

**High Performance Work System and Firm-Level Performance of
SMEs in the Southern Region of Thailand: Examining the
Antecedent Role of CEO Leadership and the Mediating
Roles of Perceived Organizational Support and
Psychological Empowerment**

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**A Thesis Submitted in Fulfillment of the Requirements for the
Degree of Doctor of Philosophy in Management**

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Thesis Title High Performance Work System and Firm-Level Performance of SMEs in the Southern Region of Thailand: Examining the Antecedent Role of CEO Leadership and the Mediating Roles of Perceived Organizational Support and Psychological Empowerment

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ชื่อวิทยานิพนธ์	ระบบการบริหารงานที่มุ่งผลการปฏิบัติงานระดับสูงและผลการดำเนินงานของวิสาหกิจขนาดกลางและขนาดย่อมในภาคใต้ของประเทศไทย: การศึกษาอิทธิพลของภาวะผู้นำและบทบาทของตัวแปรคั่นกลาง
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บทคัดย่อ

วิสาหกิจขนาดกลางและขนาดย่อม หรือ Small and Medium Enterprises (SMEs) ในประเทศที่กำลังพัฒนาส่วนใหญ่ยังขาดความสามารถในการที่จะบรรลุผลการดำเนินงานขององค์กร การศึกษาวิจัยครั้งนี้มีวัตถุประสงค์เพื่อทำการตรวจสอบความสัมพันธ์ระหว่างระบบการบริหารงานที่มุ่งผลการปฏิบัติงานระดับสูง หรือ High Performance Work Systems (HPWS) ว่ามีส่วนสำคัญและส่งผลต่อผลการดำเนินงานของ SMEs ในภาคใต้ของประเทศไทย อีกทั้งการศึกษาวิจัยครั้งนี้ยังอาศัยมุมมองจากหลากหลายทฤษฎีเพื่อศึกษาบทบาทของภาวะผู้นำด้านความสัมพันธ์ที่มีต่อการนำระบบ HPWS มาใช้ในองค์กรรวมทั้งศึกษาบทบาทของการรับรู้การสนับสนุนจากองค์กรของพนักงาน และการรับรู้ว่าคุณมีพลังและอำนาจในฐานะตัวแปรคั่นกลาง ผู้วิจัยทำการเก็บข้อมูลโดยใช้แบบสอบถามจากกลุ่มตัวอย่างของ SMEs ในภาคใต้ของประเทศไทย ประกอบด้วยพนักงานจำนวน 951 คน และผู้นำสูงสุดขององค์กร (CEOs) จำนวน 110 คน จาก SMEs 110 แห่ง ผลจากการวิเคราะห์โมเดลสมการโครงสร้างพบว่า ภาวะผู้นำด้านความสัมพันธ์ของ CEOs มีอิทธิพลต่อการนำระบบ HPWS มาใช้ในองค์กร และมีส่วนสำคัญต่อผลการดำเนินงานของ SMEs ในภาคใต้ของประเทศไทยผ่านการรับรู้การสนับสนุนจากองค์กร และการรับรู้ว่าคุณมีพลังและอำนาจของพนักงาน ผลการวิจัยครั้งนี้แสดงให้เห็นว่าองค์กรที่มีผู้นำที่มุ่งเน้นความสัมพันธ์กับพนักงานในระดับสูงมีแนวโน้มที่จะนำระบบ HPWS มาใช้ในองค์กรมากกว่าองค์กรอื่นๆ และส่งผลให้พนักงานในองค์กรรับรู้ถึงการได้รับการสนับสนุนจากองค์กรและการรับรู้ว่าคุณมีพลังและอำนาจเพิ่มขึ้นนำไปสู่การบรรลุผลการดำเนินงานขององค์กรได้ในที่สุด ดังนั้น CEOs และผู้ประกอบการ SMEs ควรเอาใจใส่และให้การสนับสนุนพนักงาน เพื่อแสดงให้เห็นว่าองค์กรเห็นถึงคุณค่าและความสำคัญของพวกเขา และเพื่อเพิ่มแรงจูงใจแก่พนักงานในการปฏิบัติงานให้บรรลุผลการดำเนินงานขององค์กรในระดับสูงยิ่งขึ้น การศึกษาวิจัยครั้งนี้นับเป็นการศึกษาแรกที่ศึกษาความสัมพันธ์ของบทบาทภาวะผู้นำสูงสุดขององค์กร ระบบ HPWS และผลการดำเนินงานขององค์กรใน SMEs

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ABSTRACT

Most small and medium-sized enterprises (SMEs) in developing countries lack the internal capabilities required to achieve superior business performance. The present study examines the relationship between High Performance Work Systems (HPWS) and SMEs' performance in Thailand. Drawing from several theoretical perspectives, the present study also seeks to examine the antecedent role of CEOs' relationship-focused and the mediating roles of perceived organizational support (POS) and employees' psychological empowerment. Based on the structural equation modeling (SEM) analyses of the data collected from 951 employees and 110 CEOs in 110 SMEs located in the southern region of Thailand, the results showed that the effects of CEOs' leadership on SMEs' performance are sequentially mediated by the aggregated employee perceptions of HPWS, perceived organizational support (POS) and psychological empowerment. Firms with higher levels of CEOs' relationship-focused leadership are more likely to adopt and implement HPWS, in turn leading to higher levels of POS, psychological empowerment, and ultimately organizational performance. An important implication for management research that arises from this present study is that, in order for SMEs to achieve higher performance, business leaders will need to provide a supportive work environment for their employees so that they could feel supported and empowered to engage in superior performance behaviors. This highlights the importance of CEOs and their employees' perceptions and motivation in linking HPWS and firms' performance. This study is among the first to shed light on the role of CEOs' leadership on HPWS and firms' performance.

