partial mediator between the relationship of HPWPs, job satisfaction and OCB.
Shen et al., (2014)	China	QWL acts as a partial mediator between the relationship of HPWS and in-role performance and extra-role behavior of teachers.
Vermeeren et al., (2014)	Netherlands	Job satisfaction mediates the relationship between HR practices and organizational performance; leadership style has an effect on the implementation of HR practices with stimulating leadership having a positive impact and correcting leadership having no impact.
Mostafa et al., (2015)	Egypt	PSM partially mediates the relationship between HPWPs and affective commitment and OCBs of employees.
Robineau et al., (2015)	U.K.	Five HPWPs (staffing, remuneration, training and personal development, flexibility of work assignments and communication) are suitable for non-profits.
Mostafa et al., (2016)	Egypt	P-O fit fully mediates the relationship between HPWPs and two negative outcomes: work-related stress and quit intentions.
Muduli et al., (2016)	India	Employee engagement acts as mediator between the relationship of HPWS and organizational performance.
Borst and Lako (2017)	Netherlands	HPWPs account for only 3.4% change in variance of pride; job and personal resources account for 13.9% change in variance of pride.
Pradhan et al., (2019)	India	Identified employee engagement acts as the mediator between the relationship of HPWPs and job satisfaction.

Table 2-2: Main theories used by authors to decipher HPWPs in public organizations

No.	Theories used by the authors	Number of Articles
1	Social Exchange theory	11
2	Institutional theory	1
3	New Institutionalism	1
4	Resource Based View (RBV) of the Firm/Sustained Competitive Advantage	9
5	Expectancy Theory	2
6	Normative HRM theories	2
7	Three Antecedent categories of Commitment	1
8	Psychological contract theory	2
9	AMO Model	5
10	Three Component Model of Commitment	1
11	Universal best practices	3
12	Social Identity theory	2
13	Job demands-Control theory	1
14	Attraction-Selection-Attrition (ASA) framework	2
15	Process theory	1
16	Stress-strain relations	1
17	Contingency Model of HR	1
18	Configurational Model of HR	1
19	Theory X and Theory Y	1
20	Signaling Theory	1
21	Public Choice Theory	1
22	Public Service Motivation (PSM)	1
23	Control vs Commitment HR Theory	1
24	PIRK Model of High Involvement	1
25	Bowen and Ostroff's Model (HRM Strength)	1

From Table 2-2, it is clear that the authors across the globe used a plethora of theories to develop their arguments and also justify their results. Two prominent theories that were mostly used are social exchange theory and RBV. Authors used social exchange theory (Blau, 1964) to justify those employees receiving benefits from the organization such as pay incentives and training will reciprocate and increase their individual performance or other helping behaviors such as OCBs to their colleagues and the organization resulting in higher organizational performance and a much more productive workplace.

Whereas, RBV (Barney, 1991), plays a central tenet in the development of SHRM. RBV argues that when a firm possesses resources that are rare, valuable, inimitable and non-substitutable, the firm will develop sustained competitive advantage (Barney, 1991). Strategic HR scholars argue that said resources include employees of the firm and hence when the human resources of the firm are rare, valuable, inimitable and non-substitutable, the firm will develop superior performance compared to its rivals. Thus, HR can be used to obtain and maintain sustained competitive advantage where the organization continuously out performs its rivals and maintain top market share.

In regards to predicting voluntary turnover, the studies show mixed findings. Selden et al. (2013, p. 311) found that HR practice of having a “centralized college recruitment program”, compensation level, “pay for performance salary increase”, group bonus, training, and job rotation significantly predicted voluntary turnover of newly recruited employees. Selden et al. (2003, p. 311) further found that two HPWS practices of performance appraisal and information sharing were unrelated to voluntary turnover. Selden and Sowa (2015) found that five HPWPs (onboarding, competencies, leadership succession, compensation and employee relations) predicted voluntary turnover. El-Ghayani (2017) found that training and development negatively predicted intention to quit. Gould-Williams (2004) also found that teamwork, performance related pay and job variety predicted intentions to quit. Mostafa (2016) found that P-O fit is influenced by HPWPs and it negatively affects quit intentions. On the other hand, Selden et al. (2013) found a curvilinear relationship between training and turnover. Watty-Benjamin (2013) found that HR practices did not predict turnover intentions.

The literature review also identifies potential moderators that influence the relationship between HPWPs and employee attitudes/employee behavior/performance: gender (Bashir et al.,

2011, Danford et al., 2008; Lindorff, 2009), and OC (Giaque et al, 2013). Whereas, partial mediators identified are: P-O fit (Mostafa & Gould-Williams, 2014; Mostafa, 2016), PSM (Mostafa et al., 2015), OCB (Messersmith et al., 2011; Ko & Smith-Walter, 2013), OC, job involvement (Ko & Smith-Walter, 2013), emotional exhaustion (Jyoti et al., 2014), and QWL (Shen et al., 2014). Full mediators identified in the literature include social identification (Young et al., 2010), employee engagement (Muduli et al., 2016; Pradhan et al., 2019), and job satisfaction (Vermeeren et al., 2014). The partial and full mediators are said to be the mechanisms through which HPWPs influence performance and thus uncover the black box through which HPWPs improve performance and productivity.

Reviewing the 45 studies also expose the fact that each author depending on the data and results recommend quite different structures for HPWPs for the public sector. Thus, the vital research question still goes unanswered: what is the structure of HPWPs for public organizations? Another question arises is can we get a unified structure that applies to the public sector in general or will it be context dependent? Given, the mixed findings from the studies done before, finding answers to these questions is a top priority.

3. HPWPS in U.S. Public Organizations: Theory and Hypothesis Development

Truss, Gratton, Hope-Hailey, McGovern and Stiles (1997) found out through a qualitative research project that there was no firm or organization that adopted either a completely soft or solely hard HR approach but most had elements of both. Soft HR focuses on commitment through the development of individual capital whereas hard HR is mainly centered around tight managerial control of HR through compensation and performance appraisals and also includes strategic fit (Truss et al., 1997). The belief in hard HR is that human resources are expendable and a cost to be minimized whereas the belief in soft HR is humanistic and the development of individual capacity (Truss et al., 1997).

Soft HR has its origins in the Harvard model (Beer, Spector, Lawrence, Mills & Walton, 1985) whereas the origins of hard HR lie in the Michigan model (Fombrun, Tichy & Devanna, 1984) (Truss et al., 1997). Harvard model focuses on achieving HRM outcomes (particularly commitment) through HRM policy choices keeping in line with stakeholder interests and situational factors (Beer et al., 1985) whereas the Michigan model mainly focuses on the role of appraisal system as a form of strategic control in the HR cycle of achieving organizational effectiveness (Fombrun et al., 1984).

Building on soft/hard HR, I argue that HPWPs can be categorized and divided into hard (control HR) and soft (commitment/humanistic HR). I further argue that AMO model can be used additionally to aid in the categorization and division of the individual HPWPs. It is well-established in the literature that according to the AMO Model, HR practices lead to greater performance in the workplace by making employees more committed as they have the necessary skills (abilities) to do their job, have adequate motivation and have ample opportunity to express themselves (Appelbaum et al., 2000; Boselie, 2010).

I argue that on one hand, we have hard (control HR) which can be further divided into motivation-enhancing practices (compensation and benefits; performance management appraisals) and on the other hand we have soft (commitment/humanistic HR) which can be further divided into ability-enhancing practices and opportunity-enhancing practices. HPWPs such as training and development and recruiting and selection fall under ability-enhancing practices whereas HPWPs such as communication, job and work design, promotion and employee relations fall under opportunity-enhancing practices.

Compensation and benefits have “core” practices such as “Pay for Performance”, “Formal Appraisal for Pay”, “External Pay Equity/Competitiveness” and “Incentive Compensation” with the main goal of motivating workers to become high performers with rewards and payments (Posthuma, Campion, Masimova & Campion, 2013, p. 1192). Performance management and appraisal have “broad” practices such as “Appraisals Based on Objective Results/Behaviors”, “Appraisals for Development/Potential”, “Frequent Performance Appraisal Meetings” with the main goal of “measuring and improving individual and team performance” (Posthuma et al., 2013, p. 1193, 1199).

Rewards and payments are well known extrinsic motivators, which make employees come to work as they are going to be paid. Therefore, I put these two practices under motivation-enhancing practices. The reason I put them under hard (control HR) is because the assumption in hard (control HR) is that human resource is a cost to be minimized which directly relates to compensation and benefits as employees get paid for what they produce. Whereas, performance management appraisals give disproportionate power to the supervisor or the person measuring the performance of the individual employee as well as sets strict criteria used to determine and measure performance. Hence, without doubt these two practices fall under hard (control HR) and

further grouped into motivation-enhancing practices as their main goal is to act as extrinsic motivators.

Particularly for U.S. public organizations, I argue that motivation-enhancing practices will have a lesser effect on organizational performance or turnover than ability-enhancing or opportunity-enhancing practices. The theoretical rationale behind my argument is that it is well established that public sector employees are committed and attracted to public employment for reasons other than compensation. Scholars have created a particular construct known as PSM to prove that individuals that join public service are indeed different from those that join private service. Quite simply, PSM refers to “an individual’s predisposition to respond to motives grounded primarily or uniquely in public institutions” (Perry, 1996, p. 5).