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LIST OF ABBREVIATIONS AND SYMBOLS

AMO	Abilities, Motivation, and Opportunity
CEOs	Chief Executive Officers
CFA	Confirmatory Factor Analysis
CI	Confidence interval
CR	Composite reliability
DE	Direct effects
HPWS	High Performance Work Systems
HR	Human Resources
HRM	Human Resource Management
ICC	Intraclass correlation coefficient
IE	Indirect effects
POS	Perceived Organization Support
RBV	Resource-Based View
SDT	Self-Determination Theory
SE	Standard error
SEM	Structural Equation Modeling
SET	Social Exchange Theory
SMEs	Small- and Medium-Sized Enterprises
TE	Total effects
ORG	Organizational Performance
UET	Upper Echelon Theory
<i>ANOVA</i>	Analysis of Variance
α	Cronbach's index of internal consistency (a form of reliability)
β	Beta
<i>df</i>	Degrees of freedom
<i>F</i>	<i>F</i> distribution
<i>M</i>	Sample mean
<i>N</i>	Total number of cases
<i>SD</i>	Standard deviation

LIST OF ABBREVIATIONS AND SYMBOLS (Continued)

<i>ns</i>	Not statistically significant
R^2	Multiple correlation squared / measure of strength of association
R_{wg}	Within-group agreement
<i>r</i>	Estimate of the Pearson product-moment correlation Coefficient
<i>t</i>	The sample value of the <i>t</i> -test statistic
Δ	Increment of change
Δdf	Difference in degree of freedom
$\Delta\chi^2$	Chi-square difference
χ^2	Chi-square
χ^2/df	Normed Fit Chi-square

CHAPTER 1

INTRODUCTION

1.1 Problem Statement: The Importance and Struggles of SMEs

In today's world, the business environment has changed rapidly (Teece, 2007) and countries across the globe have become much more interconnected and interdependent (Sull, 2007). Organizations have thus been under more severe pressure to continually improve their performance in order to compete in the world market (Becker & Gerhart, 1996; Dany, Guedri, & Hatt, 2008). Major driving forces behind these competitive pressures are the improvement in the national development plans put forth by several countries, which aim to improve their long-term and sustainable economic growth (Feige & Vonortas, 2017). To this end, it has been indicated that the national innovation development platform plays a vital role in this increasingly dynamic economy (Carlsson, Jacobsson, Holmén, & Rickne, 2002). A good example is China's "Made in China" strategy aimed towards promoting new innovations in the manufacturing sectors (Bell, 2009). Similarly, India has launched its "Made in India" campaign, which aims to generate new ideas and innovativeness for all business industries and ultimately to promote a fast growing economy (Saranga, Mudambi, & Schotter, 2017). Another noteworthy example is Korea's new economic model of "Science and Technology", which has helped it to become a global leader in innovation (Yoon, 2015).

In this competitive environment, it is necessary for the business sector in Thailand to brace itself for this rapid change. In so doing, Thailand has followed the footsteps of other successful countries. In particular, the "Thailand's economic model 4.0" was launched to boost the economic growth in four important areas (Jones & Pimdee, 2016): (1) to initiate a value-based economy that is shaped by innovation, technology and creativity, (2) to create a society that achieves long-term economic sustainability via recognizing the full capability of all of its members, (3) to raise the value of human potential and (4) to raise the awareness for environmental protection in order to become a livable community and society (Vimolsiri, 2016). To

be more specific, the success of Thailand 4.0 would have to be based on creativity, innovation, new technology and high-quality services (Jones & Pimdee, 2016). Also evident in this model is the emphasis on the improvement of Thailand's labor force and skills across all economic sectors.

The revolution of Thailand's development plans started from the so-called Thai Economy 1.0, which emphasized the growth of the agriculture sector. Then came Thai Economy 2.0, which focused on light industry, aimed at utilizing its existing natural resources and cheap labor. After that, Thailand's growth was stepped up to Thai Economy 3.0, which aimed at heavy industry, with a focus on large scale-manufacturing and worldwide exports. Under Thai economy 3.0, the Thai economy had faced some challenges, including the middle-income trap, an inequality trap and an imbalance trap. These have been acknowledged as serious problems by the Thai government.

As a result of this, the Thai government has incorporated the SMEs development plan as an important part of its national economic and social development plans. In particular, the plan to develop SMEs involves providing financial assistance, boosting their capabilities and connecting them with the globalized economy (Jones & Pimdee, 2016).

As highlighted in many academic studies, the development of SMEs is one of the most viable strategies to achieve national development goals. Not only do they play an important role in supporting economic growth at the societal level but they can also provide a more sustainable environment focused on the micro level of economic development (Bendickson, Muldoon, Ligouri, & Midgett, 2017). Additionally, SMEs constitute an important part of the economy as they participate in generating innovation, gross domestic product (GDP), export industry and employment opportunities (Baumol & Strom, 2007; Birch, 1987; Mazzarol, Volery, Doss, & Thein, 1999). Overall, past research has concluded that SME development is integral to achieving its long-term and sustainable economic growth (Bendickson et al., 2017).

In Thailand, SMEs has played a significant role in promoting economic growth and equitable sustainable development that is connected to all types of economic activities. Thai SMEs constitute a major source of employment and generate significant domestic and export earnings. For example, of a total

employment of 13,078,147 workers in all business enterprises in Thailand in 2014, SMEs employed about 10,501,166 people or 80.30% (The Office of SMEs Promotion, 2017). In the same year, SMEs accounted for about 5,212,004 million baht or 39.61 % of the country's overall GDP. Of these numbers, 'small' enterprises contributed to 27.8% whereas the 'medium' enterprises contributed to 11.8% of the total GDP (The Office of SMEs Promotion, 2017). In 2016, the number of employment among SMEs in Thailand rose to about 3,004,679 or 99.73% of the total number of employment in all business enterprises. The majority of these enterprises are small-sized, accounting for 99.26% of the country's total number of enterprises while the medium sized enterprises accounted for 0.47% (The Office of SMEs Promotion, 2017). Thus, SMEs will play a crucial role in the success of the Thailand 4.0 model which aims to increase the level of wealth and economic well-being based on value-added to goods and services for the country (The Office of SMEs Promotion, 2017).

Although Thailand is endowed with several natural resources and geographical location, it is unfortunate that Thai SMEs are limited in many aspects. In particular, SMEs face a number of difficulties in developing their own capacities as called for by the demands of Thailand 4.0. As indicated by the office of SMEs Promotion (2017), these difficulties include: (1) the inability to access the international market, (2) a lack of leadership and management skills and effective financial and human resource management, (3) a lack of key strategies for retaining employees, (4) a lack of skilled employees, (5) a lack of training and development in the organization (6) a lack of effective technology (7) poor product quality, which falls below market standards and (8) finally a lack of funds. Indeed, most SMEs are family-based businesses, which to a certain degree have caused them to lack the expertise in key aspects of successful businesses. Whereas owners of SMEs utilize their own personal work experiences to start their businesses, the hard reality is that when business grows bigger, good management skills of has become indispensable. The advent of the ASEAN Economic Community (AEC) has generated further challenges for SMEs (Petri, Plummer, & Zhai, 2012) and it is high time for Thai SME owners to brace themselves for this transformation.

1.2 The Importance of High Performance Work System (HPWS)

It has been long accepted that human capital development is a key strategy necessary to generate sustainable competitiveness (Barney, 1991). To do so, SMEs need to modify their strategies to participate competitively in the world market by attracting, developing and retaining skilled employees (Chrisman, Chua, & Litz, 2003; Mitchell, Morse, & Sharma, 2003; Sieger, Bernhard, & Frey, 2011). But what is the tool for helping SMEs? How can Thailand improve the sustainability of the SMEs sector?

In the past two decades, research has shown that ‘High Performance Work System’ or “HPWS” can have a significant impact on the well-being and success of their employees and organizational performance (Becker & Gerhart, 1996; Becker & Huselid, 1998; Way, 2002). So what is HPWS? Specifically, HPWS-a term coined by Huselid (1995)-refers to a ‘bundle’ of interrelated human resource management (HRM) practices designed to enhance employees skills, motivation, opportunity for employee development, and to maintain employees within the organization. Note that the definition and terminology used in the HPWS literature have some slight variation across the field (Boxall & Purcell, 2003). For example, HPWS is sometimes referred to as high performance involvement system or high commitment practices (Shin & Konrad, 2017; Tomer, 2001).

Appelbaum and Berg (2001) indicated that HPWS includes three categories of human resource management (HRM) practices that seek to enhance (1) employee skills (2) employee motivation and (3) employee empowerment. Firstly, HR practices that seek to enhance employee skills include selective staffing, extensive training, competitive compensation and internal promotions. These practices are designed to attract and promote highly qualified applicants with superior knowledge, skills, and abilities (KSAs) (Chi & Lin, 2011). Secondly, employee work motivation can be elicited through performance-based contingent pay and results-oriented appraisal systems (Huselid, 1995; Wright & McMahan, 1992). Thirdly, HR practices aimed to enhance employee empowerment include employee participation, formal complaint resolution systems and teamwork design that are planned and implemented to enable employees to express their opinions and perceptions, thereby

empowering them to make decisions which lead to higher employee flexibility and productivity (Way, 2002). Indeed, a combination of these HR practices will likely help facilitate employee involvement, skills enhancement and stronger motivation to improve trust in the workplace, foster employees' intrinsic level of motivation and raise organizational commitment.

In this present study, HPWS is conceptualized to encompass eight HR practices according to Ability-Motivation-Opportunity (AMO) theory (Appelbaum et al., 2000; Appelbaum & Berg, 2001). This includes recruitment and selection, training and development, the performance appraisal, compensation, self management teams, communication, participation in decision-making and career development and promotion. These HPWS practices are believe to capture the characteristics of the HR activities among SMEs in the southern region of Thailand.

Over the years, scholars have reported that HPWS can significantly influence the performance of large organizations (Bowen & Ostroff, 2004; Datta, Guthrie, & Wright, 2005; Huselid, 1995). Among the first empirical studies linking human resources management (HRM) practices and performance were the work by Arthur (1994) followed by (1995) and Huselid (1995). In particular, Huselid (1995) studied a set of HRM practices in 968 large companies and found a positive relationship between HRM and successful organizational outcomes through employee attitudes and behaviors. Other studies showed that HPWS generates benefits in individual and organizational performances such as financial performance (Guthrie, 2001; Huselid, 1995), employee commitment (Youndt, Snell, Dean, & Lepak, 1996), turnover (Richard & Johnson, 2001), firm productivity (Guthrie, 2001), efficiency and flexibility (Evans & Davis, 2005), profit, sales and return on assets (ROA) Lawer, Edward, Susan, and George (2001).

More recently, research reveals that HPWS also plays a vital role in increasing organizational performance among SMEs (De Winne & Sels, 2010; Torre & Solari, 2013; Tansky & Henemen, 2003). Indeed, the growing importance of SMEs in the market economy has generated growing interest amongst HRM scholars (Bacon & Hoque, 2005). Specifically, it has been indicated that SMEs that adopts HPWS will grow more innovatively, have higher rates of success, are more likely to

survive the business environment, and have more capabilities than those that do not implement it (Bendickson et al., 2017).

The review of the current literature indicates that the effects of HPWS on organizational performance can be explained based on three theoretical traditions: (1) the resource-based view (RBV) (Barney, 1991), (2) social exchange theory (SET) (Blau, 1964), and (3) AMO theory (Appelbaum, Bailey, Berg, & Kalleberg, 2000). From the RBV perspective, a resource can be qualified as a ‘source of competitive advantage’ so long as the resource adds value to the firm, is rare and hard to be imitated as to add unique value (Barney, 1991). This perspective suggests that HPWS helps organizations sustain competitive advantage relative to other organizations by investing in the value of human capital (Wright, Dunford, & Snell, 2001). Moreover, HPWS can create an exchange relationship between employees and employers. Social exchange theory (SET) Blau (1964) refers to the extent that both the employee and the employer apply the reciprocity norms to their relationships; favorable treatment received by either party is reciprocated, leading to beneficial outcomes for both. When employees perceive that their organizations treat them well and with respect, they are more likely to take initiatives to sustain mutually beneficial and long-term relationships with their organizations. Finally, AMO theory (Appelbaum et al., 2000) posits that work performance depends on the employees’ ability, motivation and the opportunity for them to make a contribution and maintain well-being. The study by Boxall and Purcell (2003) has shown that employees perform well when they have the capabilities, when they have the adequate motivation, and when their work environment provides opportunities to participate.