Perry argues that PSM has six dimensions: “attraction to public policy making, commitment to the public interest, civic duty, social justice, self-sacrifice, and compassion” (Perry, 1996, p. 5). Houston (2000, p. 713, 725) found evidence of PSM from an empirical study that public sector employees indeed focus more on “intrinsic reward of work that is important” and “provides a feeling of accomplishment” whereas private sector employees value extrinsic rewards such as high income and fewer work hours. Furthermore, Houston (2000) points out previous researchers (Kellough & Lu, 1993; Ingraham, 1993) have shown that designing public workplaces focused around extrinsic rewards such as pay for performance is bound to be futile. Thus, the contrast and distinction between public sector employees and private sector employees is quite robust since compensation does not fall under any of the six dimensions of PSM. It should be noted that public organization employees are not volunteers and they do need compensation to live a normal life and raise a family but compensation is not what motivates them. Hence, I hypothesize:

H1: *Motivation-enhancing HPWPs will be less likely than ability-enhancing HPWPs and opportunity-enhancing HPWPs to improve productivity in U.S. public organizations.*

Training and Development have “Core” practices such as “Training Extensiveness”, “Use of Training to Improve Performance”, and “Training for Job or Firm Specific Skills” with the main goal of imparting employees with essential skills (Posthuma et al., 2013, p. 1192, 1198). Thus, training and development fall under ability-enhancing HPWPs as they improve and increase the skills of the workers. Recruiting and selection have “Core” practices such as “Hiring Selectivity or Low Selection Ratio”, “Specific and Explicit Hiring Criteria” and “Broad” practices such as “Multiple Tools Used to Screen Applicants”, “Employment Tests or Structured Interviews” and “Planning Selection Processes and Staffing” with the goal of hiring the best employees who are highly productive, highly committed and possess much more valuable human capital (Posthuma et al., 2013, p. 1193, 1198).

Hence, HPWP of recruiting and selection also known as selective selection is an ability-enhancing HPWP as selective selection means employees have more abilities and are more capable and productive. I argue that ability-enhancing HPWPs will improve productivity as employees with greater amount and number of skills will be more productive and will get the job done more swiftly and with fewer resources as they are more capable. Hence, I hypothesize:

H2: *Ability-enhancing HPWPs will improve productivity in U.S. public organizations.*

Communication has “Core” practices such as “Formal Information Sharing Program” and “Broad” practices such as “Employees Receive Market, Firm Performance, or Strategic Information” and the existence of “Employee Input and Suggestion Processes” with the goal of reducing uncertainty, making goals clearer and aligning strategy and everyday work (Posthuma

et al., 2013, p. 1193, 1198). One of the main goals of the organization should be to boost information sharing so that employees are more committed and more productive with greater access to knowledge (Truss et al., 1997).

Job and work design HPWP have “Core” practices such as “Decentralized Participative Decisions” and “Job Rotation/Cross Functional Utilization” (Posthuma et al., 2013, p. 1192) with the goal of enriching employee experiences and making work more enjoyable along with encouraging greater empowerment and participation from employees. Promotion has “Broad” practices such as “Promotions From Within”, “Promotions Objectively Based on Merit”, “Career Planning”, “Promotion Opportunities”, “Career Paths and Job Ladders” enabling the employees to reach top positions in their organizations (Posthuma et al., 2013, p. 1193, 1199).

Employee relations contain core practice such as “Job Security/Emphasis on Permanent Jobs” and broad practice such as “Low Status Differentials” which determines the vital “culture and climate” of organizations (Posthuma et al., 2013, p. 1192, 1198). I argue that these four aforementioned practices (communication, job and work design, promotion, and employee relations) should be grouped as opportunity-enhancing practices. These five practices (greater information sharing, flexibility, empowerment, promotion opportunities from within the organization and developing a suitable and favorable work climate and culture) highly increase the opportunities of the employees at their respective workplaces which should result in higher performance. Hence, I hypothesize that

H3: *Opportunity-enhancing HPWPs will improve productivity in U.S. public organizations.*

I believe that there will be a synergy effect of ability-enhancing HPWPs and opportunity-enhancing HPWPs to boost productivity in U.S. public organizations as they will complement each other. For instance, ability-enhancing HPWPs such as hiring the best employees and

increasing the skill of employees through training and development will result in much greater productivity if the organization has opportunity-enhancing HPWPs. High skilled employees will be more productive if there is greater information sharing in the work place, the possibility to reach top positions in the organization along with a culture of job security, low status differentials, empowerment and autonomy. Hence, I hypothesize:

H4: *Ability-enhancing HPWPs and opportunity-enhancing HPWPs will interact to improve productivity in U.S. public organizations (in addition to the main effects of ability-enhancing HPWPs and opportunity-enhancing HPWPs on productivity).*

According to institutional theory, organizations are under increasing normative pressure from the external environment and the internal organization itself to adopt certain standards leading to structural isomorphism because of legitimacy concerns and also to enhance survival of the organization (Zucker, 1987; Hasselbladh & Kallinikos, 2000). Institutions are very simply “rules of the game in a society” or “humanly devised constraints that shape human interaction” (North, 1992, p. 477) with the goal of reducing transaction costs and making exchanges easier. Institutions can be summed as the addition of “formal rules”, “informal constraints” and “characteristics of enforcing those constraints” (North, 1992, p. 477).

Isomorphism which is central to homogenization of organization forms, structures and practices is best described as “a constraining process that forces one unit in a population to resemble other units that face the same set of environmental conditions” (DiMaggio & Powell, 1983, p. 149). DiMaggio and Powell (1983, p. 150) further argue that isomorphism is of three types: “coercive”, “mimetic” and “normative”. Whereas, “coercive isomorphism” derives from political power and legitimacy, “mimetic isomorphism” actually results from decreasing risk from uncertainty and “normative isomorphism” results from professionalization particularly education systems and the creations of particular professions (DiMaggio & Powell, 1983, p. 150;

Powell, 2007). This is particularly important for the public organizations in the U.S. because HPWPs have been shown to improve performance in the private sector and (Huselid, 1995) and internally public organizations are under tremendous pressure to improve performance that is provide much better service with much fewer inputs. Hence, mimetic isomorphism seems most practical as public organizations are ought to copy or imitate the successful HPWPs from their private sector counterparts.

The central idea of neo-institutionalism is that organizations are so “deeply embedded in social and political environments” that organizational practices and structures are bound to mirror those of the environment that the organization is situated in due to structuration and routinization (Powell, 2007, p. 1; March & Olsen, 1998). Selznick (1996, p. 271) argues that “as an organization is ‘institutionalized’ it tends to take on a special character and to achieve a distinctive competence or, perhaps, a trained or built-in incapacity”. Selznick further argues that “institutional theory traces the emergence of distinctive forms, processes, strategies, outlooks and competences as they emerge from patterns of organizational interaction and adaptation” (Selznick, 1996, p. 271). Selznick argues with the advent of new institutionalism (DiMaggio and Powell, 1991), organizational theorists are vying for existence of “thick” institutionalized formal structure with the “prevalence of incoherence in complex organizations” and even “loose coupling” and “organized anarchy” (Selznick, 1996, p. 274, 275).

Loose coupling or decoupling due to institutional pressures leads to inefficiency as the organization strays from core task performance (Zucker, 1987). This is where DiMaggio and Powell (1983) back away from Max Weber that rationalization and bureaucracy always result in efficiency and actually argue that it is institutional isomorphism, which is to blame for too much power for top management elites, lack of innovation and irrationality plaguing organizations.

Hence, new institutionalists believe “the typical large organization is better understood as a coalition, governed by multiple rationalities and negotiated authority, than as a unified system of coordination” (Selznick, 1996, p. 275). Therefore, the point I am trying to get at is, that according to new institutionalism, large organizations are a mess and marked by irregularities. I argue that high institutionalism will prevent the effects of HPWPs from taking place and will act as a resisting or opposing force. Hence, I hypothesize:

H5a: *Institutionalism will moderate the relationship between motivation-enhancing HPWPs and productivity such that higher institutionalism will decrease the positive relationship between motivation-enhancing HPWPs and productivity in U.S. public organizations.*

H5b: *Institutionalism will moderate the relationship between ability-enhancing HPWPs and productivity such that higher institutionalism will decrease the positive relationship between ability-enhancing HPWPs and productivity in U.S. public organizations.*

H5c: *Institutionalism will moderate the relationship between opportunity-enhancing HPWPs and productivity such that higher institutionalism will decrease the positive relationship between opportunity-enhancing HPWPs and productivity in U.S. public organizations.*

H5d: *Institutionalism will moderate the interaction effect of ability-enhancing HPWPs and opportunity-enhancing HPWPs such that higher institutionalism will decrease the positive relationship between the interaction of two types of HPWPs and productivity in U.S. public organizations.*

4. HPWPs in Universities in the U.S. and other Countries: Theory and Hypothesis

Development

George (2005, p. 661) defines slack as “potentially utilizable resources that can be diverted or redeployed for the achievement of organizational goals”. Slack resources can include social or financial capital (George, 2005). Nohria and Gulati (1996, p.1245) found that “both too much and too little slack may be detrimental to innovation” and hence suggests an “inverse U-shaped relationship between slack and innovation in organizations”. Tan and Peng (2003) found a curvilinear relationship between slack and performance. Hence, I hypothesize,

H6a: *Slack (university endowment) has a curvilinear relationship with performance (university ranking).*

H6b: *Slack (university endowment) has a curvilinear relationship with innovation (no. of utility patents held by a university).*

Kokkelenberg, Dillon and Christy (2008) found that as class sizes increase there are diseconomies of scale along with diminishing student outcomes at a U.S. public university. Keil and Partell (1997) found that at Binghamton University increasing class size had a detrimental effect on student performance and retention. Bandiera, Larcinese and Rasul (2010) found that large class size reduced student performance. Whereas, Williams, Cook, Quinn and Jensen (1985) found that class size does not have a significant effect on student outcomes. Feldman (1984) found that there existed an inverse relationship between class size and student evaluations of the instructor and the course with some studies also finding a negative curvilinear relationship. Monks and Schmidt (2011) found that class size negatively affect course and instructor evaluations. Hanushek (2002) argues that reducing class size is very expensive. Hence, universities that have greater slack resources will tend to have smaller classes as they are able to hire more faculty per student and keep class sizes small. Hence, I hypothesize:

H7: *Slack (university endowment) has a negative relationship with class size (student-to-faculty ratio).*

Dill and Soo (2005) argue that university rankings can be seen as organizational performance reports, which can increase public accountability as well as act as guides for prospective students in choosing the best university. US News and World Report America's Best Colleges (USNWR) ranking has the following components (and weights): Inputs (37%), Process (8%), Output (30%), Reputation (25%) (Dill & Soo, 2005). Out of the total 100%, 8% weight is given to class size and 1% is given to student/staff ratio in the USNWR (Dill & Soo, 2005). Whereas, The Guardian ranking based in UK allocates 6% to student/staff ratio and Maclean's ranking based in Canada allocates 14% to class size (Dill & Soo, 2005). I argue that class size can be seen as the mediating variable through which slack (university endowment) influences university ranking and innovation.

H8a: *Class size mediates the curvilinear relationship between slack (university endowment) and performance (university ranking).*

H8b: *Class size mediates the curvilinear relationship between slack (university endowment) and innovation (no. of patents held by a university).*

According to RBV, a firm can gain sustained competitive advantage if it holds resources that are rare, valuable, inimitable and non-substitutable (Wernerfelt, 1984; Barney, 1991; Barney, Wright & Ketchen Jr., 2001). Increasingly, scholars in SHRM have been suggesting that those resources can be human resources and that human resources can be a source of competitive advantage for an organization (Harel & Tzafrir, 2001; Huff, 2007; Luthans, 1997; Selden et al., 2013; Selden & Sowa, 2015; Shen et al., 2014; Tzafrir, 2005).

HPWPs have the potential to unleash the true potential of human resources of a firm through training and development, selective practices of hiring the best talent (recruiting and

selection), promotional opportunities from within, empowerment of employees (through redesigned job and work design), better communication and opportunities for better pay through compensation and benefits and identification of star employees (through performance appraisals) (Posthuma et al, 2013). Hence, I hypothesize that greater degrees of HPWPs will act as a moderator of the curvilinear relationship between slack and performance.

Gritti and Leoni (2011) found empirical evidence that “unilateral and autocratic implementation of HPWPs” leads to both higher product and process innovation. It is also well established that training and development (as a form of education and learning) can increase human capital of employees (Nafukho, Hairston & Brooks, 2004). Also, human capital has a positive impact on innovation (Dakhli & De Clercq, 2004). Hence, I believe that “Training and Development” component of HPWPs along with selective “Recruiting and Selection” will result in high human capital, which will lead to greater innovation (Posthuma et al., 2013, p.1192).

In addition, “Compensation and Benefits” and “Performance Management and Appraisals” components of HPWPs will give the employees extrinsic motivation to innovate more while “Job and Work Design” will give the employees more intrinsic motivation by making work more enjoyable along with providing greater autonomy and discretion (Posthuma et al., 2013, p.1192, 1993). Thus, I hypothesize that greater degrees of HPWPs will act as a moderator between the curvilinear relationship of slack and innovation.

H9: *HPWPs will moderate the curvilinear relationships between slack (university endowment) and performance (university ranking) and innovation. Higher implementation of HPWPs in organizations will strengthen the curvilinear relationships between slack (university endowment) and performance (university ranking) and innovation (no. of utility patents held by a university).*

5. Method Section

For this dissertation, I will be using two archival datasets owned by Dr. Richard A. Posthuma. Dr. Posthuma has ownership of the two datasets and the two datasets have not been used in any previous research. Regarding the two datasets, Dr. Posthuma also has IRB approval from the University of Texas at El Paso. The two datasets have HPWPs measures from U.S. public sector employees (Dataset 1) and HPWPs measures from university faculty from U.S. and abroad (Dataset 2). Dataset 1 has data of the moderator variable (institutionalism) and performance (productivity). Dataset 1 also has data regarding hourly wage of public employees which will be used as a control variable. In addition, I hand collected data for of state turnover rates for public employees from the world-wide-web which will be used as a control variable.

For U.S. public organizations data, Dataset 1, HPWPs were measured by 5-item Likert scale (None or Very Few, Few, Some, Many, All or Nearly All). The following HPWPs components were collected: compensation and benefits (12-items), job and work design (9-items), training and development (7-items), recruiting and selection (7-items), employee relations (8-items), communication (4-items), performance management and appraisals (7-items), promotions (6-items), employee turnover (3-items) resulting in 63-items HPWPs measure.

State turnover rates were collected from websites such as the U.S. Department of Labor. Following previous scholars such as Huselid (1995), Koch and McGrath (1996), and Guthrie (2001), productivity was measured by dividing the revenue of the organization by the number of employees of the organization and then taking the logarithm of that number. Hence, $\text{productivity} = \text{Log of (Revenue/no. of employees)}$. Some potential control variables include hourly wage and city population.

The logarithm of organization size is used as proxy for the measure of institutionalism. Although, it is well established in the literature (Astley, 1985; Grinyer, Yasai-Ardekani, 1981; Walton, 2005) that organization size can be used to measure bureaucracy, this is the first study to propose that organization size can also be used as a proxy for institutionalism. The argument behind this rationale is that larger the organization, the more it will be affected by outside institutional pressures resulting in isomorphism where the organization mirrors policies and structures of its environment (DiMaggio & Powell, 1983; Powell, 2007).

Whereas, Dataset 2 only had HPWPs scores from the university faculty at U.S. and abroad, I hand collected the following variables: slack (university endowment), class size (student-to-faculty ratio), performance (university ranking), innovation (no. of utility patents held by a university) from university websites and other websites regarding higher education. Since, slack is quite a big number (mean is 1.20 billion U.S. dollars and standard deviation is 1.87 billion U.S. dollars), logarithm of the actual number is taken so that model fits more perfectly and the results are easier to interpret.

For the university faculty data, HPWPs were measured by 5-item Likert scale (None or very Few, Few, Some, Many, All or Nearly All). The following HPWPs components were collected: compensation and benefits (12-items), job and work design (9-items), training and development (6-items), recruiting and selection (7-items), employee relations (8-items), communication (4-items), performance management and appraisals (7-items) and promotions (6-items). So, HPWPs measure comprised a total of 59-items.

Since, all of the data are at the organizational level, I will be using IBM SPSS Statistics Software 25 to run the factor analyses, correlation, regression and interaction effects for both of the datasets. I will be using SPSS Process to test the mediator relationship of class size.