1.3 Gaps in the literature

The present study seeks to address several gaps in the HRM literature in the context of SMEs in Thailand. Firstly, despite the significant role of HRM in SMEs, on the whole, there has been little focus on it (Williamson, 2000). According to Tansky and Heneman (2003, p.299), ‘*SMEs have been treated as second class citizens by authors in the human resource management literature for far too long*’. Furthermore, although most of HPWS research has been conducted in an

international context (Boselie, 2010; Gould-Williams & Mohamed, 2010; Kehoe & Wright, 2013; Messersmith, Patel, Lepak, & Gould-Williams, 2011), the study of HPWS in Thailand is very limited and much less is known about the virtuous influence of HPWS in the SEMs context. Existing research has focused on large organizations such as universities (Pongpearchan, 2016), hospitals (Ruanggoon, 2016), hotels (Limpitikranon, 2017), those in the telecommunications sector (Koednok & Sungsanit, 2016) and subsidiaries of multinational corporations (MNCs) (Yalabik, Chen, Lawler, & Kim, 2008).

This present study thus seeks to address this existing gap by examining the influence of HPWS on organizational performance amongst SMEs in the southern region of Thailand. It also aims to examine the extent to which HPWPs is implemented among SMEs and to compare them across enterprises of different sizes (Kroon, Van De Voorde, & Timmers, 2013). Although one could argue that there are likely low levels of HPWS among SMEs, recent research does support that smaller but coherent bundles of HPWPs can be found in small organisations and that the implementation of these bundles depends on available resources, strategic decision-making and the combination of the two (Kroon et al., 2013).

Secondly, although it is widely accepted that leadership of CEOs or business owners play a pivotal role in the first stage of an organization's life cycle, little research has been conducted on the role of leadership in the adoption and implementation of HPWS. Specifically, CEOs play a vital role in conceiving the organization's strategy and directly influence the selecting and managing of crucial resources to implement the desired strategy, especially in small organizations (Lichtenstein & Brush, 2001). For example, a recent study by Kroon, Van De Voorde and Timmers (2013) showed that in firms where the owners have high trust and awareness in the value of HPWS and have a deeper understanding in HRM practices, employees will perceive a greater presence of opportunity practices and that this effect is stronger in smaller organizations. Thus, managerial value-based beliefs are expected to relate with the choice of HPWS approach.

This present study proposes that the leadership quality of CEOs will influence the adoption of HPWS in their business. Specifically, this study investigates the impact on relationship-focused CEO leadership behaviors and the

characteristics of CEO's leadership (Wang, Tsui, & Xin, 2011; Xi, Zhao, & Xu, 2016). To investigate this phenomenon, the researcher applied the upper echelon theory (Hambrick, 2007; Hambrick & Mason, 1984) to form the hypotheses. Specifically, managerial skills are often associated with the human capital of the owner, derived from their education background and past experience that reflects on their knowledge bases and cognitive abilities.

Thirdly, although the underlying mechanisms through which HPWS influences organizational performance have been both theoretically and empirically established in the strategic HRM literature (Aryee, Walumbwa, Seidu, & Otaye, 2012; Combs, Liu, Hall, & Ketchen, 2006; Guest, Paauwe, & Wright, 2012; Jensen, Patel, & Messersmith, 2013; Liao, Toya, Lepak, & Hong, 2009), researchers have indicated that the relationship between HPWS and organizational performance remains a "black box" and deserves further attention from scholars (Becker & Huselid, 2006; Bendickson et al., 2017; Heffernan & Dundon, 2016). Furthermore, scholars have emphasized that there is no clear answer to the question of how CEOs influence firm performance (House, Spangler, & Woycke, 1991; Wang et al., 2011). This present study also investigates the employees' psychological mechanisms linking HPWS and organizational performance. Although HPWS is related to outcomes at the organizational level, an 'employee' perspective is particularly important given that HR practices are not necessarily implemented as 'intended' (Nishii, Lepak, & Schneider, 2008). Specifically, this present study draws from the social exchange theoretical perspective (Blau, 1964) and Self Determination Theory (SDT) (Deci & Ryan, 1975) to develop the hypotheses. From the social exchange view, the researcher proposes that perceived organization support (POS) (Eisenberger, Huntington, Hutchison, & Sowa, 1986), which refers to the extent the organizations value their employees' contributions and well-being, will mediate the relationship between HPWS and SMEs' performance. Furthermore, based on SDT, it is hypothesized that psychological empowerment, which refers to the process of fostering and creating intrinsic motivation in the employee in four cognitions including meaning, competence, self-determination, and impact (Spreitzer, 1995) will provide an alternative explanation to this psychological process.

Taken together, the present study seeks to test that the assumption that HPWS may relate to important organizational outcomes via the role of social exchange and enhanced intrinsic motivation. Furthermore, this research sheds light on peculiarities in SMEs knowledge and HR practices which will be expanding to contributions of SME organizations. It aims to shed light on the much underexplored role of leadership of business owners.

1.4 Research Questions

Given the above theoretical gaps, the following research questions have been formulated to guide this research endeavors;

1. To what extent does HPWS matter in terms of predicting organizational performance among SMEs in the southern region of Thailand?
2. What are the characteristics and the extent to which HPWS is implemented in the context of SMEs in the southern region of Thailand?
3. To what extent do leadership styles of SMEs' owners impact the adoption and implementation as perceived by employees in the context of SMEs in the southern region of Thailand?
4. What are the underlying psychological mechanisms linking HPWS and organizational performance?

1.5 Research Objectives

The major objectives of this research are as follows:

1. To examine the characteristics of HPWS in the context of SMEs in the southern region of Thailand and the extent to which it is actually implemented.
2. To examine the association between HPWS and organizational performance in the context of SMEs in the southern region of Thailand.
3. To examine the extent do SMEs' owners' leadership behaviors influence the adoption and implementation of HPWS in the context of SMEs in the southern region of Thailand

4. To examine the mediating roles of perceived organizational support (POS) and empowerment in explaining the effect of HPWS organizational performance in the context of SMEs in the southern region of Thailand.