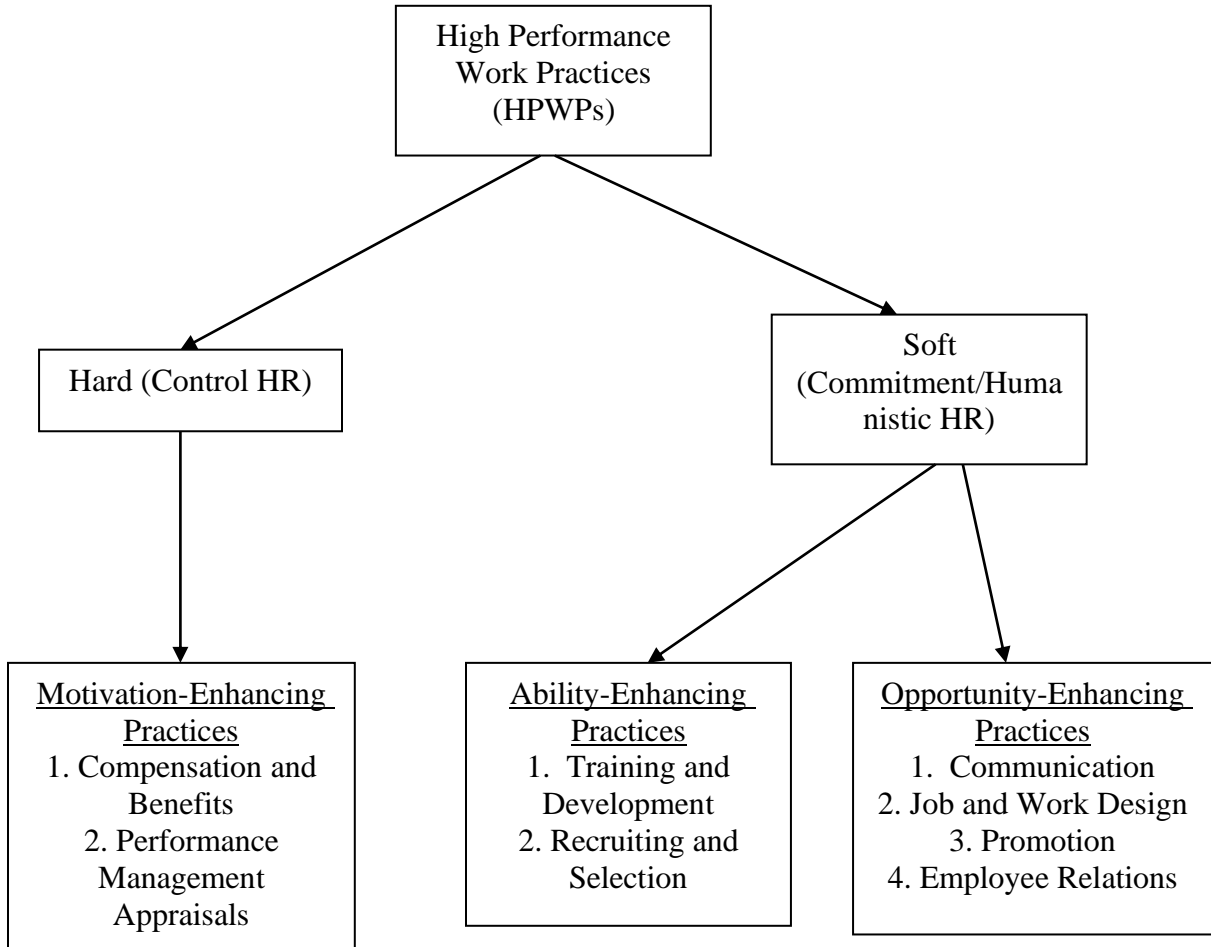


Figure 5-1: Breakdown and grouping of HPWPs in U.S. public organizations according to soft/hard HR and AMO (ability, motivation and opportunity) model

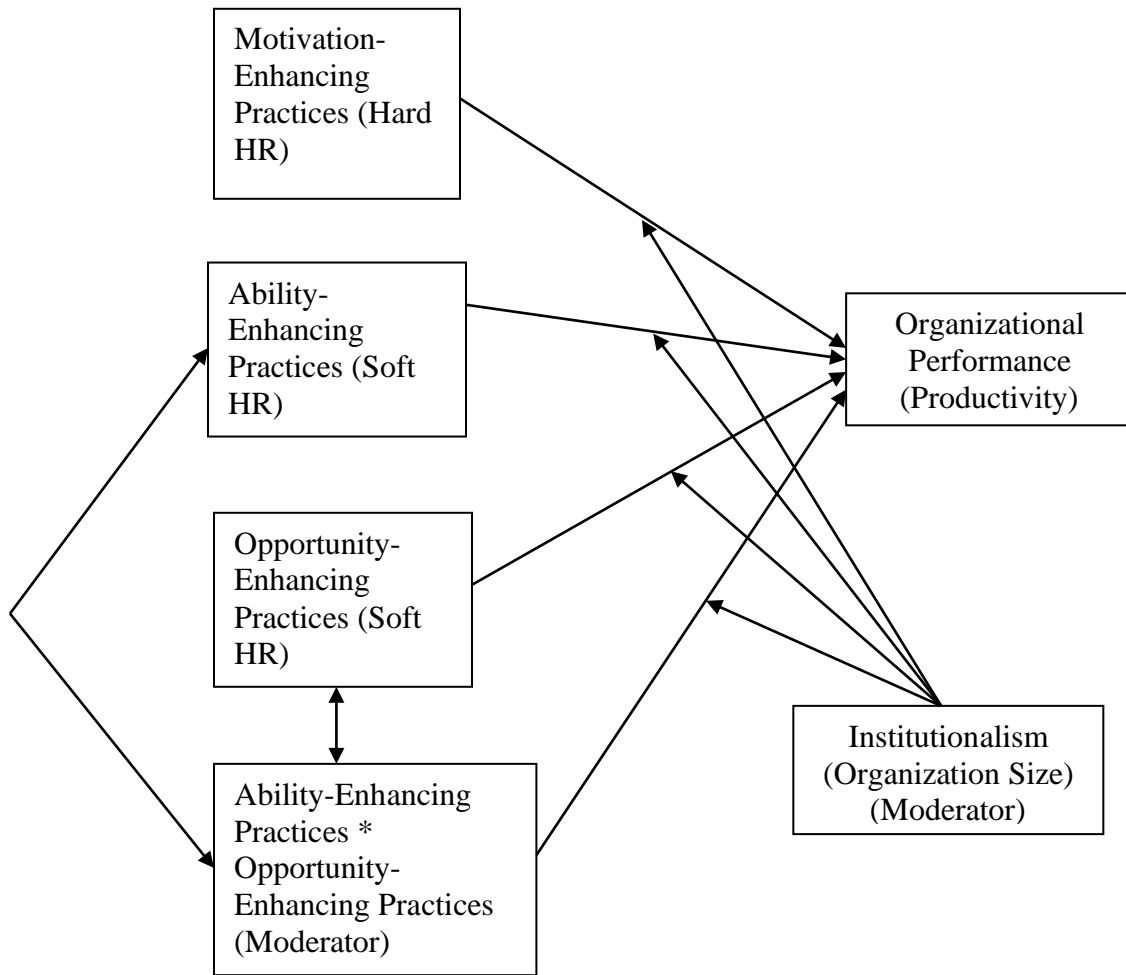


Figure 5-2: Conceptual Model for HPWPs in U.S. Public Organizations

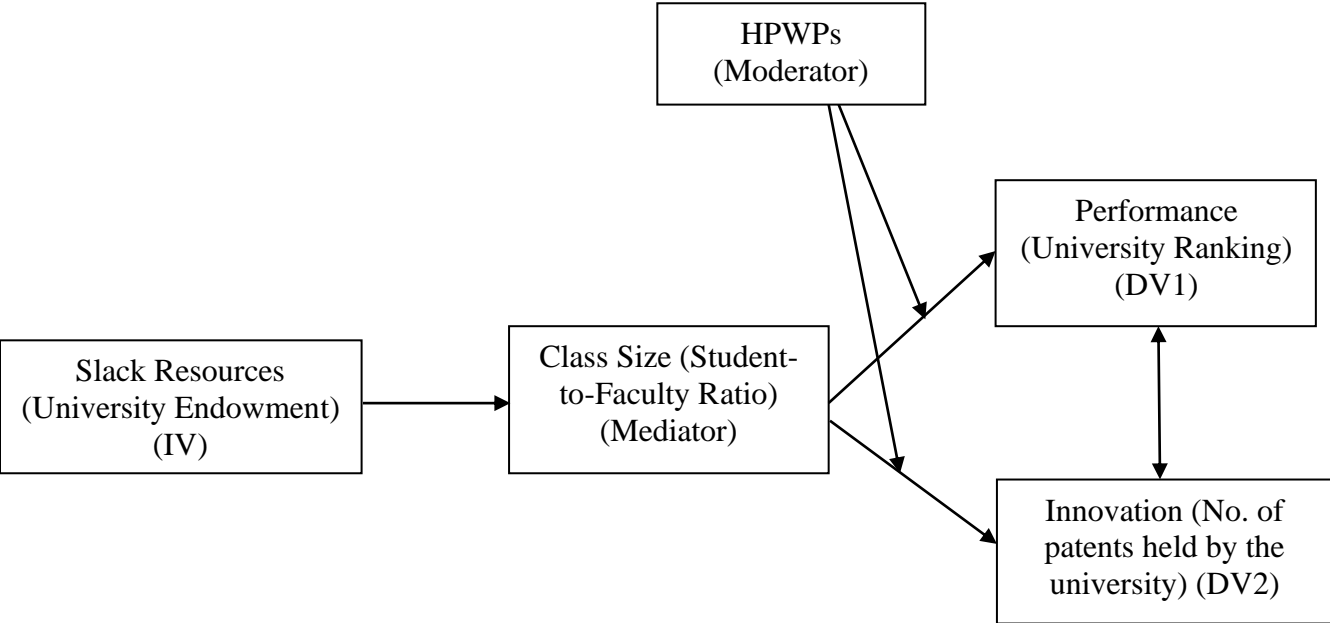


Figure 5-3: Conceptual model for HPWPs in universities (U.S. and other countries)

6. Results

Table 6-1: Factor analysis results of HPWPs in U.S. public organizations

	Components			
	1	2	3	4
Compensation and Benefits-Pay for performance			.699	
Compensation and Benefits- Competitive and fair pay compared to other organizations				.744
Compensation and Benefits-Incentive compensation			.759	
Compensation and Benefits- Bonuses or cash for performance			.707	
Compensation and Benefits- Equitable pay processes				.648
Job and Work Design- Job enlargement and enrichment	.342			
Training and Development- Extensive training		.866		
Training and Development- Training improve performance		.876		
Training and Development- Training for job or organization-specific skills		.844		
Training and Development- Training for career development		.723		
Training and Development- Evaluation of training		.661		
Training and Development- Cross-functional or multi-skill training		.661		
Recruiting and Selection- Hiring few of those who apply				.622
Recruiting and Selection- Specific and explicit criteria used to hire new employees				.538
Employee Relations- Measures of employee relations outcomes	.616			
Employee Relations- Employee opinion and attitude surveys	.737			
Employee Relations- Social and family events and policies				.332
Performance Management and Appraisals- Appraisals used for development or potential	.648			
Performance Management and Appraisals- Frequent performance appraisal meetings	.784			
Performance Management and Appraisals- Employees involved in setting appraisal objectives	.796			
Performance Management and Appraisals- Written performance plans with defined objectives	.854			
Performance Management and Appraisals- Multi-source feedback and peer appraisal	.801			
Performance Management and Appraisals- Appraisals based on strategic or team goals	.739			
Employee Turnover- Exit interviews				.667
Employee Turnover- Employee retention strategies	.482			

Notes: Extraction using Principal component analysis using Oblimin with Kaiser normalization. Component 1: Performance Management and Appraisals, Component 2: Training and Development, Component 3: Compensation and Benefits, Component 4: Fair Pay and Selective Hiring

An exploratory factor analysis was conducted with the 63-items measures of HPWPs for U.S. public employees. Since, the HPWPs items were correlated with each other, Oblimin with Kaiser normalization rotation method was used along with principal component analysis extraction method. Four components emerged with eigenvalues greater than 1. The four components explained 59.5% of variance and were composed of 25-items in total. The four components are Performance Management and Appraisals (10-items, Cronbach's Alpha=.921), Training and Development (6-items, Cronbach's Alpha=.907), Compensation and Benefits (3-items, Cronbach's Alpha=.613), Fair Pay and Selective Hiring (6-items, Cronbach's Alpha=.756).

Table 6-2: Means, standard deviations and correlations for U.S. public organizations data

	M	SD	1	2	3	4	5	6	7	8
1. Hourly Wage	17.7	2.09	1							
2. Turnover Rates	.057	.011	.170**	1						
3. Institutionalism	10.97	2.25	-.143	-.315**	1					
4. Performance Mgmt & Appraisals	2.64	1.05	-.138*	-.087	.071	1				
5. Training & Development	3.02	.985	-.113	-.026	.038	.650**	1			
6. Compensation & Benefits	1.68	.928	-.029	-.059	.016	.371**	.362**	1		
7. Fair Pay & Selective Hiring	3.32	.984	-.130*	-.004	-.031	.634**	.579**	.313**	1	
8. Productivity	3.61	.703	.230**	.015	-.032	.011	.115	-.162	-.076	1

Notes: N varies from 138 to 292, *p<0.05, **p<0.01, ***p<0.001 (two-tailed)

Means, standard deviations and correlations for U.S. public employees are presented in Table 6-2. The outcome variable productivity was significantly positively correlated with only

hourly wage for U.S. public employees (a control variable). The four HPWP components are significantly positively correlated with each other and varied from .313 to .650. Institutionalism is significantly and negatively correlated to turnover rates for U.S. public employees. Whereas hourly wage is significantly correlated to turnover rates, performance management and appraisals, fair pay and selective hiring and productivity. More importantly, none of the correlation coefficients is greater than .70 which shows that multicollinearity is not an issue in this statistical model.

Table 6-3: Regression estimates using GLM

Step 1: Control Variables	Productivity	
	β	β
Hourly Wage	-.40	.228
Turnover Rates	-.49	-.507
Step 2: Performance Mgmt and Appraisals		.059
Training and Development		.143*
Compensation and Benefits		-.117
Fair Pay and Selective Hiring		-.144*
F	6.041***	5.879***
R ²	.477	.529
Adjusted R ²	.398	.439

Notes: *p<0.05, **p<0.01, ***p<0.001 (two-tailed)

Hypothesis 1 states that motivation-enhancing HPWPs will be less likely than ability-enhancing HPWPs and opportunity-enhancing HPWPs to improve productivity in U.S. public organizations. To test this hypothesis, hierarchical regression was performed. In Step 1, the

control variables, hourly wage for U.S. public employees and turnover rates for U.S. public employees were entered. In Step 2, the four HPWP components were entered. 40% of the variance was explained by the two control variables and entering the four HPWP components increases the variance explained to 44%. We find support for hypothesis 1, since motivation-enhancing HPWPs (Performance Management and Appraisals and Compensation and Benefits) is not significantly related to productivity. Fair pay and selective hiring is significantly and negatively related to productivity ($\beta = -.144$, $p < 0.05$). This is very important in the two distinct contexts of the HPWP literature and the public sector literature. Motivation-enhancing HPWPs do not lead to improved productivity in the public sector.

Hypothesis 2 states that ability-enhancing HPWPs will improve productivity in U.S. public organizations. We find support for hypothesis 2, since training and development significantly positively leads to productivity ($\beta = .143$, $p < 0.05$).

Hypothesis 3 states that opportunity-enhancing HPWPs will improve productivity in U.S. public organizations. We do not find support for this hypothesis since none of the opportunity-enhancing HPWPs (communication, job and work design, promotion and employee relations) formed a significant HPWP component of their own.

Hypothesis 4 states that ability-enhancing HPWPs and opportunity-enhancing HPWPs will interact to improve productivity in U.S. public organizations (in addition to the main effects of ability-enhancing HPWPs and opportunity-enhancing HPWPs on productivity). We do not find support for this hypothesis.

Table 6-4: Hierarchical regression testing showing the moderating role of institutionalism using GLM

Step 1: Control Variables	Productivity	
	β	β
Hourly Wage	-.50	-.426
Turnover Rates	-.343	-.415
Step 2: Performance Mgmt and Appraisals	.059	.416
Training and Development	.143*	.915**
Compensation and Benefits	-.117	-.639*
Fair Pay and Selective Hiring	-.144	-1.197**
Step 3: Institutionalism	-.007	.106
Step 4: Institutionalism * Performance Mgmt and Appraisals		-.029
Institutionalism* Training and Development		-.070**
Institutionalism* Compensation and Benefits		.049
Institutionalism* Fair Pay and Selective Hiring		.094**
F	5.581***	6.261***
R ²	.530	.606
Adjusted R ²	.435	.509

Notes:*p<0.05, **p<0.01, ***p<0.001 (two-tailed)

To test hypotheses 5a to 5d, the moderating role of institutionalism, institutionalism is added in Step 3 as evident in Table 6-4. In Step 4, the interaction terms of institutionalism with the 4 HPWP components is added which increases the variance explained from 44% to 51%.

Hypothesis 5a states that institutionalism will moderate the relationship between motivation-enhancing HPWPs and productivity such that higher institutionalism will decrease the positive relationship between motivation-enhancing HPWPs and productivity in U. S. public organizations. We do not find support for this hypothesis but instead find the opposite. Whereas,

fair pay and selective hiring is significantly negatively related to productivity ($\beta=-1.197$, $p<0.01$), the interaction of institutionalism and fair pay and selective hiring makes it positive ($\beta=.094$, $p<0.01$). Meaning, in organizations with higher institutionalism (greater size), fair pay and selective hiring actually boosts productivity.

Hypothesis 5b states that institutionalism will moderate the relationship between ability-enhancing HPWPs and productivity such that higher institutionalism will decrease the positive relationship between ability-enhancing HPWPs and productivity in U.S. public organizations. We find support for this hypothesis. Whereas, training and development significantly leads to productivity ($\beta=.915$, $p<0.01$), the interaction of institutionalism and training and development leads significantly and negatively to productivity ($\beta=-.070$, $p<0.01$). This is a very important finding because in organizations with greater institutionalism (greater size), training and development is actually detrimental to productivity.

Hypothesis 5c states that institutionalism will moderate the relationship between opportunity-enhancing HPWPs and productivity. We do not find support for this hypothesis. Hypothesis 5d states that institutionalism will moderate the interaction effect of ability-enhancing HPWPs and opportunity-enhancing HPWPs. We do not find support for this hypothesis.

Table 6-5: Factor Analysis Results of HPWPs for faculty in U.S. and non U.S. universities

	Components			
	1	2	3	4
Compensation and Benefits- Pay for skills or knowledge	.389			
Job and Work Design- Faculty have flexible work schedules		.546		
Training and Development- Faculty receive extensive training	.960			
Training and Development- Training is designed to improve faculty performance	.885			
Training and Development- Training for job or university specific skills	.846			
Training and Development- Training for career development	.777			
Employee Relations- Complaint or grievance procedure		.525		
Employee Relations- Social and family events and policies		.632		
Communication- Faculty receive budget, university performance or strategic information				-.916
Communication- Faculty input and suggestion processes				-.735
Communication- Frequent and regular meetings with faculty				-.754
Performance Management and Appraisals- Faculty involved in setting appraisal objectives			.789	
Performance Management and Appraisals- Faculty have written performance plan with defined objectives			.865	
Performance Management and Appraisals- Faculty receive performance feedback from multiple sources and peer appraisals	.437			
Performance Management and Appraisals- Faculty appraisals based on strategic or team goals			.728	
Promotions- Faculty are promoted from within the organization		.704		
Promotions- Defined career paths and job ladders		.644		

Notes: Extraction using Principal component analysis using Oblimin with Kaiser normalization. Component 1: Training and Development, Component 2: Employee Relations and Promotion, Component 3: Performance Management and Appraisals, Component 4: Communication.

An exploratory factor analysis was conducted with the 59-items measures of HPWPs from faculty in U.S. universities and abroad. The extraction method chosen was principal component analysis and Oblimin with Kaiser normalization. Four components were extracted with eigenvalues greater than 1. The four components explained 60.6% of variance and were composed of 17-items. The four components are merged into a single HPWP measure (Cronbach's alpha for summated measure=.853).