1.6 Research Significance

This study is among the first to study the impact of HPWS on organizational performance among SMEs in the southern region in Thailand. It aims to provide a novel insight into the roles of HPWS and relationship-focused CEO leadership behaviors among Thai SMEs sector and the psychological mechanisms that underlie the impact of these factors. The findings will help illustrate how SMEs can better equip themselves for sustainable growth.

1.7 Research Hypotheses

Table 1.1

Research hypotheses

	Hypotheses	Page
H₁	HPWS will be positively related to organizational performance.	35
H₂	Perceived organization support (POS) will mediate the relationship between HPWS and organizational performance.	52
H₃	Psychological Empowerment will mediate the relationship between HPWS and organizational performance	54
H₄	CEOs' relationship-focused leadership behaviors will relate positively to organizational performance.	59
H₅	HPWS will mediate the relationship between CEOs' relationship-focused leadership behaviors and organizational performance.	59
H₆	HPWS, perceived organization support (POS) and psychological empowerment will sequentially mediate the relationship between CEOs' relationship-focused leadership behaviors and organizational performance.	59

1.8 Research Methodology

The present study is positioned within the positivist research paradigm. The study employed a descriptive and cross-sectional design to achieve the aforementioned research objectives.

1.8.1 Population, sample size, sampling and data collection

The population for this research is the small-to-medium-sized enterprises (SMEs) in the southern region of Thailand. Specifically, the primary focus was on five provinces in the eastern coast southern sub region including Surat Thani, Songkhla, Phattalung, Chumphon and Nakhon Si Thammarat. The reason for choosing this specific sample is that the eastern coast southern sub region is the largest economic area in the southern region of Thailand, which has greatly contributed to the economic and social growth in the region (The office strategy management, 2017).

According to the Office of SMEs Promotion (2017), there are currently 28,231 SMEs in this specific region, with registered capital of not more than 200 million baht and a workforce of up to 200 employees. As there is no clear guidance on the appropriate number of organizational units to be examined in organization-level research, the researcher was drawn upon the insights in multilevel research, which indicated that a study sample of at least 100 organizational units with more than 5 employees each was an acceptable cluster size (Hox, Maas, & Brinkhuis, 2010).

1.8.2 Sampling Technique

These 100 SMEs were randomly chosen based on the proportional stratified random sampling method. The researcher handed and mailed the surveys to each of the chosen SMEs. CEOs were asked to assess their organizational performance and provided basic information about their organizations' characteristics. They were also asked to distribute the survey to their respective employees. The employees were then asked to assess their perceptions towards HPWS, their relationship-focused CEO leadership behaviors perceived

organizational support (POS) and psychological empowerment. Completed surveys were asked to be mailed back or returned directly to the researcher.

1.8.3 Research Instrument

In this research, the survey questionnaire method was used to collect the data. The development of the survey questionnaire was based on the review of the literature, theories, and previous research. Since all the items were borrowed from established measures in international research, they were back-translated into the Thai language. The questionnaires were divided into two parts. The first survey questionnaire, which is to be filled out by CEOs, were asked about (1) basic information on CEOs and SMEs and (2) organizational performance, which comprises employee turnover rate, sales, sales growth, and return on investment (ROI). The second part of the survey, which is to be filled out by at least 5 employees from each of the SMEs, consists of 3 sections as follows: (1) basic information about the respondents such as age, education, tenure, salary and whether they are high vs. low performers (2) employees' perceptions of regarding the extent to which high performance work system (HPWS) is implemented (3) relationship-focused CEO leadership behaviors and (4) perceived organizational support (POS), psychological empowerment, job satisfaction and commitment.

1.8.4 Data Analysis

(1) The data obtained from the survey was entered in a spreadsheet using SPSS Version 23.00. Basic descriptive statistics including means, standard deviation, frequency and percentage were used to describe the data.

(2) To check the quality of the measures, five experts were asked to provide their assessments of the constructs' content validity. Based on the "Item of Consistency" (IOC) method, a score of 0.60 for each specific item is a required cutoff value (i.e., approval from at least four experts out of five were needed for each item). As recommended by Hair, Anderson, Tatham, and Black (1998), to assess the discriminant validity of the variables, a series of confirmatory factor analysis (CFA) was conducted to evaluate the distinctiveness of key variables. The overall model's chi-square, the comparative fit index (CFI), the Tucker-Lewis Index

(TLI), the root mean square error of approximation (RMSEA), Chi-square. Then the data were analyzed using structural equation modeling (SEM) to assess the model fit. To assess convergent validity, composite reliabilities (CR) estimates (Bagozzi & Yi, 1988) and the average variance extracted (AVE) (Bagozzi, Yi, & Phillips, 1991).

(3) The study hypotheses were tested at the organizational (SMEs) level. To do that, first, all the study variables assessed at the individual level (except for organizational performance, which was already assessed at the organizational level) was aggregated to the organizational level. In so doing, it is necessary to demonstrate both between-groups disagreement and within-group agreement (Klein, Dansereau, & Hall, 1994). Intraclass correlation (ICC) was used to assess between-units disagreement and interrater agreement (r_{wg}) to assess within-unit agreement, respectively (James, Demaree, & Wolf, 1984; LeBreton & Senter, 2008). The ICC (1) value should be above the conventional criterion of 0.05 (Heck & Thomas, 2010; LeBreton & Senter, 2008) whereas ICC (2) value should be above the suggested criterion of .70 in the literature (Klein & Kozlowski, 2000).

(4) Structural equation modeling (SEM) was used to test all the study hypotheses using latent variables. Tests of sequential mediation involving multiple mediators was conducted (Preacher & Hayes, 2008). Indirect effects were derived using a bootstrapping method.

1.9 Definitions of Terms

Definitions of important terms are provided as follows;

1.9.1 High Performance Work Systems (HPWS)

HPWS refers to a bundle of HRM practices that are internally consistent (i.e., aligned within the HRM system) and externally consistent (i.e., aligned with the strategy of the organizations), which are designed to enhance employees skills, motivation and opportunity for employee development, retention and ultimately organizational success. HPWS may include specific practices such as recruitment and selection, participation in decision-making, training and development, communication, compensation, performance appraisal, career development and promotion, self-management teams (Huselid, 1995).

1.9.2 Relationship-focused CEO leadership behaviors

Relationship-focused CEO leadership behaviors refers to the extent to which leaders are supportive of and helpful to subordinates, showing trust and confidence in employees, being friendly and considerate, trying to understand subordinates' problems, showing appreciation for a subordinate's ideas, and providing recognition for subordinates' contributions and accomplishments. The CEO puts strong emphasis on showing concern and respect for his/her employees, looking out for their welfare, expressing appreciation and providing emotional support (Wang, Tsui, & Xin, 2011; Xi, Zhao, & Xu, 2016).

1.9.3 Perceived organization support (POS)

POS refers to the employees' perception about how the organization values their contribution and concerns about their well-being. Moreover, the perception allows them believe to understand and reflect upon the perceived organizational support that they have received through their organizational commitment (Eisenberger et al., 1986).

1.9.4 Psychological Empowerment

Psychological empowerment refers to the process of fostering and creating intrinsic motivation in the employee or individual whose influence on work activity in the organization leads to the employees' belief in their potential to do a successful job. This motivational construct is manifested in four cognitions: meaning, competence, self-determination, and impact (Spreitzer, 1995).

1.9.5 Organizational Performance

Organizational performance encompasses the specific areas of relative or benchmarked in that they are derived from assess organizational performance relative to the performance of industry firm performance. The specific areas of organizational performance in terms of perceptions of firm's performance over the past years relative to that of similar organizations such as competitive position, overall firm performance and employee retention (Delaney & Huselid, 1996).

1.10 Structure of the Thesis

In Chapter 2, the researcher discusses and reviews the relationship between high performance work system (HPWS) and organizational performance. Specifically, major theories in the literature on the HPWS and organizational performance relationship are discussed including Resource Based View theory (RBV) (Barney, 1991), social exchange theory (SET) (Blau, 1964), and the Ability-Motivation-Opportunity theory (AMO) (Appelbaum, 2000). Self-Determination Theory (SDT) (Deci & Ryan, 1975) is also proposed as a theory that helps to explain the link between the HPWS and employee behaviors and attitudes. Moreover, the upper echelon theory (UET) (Hambrick & Mason, 1984), and the Ulrich's four-HRM roles model (Ulrich, 1997) were used to underpin the link between CEOs leadership styles and HPWS in SMEs context, and the hypothesis development. Furthermore, this chapter also presents major studies that examined the relationship between HPWS, POS and psychological empowerment. Finally, the study hypotheses are developed and presented after the related literature in each respective section is thoroughly reviewed and discussed. In Chapter 3, the research methodology is discussed in detailed. The study employs a quantitative method to collect and analyzes the data for examining the study's hypotheses. It then deals with research design. In addition, hypotheses are tested and discussed in chapter 4. Finally, in chapter 5 the summary of the findings, implications, and limitations recommendations for future research are discussed.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter provides an overview of the literature on high performance work systems (HPWS) and how it relates to the general human resource management (HRM) practices. Several theories are discussed to highlight the rich nature of the literature including the Ability-Motivation-Opportunity (AMO) theory and the Resource-Based View (RBV) of the firm. To develop the main hypotheses regarding the influence of HPWS, the present study relies on Social Exchange theory (SET) and Self-Determination theory (SDT) and use Perceived Organizational Support (POS) and empowerment as proxies of the theories. The Upper Echelon theory is also presented as a main theoretical lens to explain the relationship between CEOs' leadership and HPWS. Empirical research examining the effect of HPWS on employees' and organizational outcomes are discussed throughout the chapter.

2.2 High Performance Work System (HPWS)

As stated in Chapter 1, an important goal of HRM is to acquire, motivate, develop and keep talented individuals. This could be achieved through several HRM practices including selective selection, training and development, competitive compensation and performance appraisal, to name a few. Over the past two decades, scholars have moved beyond these traditional HRM and began to examine a bundle of various HRM practices that are perceived as both internally and externally aligned, also known as 'High Performance Work System (HPWS).' When bundled together, these HRM practices can said to create synergies among the various HRM activities, which aim to effectively deploy the value of human capital. Despite the various differences and contextual factors inherent in the implementation of HPWS, which will be discussed below, there is a general agreement among scholars on what are considered to be best practices in HRM.

2.2.1 Terminology

Based on the review of the current literature, it was found that different terms have been used to refer to HRM system. These terms include High Involvement Work Practices (HIM) and High Commitment Human Resources Practices (HCM) or simply Human Resource Management (HRM) practices (HRMP) (Combs et al., 2006; Karatepe & Vatankhah, 2014; Shin & Konrad, 2017; White, Hill, McGovern, Mills, & Smeaton, 2003). Table 2.1 summarizes the various terms that have been used. Despite the differences in terminology used, it is important to recognize that they generally refer to a set or a bundle of HRM practices that aim to attract, motivate, develop and retain employees (Becker & Huselid, 1999; Guthrie, 2001; Huselid, 1995). As can be seen in Table 2.1, HPWS appears to be the most widely used terminology in the context of both small and medium enterprises (SMEs) and large organizations. Thus, to be consistent with the existing literature, ‘HPWS’ will be used hereafter to refer to a bundle of HRM practices including recruitment and selection, participation in decision-making, training and development, communication, compensation, performance appraisal, career development and promotion, self-management teams. This is further discussed in the sections that follow.