Table 6-6: Mean, standard deviations and correlations for university faculty data

	Mean	SD	1	2	3	4	5
1. Slack	19.8	1.70	1				
2. HPWPs	1.66	.484	.028	1			
3. Uni Ranking	722.6	629.7	-.458**	-.235*	1		
4. Innovation	584	1167	.228	.353*	-.240	1	
5. Class Size	15.6	9.23	-.232	-.059	.232	-.223	1

Notes: N varies from 51 to 129; ** correlation is significant at the .01 level (2-tailed)

*correlation is significant at the .05 level (2-tailed)

Table 6-6 shows the mean, standard deviation and correlation coefficients for faculty at universities in U.S. and abroad. Slack is significantly negatively correlated with university ranking (-.458). This is because university ranking is ranked index where the lowest numbers (single digits) are the highest ranked universities. HPWPs is also negatively correlated to university ranking and positively correlated with innovation. None of the correlation coefficients is greater than .70 which shows that multicollinearity is not issue in this statistical model.

Table 6-7: Multivariate Regression using GLM (3 dependent variables)

	University Ranking	Innovation	Class Size
	β	β	β
Slack	-184.2**	140.3	-2.34**
HPWPs	-291.7	1115.5*	-2.98
F value	7.097**	3.879*	7.250**
R Squared	.257	.159	.261
Adjusted R Squared	.221	.118	.225

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ (two-tailed)

Hypothesis 6a states that slack has a curvilinear relationship with university ranking. We do not find support for this hypothesis. Slack is significantly negatively related to university ranking ($\beta = -184.2$, $p < 0.01$). Hypothesis 6b states that slack has a curvilinear relationship with

innovation (no. of utility patents held by a university). We do not find support for this hypothesis.

Hypothesis 7 states that slack has a negative relationship with class size. We find support for this hypothesis ($\beta=-2.34$, $p<0.01$).

Hypothesis 8a states that class size mediates the relationship between slack and university ranking. We do not find support for this hypothesis. Hypothesis 9 states that class size mediates the relationship between slack and innovation. We do not find support for this hypothesis; what we discover from the results is that class size is not a mediator but an outcome variable in the statistical model.

Hypothesis 9 states that HPWPs will moderate the curvilinear relationships between slack (university endowment) and performance (university ranking) and innovation. We do not find support for this hypothesis. We discover that HPWPs is not a moderator but is actually an independent variable and significantly predicts innovation ($\beta=1115.5$, $p<0.05$).

Out of the 14 hypotheses, we find support for four (H1, H2, H5b and H7) and no support for these H3, H4, H5a, H5c, H5d, H6a, H6b, H8a, H8b and H9 ten hypotheses.

7. Discussion, Limitations and Future Research

The results revealed that 1 unit increase in training and development, increases productivity by .915 ($p < 0.001$); higher implementation of this ability enhancing HPWP actually boosts productivity in public organizations. In organizations with higher institutionalism, training and development actually decreases productivity by .070 ($p < 0.01$). 1 unit increase in fair pay and selective hiring actually decreases productivity by 1.197 ($p < 0.01$). But in organizations with higher institutionalism, fair pay and selective hiring actually increase productivity by .094 ($p < 0.01$).

Hence, we discover the interesting role played by institutionalism. Higher institutionalism (greater organization size) can actually reverse effects as evident in the case of training and development and fair pay and selective hiring. This is a big contribution, since it shows that organizations of different sizes cannot be treated equally. Management scholars need to be careful when they conduct research and choose their samples because results derived from a certain sample of organizations will not be applicable to other organizations of a different size. This is particularly important in the public sector context because most public organizations are huge with thousands of employees irrespective of national location. Also, the findings lend credit to new institutionalism scholars who argue that large organizations are a mess marked by irregularities, inefficiencies and too much power for top management elites (DiMaggio & Powell, 1983; Zucker, 1987).

The results from analyzing Dataset 2 revealed that for 1 unit increase in slack, university ranking goes down by -184.2 ($p < 0.01$). This is because University Ranking of 1 is the highest. Also, 1 unit increase in slack, class size goes down by 2.34 ($p < 0.05$). This means, highly endowed universities have smaller class sizes. For 1 unit increase in HPWPs, innovation

(number of utility patents) goes up by 1115.5 ($p < 0.05$). Universities with greater implementation of HPWPs have higher innovation. This is a very important contribution because it shows that HPWPs lead to innovation and organizations should adopt HPWPs if they want to have higher innovation which is the cornerstone of sustained competitive advantage.

For Dataset 1, U.S. public employees, a multilevel model could be developed and analyzed if variables such as public service motivation (PSM) and employee attitudes and employee outcomes were collected. Recent developments in statistical software such as Mplus and HLM can help us analyze and interpret multilevel statistical models. But as with HPWP research, careful thought should be given how the research question is developed since employee attitudes have been found in previous HPWP literature to act as both outcomes and moderators or mediators (e.g. Gould-Williams, 2004; Pradhan et al. 2019; Vermeeren et al. 2014). Adjusted r square after step 4 (adding the interaction effects) is .509 showing that there is still room to identify variables that account for the missing variance.

For Dataset 2, faculty at U.S. universities and abroad, suitable control variables need to be identified. Also, since the highest adjusted r square is .225 among the three outcome variables, we are missing important variables that account for the variance not reported. Future studies need to identify those variables that we are missing.

One key limitation of this study is that even though we show that HPWPs lead to higher productivity and innovation but we do not venture into at what cost. For instance, HPWPs may improve productivity at the expense of higher stress and burnout (Topcic, Baum & Kabst, 2015; Kroon et al., 2009). Future studies need to explore this negative side of HPWPs that we simply avoid in this current study. Even though higher productivity is always desirable but welfare, health and safety of employees should be a more important priority.

8. Conclusion

One of the key strengths of this study is that we use actual measures of dependent variables rather than perceived outcomes; for instance, we use actual measures of productivity, university ranking, class size and innovation. Even though high correlation exists between perceived measures of outcome variables and actual measures of outcome variables (Powell, 1992), some scholars (e.g. Capelli & Neumark, 2001) did not find HPWPs lead to positive outcomes when they used actual measures of performance. Hence, using actual measures of performance lends credibility to the results of this study.

This study takes the scholarly conversation forward by theoretically showing that HPWPs can be classified into soft/hard HR and AMO model in the public sector context. Even though the data revealed that empirically it is much harder to classify HPWPs as such. For instance, for dataset 2, even though the factor analysis revealed four distinct components, the first component had practices from ability-enhancing HPWPs (four practices) and motivation-enhancing HPWPs (two practices) conjoined together which led us to create the composite measure of HPWPs for dataset 2. This takes us to the familiar debate in the HPWPs literature, should individual practices be analyzed separately or should we take HPWPs to exist as a system or bundle of practices that work together? We could not come to a concrete answer to this puzzling question and hence much more future work needs to be done.

One key contribution of this study is identifying the moderating role of institutionalism on the relationship between HPWPs and productivity. Also, this is one of the few studies that empirically show that higher implementation of HPWPs leads to greater innovation. This is very important because innovation is the cornerstone of sustained competitive advantage in the 21st

century and it highlights the fact how important HPWPs is for not only higher firm survivability but rather achieving and maintaining sustained competitive advantage.

References

- Appelbaum, E., Bailey, T., Berg, P., & Kalleberg, A. L. (2000). *Manufacturing advantage: Why high-performance systems pay off*. Ithaca, NY [u.a.]: Cornell University Press. Retrieved from <http://www.econis.eu/PPNSET?PPN=306031493>
- Arthur, B. J. (1994). Effects of human resource systems on manufacturing performance and turnover. *The Academy of Management Journal*, 37(3), 670-687. doi:10.2307/256705
- Ashbridge, G. A. (2000). *Management and non-supervisory perceptions surrounding the implementation and significance of high -performance work practices in a nuclear power plant* (Doctoral Dissertation). Retrieved from ProQuest Dissertations & Theses Global. (Order No. 3004524)
- Astley, G. W. (1985). Organizational size and bureaucratic structure. *Organization Studies*, 6(3), 201-228. doi:10.1177/017084068500600301
- Bandiera, O., Larcinese, V., & Rasul, I. (2010). Heterogeneous class size effects: New evidence from a panel of university students. *The Economic Journal*, 120(549), 1365-1398. doi:10.1111/j.1468-0297.2010.02364.x
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120. doi:10.1177/014920639101700108
- Barney, J., Wright, M., & Ketchen, D. J. (2001). The resource-based view of the firm: Ten years after 1991. *Journal of Management*, 27(6), 625-641. doi:10.1016/S0149-2063(01)00114-3
- Bartram, T., Karimi, L., Leggat, S. G., & Stanton, P. (2014). Social identification: Linking high performance work systems, psychological empowerment and patient care. *The International*

Journal of Human Resource Management, 25(17), 2401-2419.

doi:10.1080/09585192.2014.880152

Bashir, M., Jianqiao, L., Zhang, Y., Ghazanfar, F., Abrar, M., & Khan, M. M. (2011). The relationship between high performance work system, organizational commitment and demographic factors in public sector universities of Pakistan. *Interdisciplinary Journal of Research in Business*, 1(8), 62-71.

Bashir, S., & Khattak, H. R. (2008). Impact of selected HR practices on perceived employee performance, a study of public sector employees in Pakistan. *European Journal of Social Sciences*, 5(4), 243-252.

Blackman, D., Buick, F., O'Donnell, M., O'Flynn, J., & West, D. (2013). Strengthening the performance framework: Towards a high performing Australian public service. *ANZSIG Working Paper*

Blau, P. M. (1964). *Exchange and power in social life*. NY: John Wiley and Sons.