2.2.2 Defining HPWS

Although there is no universal agreement on the definition and the elements of HPWS (Boxall & Macky, 2009; Boxall & Purcell, 2003; Huselid, 1995; Zhang & Morris, 2014; Zhu, Liu, & Chen, 2018), HPWS can be construed as a set of distinct but interrelated HRM practices with emphasis on selection, development, retention, and motivation of human resources (Becker & Huselid, 1999; Guthrie, 2001; Huselid, 1995). This generally involves the use of selective staffing, extensive training and development, mentoring, performance management, and performance-based incentives (Fu, 2013; Fu, Flood, Bosak, Morris, & O'Regan, 2013; Gittell, Seidner, & Wimbush, 2010; Takeuchi et al., 2007). Other researchers indicate HPWS involves an investment in people, employee empowerment, good communication systems, performance management, fairness in setting pay and benefits, job security and a focus on low status differentials (Demirbag, Collings, Tatoglu, Mellahi, & Wood, 2014).

Table 2.1

The Terminology of high performance work systems (HPWS)

Authors	SMEs Context				Other Contexts			
	HIM	HCM	HRMP	HPWS	HIM	HCM	HRMP	HPWS
Ait Razouk (2011)				✓				
Ahmad and Schroeder (2003)							✓ Manufacturing	
Allen, Shore, and Griffeth (2003)								✓ Cosmetic & insurance companies
Arefin, Raquib, and Arif (2015)								✓ Pharmaceutical firms
Arthur, Herdman, and Yang (2016)								✓ Hotel
Bae, Chen, David Wan, Lawler, and Walumbwa (2003)				✓				
Bendickson et al.(2017)				✓				
Cardon and Stevens (2004)				✓				
Camuffo, De Stefano, and Paolino (2017)					✓			
Cassell, Nadin, Gray, and Clegg(2002)			✓					
Chang, Liangding, Takeuchi, and Yahua (2014)						✓ High Technology		
Chi and Lin (2011)								✓ High-technology industry
Combs et al.(2006)					✓	Combs et al.(2006)		

Authors	SMEs Context				Other Contexts			
	HIM	HCM	HRMP	HPWS	HIM	HCM	HRMP	HPWS
Cunningham and Rowley (2010)			✓					
De Grip and Sieben (2009)				✓				
De Kok and Uhlaner (2001)			✓					
Fu et al (2017)								✓ Service firms
Gilman and Raby (2013)				✓				
Gong, Chang, and Cheung (2010)				✓				
Guiyao, Bingjie, Lee, and Yang (2017)								✓ Chemical companies
Guthrie (2001b)					✓			
Harney and Dundon (2006)			✓					
Ingvaldsen, Johansen, and Aarlott (2014)								✓ Automotive industry
Iverson and Zatzick (2007)					✓			
Kim and Sung-Choon (2013)					✓			
Kroon et al.(2013)			✓					
Kotey and Slade (2005)			✓					
Lee, Lee, and Wu (2010)							✓	
Liao et al (2009)							Steel industry	✓ Banking industries
Macky and Boxall (2008)					✓			
Martin-Tapia, Aragon-Correa, and Guthrie (2009)								✓ Food Processing Sector

Authors	SMEs Context				Other Contexts			
	HIM	HCM	HRMP	HPWS	HIM	HCM	HRMP	HPWS
Messersmith et al.(2011)								✓ Local government authorities
Schopman, Kalshoven, and Boon (2017)						✓ Health care		
Shih, Chiang, and Hsu (2010)	✓							
Pittino, Visintin, Lenger, and Sternad (2016)				✓				
Takeuchi, Lepak, Wang, and Takeuchu (2007)								✓
Torre and Solari (2013)				✓				
Vatankhah, Javid, and Raofi (2017)								✓ Airline Industry
Wood and de Menezes (2011)					✓			
Wu and Chaturvedi (2009)								✓ Manufacturing & service industries
Total	1	-	6	9	7	2	2	13

Note. Total number of studies = 40

Indeed, different scholars have included different components of HPWS practices in their research framework. This largely depends on the theoretical basis, contexts and goals of each specific study. For example, Pfeffer (1998) identified seven key dimensions of HPWS including employment security; selective hiring of new personnel; self-managed teams and decentralization of decision making as the basic principles of organizational design; comparatively high compensation contingent on organizational performance; extensive training; reduced status distinctions and barriers; and the extensive sharing of financial and performance information throughout the organization. Alternatively, Boselie, Dietz, and Boon (2005) suggested

HPWS included self-managed teams and decentralization of decision making, selective hiring of new personnel, comparatively high compensation including performance and incentives, management planning and measurement, training, and development, more cooperative labor relations, technology, and employment security. Consistent with these studies, Huselid, Jackson and Schuler (1997) categorized HRM activities into two distinct groups: functional and strategic HRM. Functional HRM includes recruitment and selection, compensation, training, employee relations, appraisal and surveying employee attitudes, whereas strategic HRM includes teamwork, employee participation and empowerment, communications, management and executive development. Indeed, Posthuma, Campion, Masimova, and Campion (2013) conducted a review of HPWS practices from 1992 to 2011 and found that 61 HR practices are mentioned a total of 2,042 times. This reflects the amount of variation in the use of the HRM practices in the HPWS literature.

From the AMO perspective, HPWS is viewed as a set of complementary practices grouped into three bundles including (1) skill development (2) remuneration and incentives, and (3) opportunity to participate in organizational choices (Macky & Boxall, 2007). Specifically, AMO theory posits that an individual's performance is contingent upon his/her ability and motivation, and the opportunity to put their skills and motivation to use (Bailey, Berg, & Sandy, 2001; Boselie, 2010; Macky & Boxall, 2007). In terms of HPWS, Likewise, Lepak, Liao, Chung, and Harden (2006) indicated that HRM practices can be classified into ability-enhancing,

motivation-enhancing, and opportunity-enhancing practices Ability-enhancing HRM practices focus on increasing employee ability.