Blom, R., Kruijen, P. M., Van der Heijden, B. I. J. M., & Van Thiel, S. (2018). One HRM fits all? A meta-analysis of the effects of HRM practices in the public, semipublic, and private sector. *Review of Public Personnel Administration*, 1-33. doi:10.1177/0734371X18773492

Borst, R. T., & Lako, C. J. (2017). Proud to be a public servant? An analysis of the work-related determinants of professional pride among Dutch public servants. *International Journal of Public Administration*, 40(10), 875-887. doi:10.1080/01900692.2017.1289390

Boselie, P. (2010). High performance work practices in the health care sector: A Dutch case study. *International Journal of Manpower*, 31(1), 42-58. doi:10.1108/01437721011031685

- Boselie, P., Paauwe, J., & Richardson, R. (2003). Human resource management, institutionalization and organizational performance: A comparison of hospitals, hotels and local government. *The International Journal of Human Resource Management*, 14(8), 1407-1429. doi:10.1080/0958519032000145828
- Cappelli, P., & Neumark, D. (2001). Do "high-performance" work practices improve establishment-level outcomes? *Industrial and Labor Relations Review*, 54(4), 737-775. doi:10.1177/001979390105400401
- Chen, C., & Rainey, H. G. (2014). Personnel formalization and the enhancement of teamwork: A public-private comparison. *Public Management Review*, 16(7), 945-968. doi:10.1080/14719037.2013.770057
- Cho, Y. J., & Poister, T. H. (2013). Human resource management practices and trust in public organizations. *Public Management Review*, 15(6), 816-838. doi:10.1080/14719037.2012.698854
- Danford, A., Richardson, M., Stewart, P., Tailby, S., & Upchurch, M. (2008). Partnership, high performance work systems and quality of working life. *New Technology, Work and Employment*, 23(3), 151-166. doi:10.1111/j.1468-005X.2008.00210.x
- Dakhli, M., & De Clercq, D. (2004). Human capital, social capital, and innovation: A multi-country study. *Entrepreneurship & Regional Development: An International Journal*, 16(2), 107-128. doi:10.1080/08985620410001677835
- Delaney, J. T., & Huselid, M.A. (1996). The impact of human resource management practices on perceptions of organizational performance. *Academy of Management Journal*, 39(4), 949-969. doi:10.2307/256718

- Dill, D. D., & Soo, M. (2005). Academic quality, league tables, and public policy. *Higher Education*, 49(4), 495-533. doi:10.1007/s10734-004-1746-8
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields; *American Sociological Review*, 48(2), 147-160.
- El-Ghalayini, Y. (2017). Human resource management practices and organizational performance in public sector organization. *Journal of Business Studies Quarterly*, 8(3), 65. Retrieved from <https://search.proquest.com/docview/1880365880>
- Feldman, K. A. (1984). Class size and college students' evaluations of teachers and courses: A closer look. *Research in Higher Education*, 21(1), 45-116. doi:10.1007/BF00975035
- Flores, G. L., Posthuma, R. A., & Campion, M. A. (2016). Managing the risk of negative effects of high performance work practices. In N. M. Ashkanasy, R. J. Bennett & M. J. Martinko (Eds.), *Understanding the high performance work place: The line between motivation and abuse* (pp. 15-38) Routledge.
- George, G. (2005). Slack resources and the performance of privately held firms. *The Academy of Management Journal*, 48(4), 661-676. doi:10.5465/AMJ.2005.17843944
- Godard, J. (2001). High performance and the transformation of work? The implications of alternative work practices for the experience and outcomes of work. *Industrial and Labor Relations Review*, 54(4), 776-805. doi:10.1177/001979390105400402
- Grinyer, P. H., & Yasai-Ardekani, M. (1981). Strategy, structure, size and bureaucracy. *Academy of Management Journal*, 24(3), 471-486. doi:10.5465/255569

- Guthrie, J. P. (2001). High-involvement work practices, turnover, and productivity: Evidence from New Zealand. *The Academy of Management Journal*, 44(1), 180-190.
doi:10.2307/3069345
- Hanushek, E. A. (2002). Evidence, politics, and the class size debate. *The Class Size Debate*, , 37-65.
- Harel, G. H., & Tzafrir, S. S. (2001). HRM practices in the public and private sectors: Differences and similarities. *Public Administration Quarterly*, 25(3), 316-355.
- Hasselbladh, H., & Kallinikos, J. (2000). The project of rationalization: A critique and reappraisal of neo-institutionalism in organization studies. *Organization Studies*, 21(4), 697-720. doi:10.1177/0170840600214002
- Houston, D. J. (2000). Public-service motivation: A multivariate test. *Journal of Public Administration Research and Theory: J-PART*, 10(4), 713-727.
doi:10.1093/oxfordjournals.jpart.a024288
- Huselid, M. A. (1995). The impact of human resource management practices on turnover, productivity, and corporate financial performance. *The Academy of Management Journal*, 38(3), 635-672. doi:10.2307/256741
- Giauque, D., Anderfuhren-Biget, S., & Varone, F. (2013). HRM practices, intrinsic motivators, and organizational performance in the public sector. *Public Personnel Management*, 42(2), 123-150. doi:10.1177/0091026013487121
- Gould-Williams, J. (2004). The effects of 'High commitment' HRM practices on employee attitude: The views of public sector workers. *Public Administration*, 82(1), 63-81.
doi:10.1111/j.0033-3298.2004.00383.x

- Gould-Williams, J. (2003). The importance of HR practices and workplace trust in achieving superior performance: A study of public-sector organizations. *The International Journal of Human Resource Management*, 14(1), 28-54. doi:10.1080/09585190210158501
- Gould-Williams, J.S., & Gatenby, M. (2010). The effects of organizational context and teamworking activities on performance outcomes. *Public Management Review*, 12(6), 759-787. Retrieved from <http://www.econis.eu/PPNSET?PPN=641934599>
- Gritti, P., & Leoni, R. (2012). High performance work practices, industrial relations and firm propensity for innovation. In A. Kauhanen (Ed.), *Advances in the economic analysis of participatory and labor-managed firms* (pp. 267-309) Emerald Group Publishing Limited. doi:10.1108/S0885-3339(2012)0000013014
- Harley, B., Allen, B. C., & Sargent, L. D. (2007). High Performance Work systems and employee experience of Work in the service sector: The case of aged care. *British Journal of Industrial Relations*, 45(3), 607-633.
- Hood, C. (1995). The “New public management” in the 1980s: Variations on a theme. *Accounting, Organizations and Society*, 20(2/3), 93-109. doi:10.1016/0361-3682(93)E0001-W
- Huff, R. F. (2007). *Achieving high performance in local government: Linking government outcomes with human resource management practices* (Doctoral dissertation). Retrieved from Retrieved from ProQuest Dissertations & Theses Global. (Order No. 3264839)
- Huselid, M. A. (1995). The impact of human resource management practices on turnover, productivity, and corporate financial performance. *The Academy of Management Journal*, 38(3), 635-672. doi:10.2307/256741

- Jensen, J. M., Patel, P. C., & Messersmith, J. G. (2013). High-performance work systems and job control. *Journal of Management*, 39(6), 1699-1724. doi:10.1177/0149206311419663
- Jyoti, J., Rani, R., & Gandotra, R. (2015). The impact of bundled high performance human resource practices on intention to leave. *International Journal of Educational Management*, 29(4), 431-460. doi:10.1108/IJEM-07-2014-0099
- Kalleberg, A. L., Marsden, P. V., Reynolds, J., & Knoke, D. (2006). Beyond profit? Sectoral differences in high-performance work practices. *Work and Occupations*, 33(3), 271-302. doi:10.1177/0730888406290049
- Keil, J., & Partell, P. J. (1997). The effect of class size on student performance and retention at Binghamton University. *Office of Budget & Institutional Research Binghamton University PO Box 6000*.
- Knies, E., & Leisink, P. (2018). People management in the public sector. In C. Brewster, & J. Cerdin (Eds.), *HRM in mission driven organizations: Managing people in the not for profit sector* (pp. 15-46). Cham: Palgrave Macmillan.
- Koch, M. J., & McGrath, R. G. (1996). Improving labor productivity: Human resource management policies do matter. *Strategic Management Journal*, 17(5), 335-354.
- Ko, J., & Smith-Walter, A. (2013). The relationship between HRM practices and organizational performance in the public sector: Focusing on mediating roles of work attitudes. *International Review of Public Administration*, 18(3), 209-231. doi:10.1080/12294659.2013.10805270
- Kokkelenberg, E. C., Dillon, M., & Christy, S. M. (2008). The effects of class size on student grades at a public university. *Economics of Education Review*, 27(2), 221-233. doi:10.1016/j.econedurev.2006.09.011

- Kroon, B., Voorde, K. v. d., & Veldhoven, M. v. (2009). Cross-level effects of high-performance work practices on burnout: Two counteracting mediating mechanisms compared. *Personnel Review*, 38(5), 509-525. doi:10.1108/00483480910978027
- Leggat, S. G., Bartram, T., & Stanton, P. (2011). High performance work systems: The gap between policy and practice in health care reform. *Journal of Health Organization and Management*, 25(3), 281-297. doi:10.1108/14777261111143536
- Levine, D. I. (1995). *Reinventing the workplace*. Washington: The Brookings Inst.
- Lindorff, M. (2009). We're not all happy yet: Attitudes to work, leadership, and high performance work practices among managers in the public sector. *Australian Journal of Public Administration*, 68(4), 429-445. doi:10.1111/j.1467-8500.2009.00649.x
- Lowthert III, W. H. (1997). *The relationship between the implementation of high performance work practices and nuclear power plant performance*(Doctoral dissertation).Retrieved from ProQuest Dissertations & Theses Global. (Order No. 9628132)
- Luthans, K. W. (1997). *Human resource management of rural electric utilities: The impact of high-performance work practices*(Doctoral dissertation). Retrieved from Retrieved from ProQuest Dissertations & Theses Global. (Order No. 9734624)
- Macky, K., & Boxall, P. (2008). Employee experiences of high-performance work systems: An analysis of sectoral, occupational, organisational and employee variables. *New Zealand Journal of Employment Relations*, 33(1), 1-16. Retrieved from <https://search.proquest.com/docview/233249970>
- March, J. G., & Olsen, J. P. (1998). The institutional dynamics of international political orders. *International Organization*, 52(4), 943-969. doi:10.1162/002081898550699

- Messersmith, J. G., Patel, P. C., Lepak, D. P., & Gould-Williams, J. (2011). Unlocking the black box: Exploring the link between high-performance work systems and performance. *The Journal of Applied Psychology, 96*(6), 1105-1118. doi:10.1037/a0024710
- Monks, J., & Schmidt, R. (2011). The impact of class size and number of students on outcomes in higher education. *The BE Journal of Economic Analysis & Policy, 11*(1)
- Mostafa, A. M. S. (2016). High-performance HR practices, work stress and quit intentions in the public health sector: Does person-organization fit matter? *Public Management Review, 18*(8), 1218-1237. doi:10.1080/14719037.2015.1100319
- Mostafa, A. M. S., Gould-Williams, J. S., & Bottomley, P. (2015). High-Performance human resource practices and employee outcomes: The mediating role of public service motivation. *Public Administration Review, 75*(5), 747-757. doi:10.1111/puar.12354
- Mostafa, A. M. S., & Gould-Williams, J. S. (2014). Testing the mediation effect of person-organization fit on the relationship between high performance HR practices and employee outcomes in the Egyptian public sector. *The International Journal of Human Resource Management, 25*(2), 276-292. doi:10.1080/09585192.2013.826917
- Muduli, A., Verma, S., & Datta, S. K. (2016). High performance work system in India: Examining the role of employee engagement. *Journal of Asia-Pacific Business, 17*(2), 130-150. doi:10.1080/10599231.2016.1166021
- Nafukho, F. M., Hairston, N. R., & Brooks, K. (2004). Human capital theory: Implications for human resource development. *Human Resource Development International, 7*(4), 545-551. doi:10.1080/1367886042000299843

- Nohria, N., & Gulati, R. (1996). Is slack good or bad for innovation? *The Academy of Management Journal*, 39(5), 1245-1264. doi:10.2307/256998
- North, D. C. (1992). Institutions, ideology, and economic performance. *The Cato Journal*, 11(3), 477. Retrieved from <https://search.proquest.com/docview/1293629277>
- Perry, J. L. (1996). Measuring public service motivation: An assessment of construct reliability and validity. *Journal of Public Administration Research and Theory: J-PART*, 6(1), 5-22. doi:10.1093/oxfordjournals.jpart.a024303
- Perry, J. L., & Rainey, H. G. (1988). The public-private distinction in organization theory: A critique and research strategy. *The Academy of Management Review*, 13(2), 182-201. Retrieved from <http://www.econis.eu/PPNSET?PPN=259410241>
- Pfeffer, J. (1994). *Competitive advantage through people*. Boston, Mass: Harvard Business School Press.
- Powell, T. C. (1992). Organizational alignment as competitive advantage. *Strategic Management Journal*, 13(2), 119-134. doi:10.1002/smj.4250130204
- Pradhan, R. K., Dash, S., & Jena, L. K. (2019). Do HR practices influence job satisfaction? examining the mediating role of employee engagement in Indian public sector undertakings. *Global Business Review*, 20(1), 119-132. doi:10.1177/0972150917713895
- Robineau, A., Ohana, M., & Swaton, S. (2014). The challenges of implementing high performance work practices in the nonprofit sector. *Journal of Applied Business Research (JABR)*, 31(1), 103. doi:10.19030/jabr.v31i1.8994

- Selden, S. C., & Sowa, J. E. (2015). Voluntary turnover in nonprofit human service organizations: The impact of high performance work practices. *Human Service Organizations: Management, Leadership & Governance*, 39(3), 182-207.
doi:10.1080/23303131.2015.1031416
- Selden, S., Schimmoeller, L., & Thompson, R. (2013). The influence of high performance work systems on voluntary turnover of new hires in US state governments. *Personnel Review*, 42(3), 323. doi:10.1108/00483481311320426
- Selznick, P. (1996). Institutionalism "old" and "new". *Administrative Science Quarterly*, 41(2), 270-277. doi:10.2307/2393719
- Shen, J., Benson, J., & Huang, B. (2014). High-Performance work systems and teachers' work performance: The mediating role of quality of working life. *Human Resource Management*, 53(5), 817-833. doi:10.1002/hrm.21614
- Tan, J., & Peng, M. W. (2003). Organizational slack and firm performance during economic transitions: Two studies from an emerging economy. *Strategic Management Journal*, 24(13), 1249-1263. doi:10.1002/smj.351
- Posthuma, R. A., Campion, M. C., Masimova, M., & Campion, M. A. (2013). A high performance work practices taxonomy. *Journal of Management*, 39(5), 1184-1220.
doi:10.1177/0149206313478184
- Powell, W. W. (2007). *The new institutionalism*. In Clegg, S., & Bailey, J. R. (Eds) (2007)*The international encyclopedia of organization studies*. Sage Publications.

- Topcic, M., Baum, M., & Kabst, R. (2016). Are high-performance work practices related to individually perceived stress? *The International Journal of Human Resource Management*, 27(1/2), 45-66. Retrieved from <http://www.econis.eu/PPNSET?PPN=851734731>
- Truss, C., Gratton, L., Hope-Hailey, V., McGovern, P., & Stiles, P. (1997). Soft and hard models of human resource management: A reappraisal. *Journal of Management Studies*, 34(1), 53-73. doi:10.1111/1467-6486.00042
- Tzafrir, S. S. (2005). The relationship between trust, HRM practices and firm performance. *The International Journal of Human Resource Management*, 16(9), 1600-1622. doi:10.1080/09585190500239135
- United States. Dept. of Labor. (1993). *High performance work practices and firm performance*. [Washington, DC.?]: U.S. Dept. of Labor
- Vandenabeele, W., Leisink, P., & Knies, E. (2013). Public value creation and strategic human resource management: Public service motivation as a linking mechanism. In P. Leisink, P. Boselie, M. v. Bottenburg & D. M. Hosking (Eds.), *Managing social issues: A public values perspective* (pp. 37-54) Edward Elgar Publishing.
- Vanhala, S., & Stavrou, E. (2013). Human resource management practices and the HRM-performance link in public and private sector organizations in three western societal clusters. *Baltic Journal of Management*, 8(4), 416-437. doi:10.1108/BJM-12-2012-0115
- Vermeeren, B., Kuipers, B., & Steijn, B. (2014). Does leadership style make a difference? linking HRM, job satisfaction, and organizational performance. *Review of Public Personnel Administration*, 34(2), 174-195. doi:10.1177/0734371X13510853

- Walton, E. J. (2005). The persistence of bureaucracy: A meta-analysis of Weber's model of bureaucratic control; *Organization Studies*, 26(4), 569-600.
- Watty-Benjamin, W. (2013). *Public sector human resource practices and the impact on employees behavioral outcomes*(Doctoral dissertation). Retrieved from Retrieved from ProQuest Dissertations & Theses Global. (Order No. 3561505)
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171-180. Retrieved from <https://search.proquest.com/docview/230627518>
- Williams, D. D., Cook, P. F., Quinn, B., & Jensen, R. P. (1985). University class size: Is smaller better? *Research in Higher Education*, 23(3), 307-318. doi:10.1007/BF00973793
- Young, S., Bartram, T., Stanton, P., & Leggat, S. G. (2010). High performance work systems and employee well-being: A two stage study of a rural Australian hospital. *Journal of Health Organization and Management*, 24(2), 182-199. doi:10.1108/14777261011047345
- Zucker, L. G. (1987). Institutional theories of organization. *Annual Review of Sociology*, 13, 443-464. Retrieved from <https://search.proquest.com/docview/1300196029>

Vita

Kingshuk Saha is originally from Dhaka, Bangladesh. He completed his Bachelor of Arts from Dickinson College, Pennsylvania, U.S. in 2012 and double majored in International Business and Management and Economics. He completed Post-Graduate Diploma in International Relations (PGDIR) from University of Dhaka, Bangladesh in the summer of 2013. He also completed Masters of Development Studies (MDS) from BRAC University, Dhaka, Bangladesh in 2014.

Saha is passionate about conducting research in the areas of High Performance Work Practices, Corporate Social Responsibility, Gender and Leadership and multidisciplinary research. Teaching interests of Saha include Organizational Behavior, Small Business Management, Entrepreneurship and Human Resource Management. Saha greatly believes in student engagement and participation. Saha is a member of Academy of Management (AOM), Strategic Management Society (SMS) and Society for Industrial and Organizational Psychology (SIOP). Saha has taught 7 management courses as the sole instructor at the University of Texas at El Paso while being a doctoral student at the institution.

The author can be reached at kasha@miners.utep.edu and sahak2021@gmail.com