What is unique about the conceptualization of HPWS is the view that the different components of HRM are internally and externally aligned (Huselid, 1995). What does this mean in practice? *Internally alignment* suggests that each specific HRM activity is consistent with one another. For example, individuals are selected, trained, rewarded and evaluated based on a predefined set of firm-specific behavioral competencies. *External alignment* is achieved when these HRM strategies are well aligned with the intent of the organization. For example, a successful organization that pursues innovation is likely to have an HR system that relies on a set of competencies that places emphasis on creativity and innovativeness in employees. When designed and implemented properly, the synergies among the various HRM functions are believed to emerge. As Huselid (1995, p.635) stated, when HPWS is integrated as a interrelated bundle, it can “improve knowledge, skills and, abilities of a firm’s current and potential employees, increase their motivation, reduce shirking and enhance retention of quality employees.”

2.2.3 HPWS in the Context of SMEs

A central focus of this study is on the influence of HPWS on SMEs’ performance. Although several scholars have questioned the extent to which HPWS actually exists in small business (e.g., family business or SMEs), it has argued that small business may not have the resources to possess HPWS or that HPWS may not be even be needed in certain small organizations (Bendickson et al., 2017). However, as will be further discussed below, several scholars have indicated that successful SMEs tend to have higher levels of HPWS (Aït Razouk, 2011; Bae et al., 2003; Bendickson et al., 2017; Cardon & Stevens, 2004; Cassell et al., 2002; De Grip & Sieben, 2009; De Kok & Uhlaner, 2001; Torre & Solari, 2013; Do, Budhwar, & Patel, 2015; Gilman & Raby, 2013; Harney & Dundon, 2006; Kotey & Slade, 2005; Kroon et al., 2013; Pittino et al., 2016). Furthermore, other scholars indicated that HPWS can be a successful endeavor both in large and small organizations (Becker & Huselid, 2006)

Authors	Recruit & Select	Train & Dev	Comp	Perf Appraisal	Career & Promote	Comm	Partip in dec	Self-mgt team
Do et al (2015)		✓	✓	✓		✓		✓
Total of studies (14) that use each specific component of HPWS	9	11	9	11	1	4	4	8

Note. Recruit& Select = Recruitment & Selection, Train & Dev = Training & Development, Comp = Compensation, Perf Appraisal = Performance Appraisal, Career & Promote = Career Development & Promotion, Comm = Communication, Partip in dec = Participation in decision making, Self-mgt = Self-management team

Based on the above discussion, this present study defines HPWS as; *A bundle of HRM practices that are internally consistent (i.e., aligned within the HRM system) and externally consistent (i.e., aligned with the strategy of the organizations), which are designed to enhance employees skills, motivation and opportunity for employee development, retention and ultimately organizational success. HPWS may include specific practices such as recruitment and selection, participation in decision-making, training and development, communication, compensation, performance appraisal, career development and promotion, self-management teams.*

2.2.4 Describing Specific Components of HPWS

In this present study HPWS is conceptualized to encompass eight HRM practices including recruitment and selection, training and development, compensation, performance appraisal, self managed teams, communication, participation in decision-making, and career development and promotion. These practices are believed to appropriately capture the construct domain of HPWS in small business research. Each of the practices is discussed below.

2.2.4.1 HPWS Practices

As shown in Table 2.3, the conceptualization of HPWS in this present study comprises the following eight components:

(1) Recruiting and Selection

Recruitment and selection include practices that deal with locating and recruiting applicants and then choosing whom to hire by setting specific selection criteria based on organizational strategy and other desirable qualities. To select the best candidate for the position, the evaluation made during the selection phase is generally based on knowledge, skills, and abilities (KSAs) of the applicants. Attitudes and personality may provide additional measurements for desired characteristics. Other findings support selection methods aims to screen applicants based on general mental ability (Schmidt & Hunter, 1998) and person-job fit and person-organization fit. But firms of different size generally differ in the levels of extensiveness of this selective procedure. In particular, although it is argued that staffing is a fundamental part of HPWS that can give SMEs a competitive advantage, it may not be feasible for small business to wait until there is time to conduct more rigorous staffing procedures.

In contrast, large organizations may, for example, be able to conduct several rounds of interviews until they can screen out the most qualified candidates. Above all else, attracting the right applicants in the first place is a critical step to ensure that selection is done from the best talent pools (Rynes & Barber, 1990). Empirically, staffing is important because it can have positive outcomes such as higher profitability and greater labor productivity (Michie & Sheehan, 2005), increased levels of employee commitment (Fiorito, Bozeman, Young, & Meurs, 2007; Taylor, Levy, Boyacigiller, & Beechler, 2008), and higher levels of human capital leading to higher overall performance (Takeuchi et al., 2007).

(2) Participation in decision making

Employee participation refers to the extent to which individuals who are hierarchically unequal are actively involved in the organizational decision-making process (Locke & Schweiger, 1979; Wagner, 1994). Participation in decision making can generate significant benefits for workers such as employee involvement, employee job satisfaction, employee performance, employee attitudes, and including flexibility and autonomy (Arthur, 1994; Bowen & Ostroff, 2004; Cordery, Mueller, & Smith, 1991; Mark A Huselid et al., 1997; Lepak & Snell, 1999; Scotti, Harmon, Behson, & Messina, 2007; Scott A. Snell & Youndt, 1995).

Furthermore, it can also increase productivity by enhancing the knowledge, skills and abilities (KSAs) and motivation of employees (Gollan, 2005). For example, when employers provide autonomy to employees to make a decision, it allows them to improve their skills and obtain new abilities which lead to employees' job satisfaction (Likret, 1961). In addition, employee participation in decision making at the team level may also improve better information sharing between the employer and its employees, which directly affects the firm's overall productivity (Gollan, 2005).

(3) Training and development

Organization can provide extensive formal training (either in-house or otherwise) or rely on acquiring skills through selection and socialization. Indeed, training is important because it is directly linked to employees KSAs and a functional capacity of the organization (Truss, 2001). To be competitive in the market, organizations, large or small, must provide a way for its employees to develop new skills (Ulrich, 1997). Training is generally targeted on improving both technical (firm-specific) and soft skills such as team-working and leadership. Though training is often designed for new employees, it is equally important for experienced employees as well (Bendickson et al., 2017; Evans & Davis, 2005; Pittino et al., 2016).

(4) Communication and Information sharing

Although not a traditional HR function, open communication within the organization can serve a strategic purpose by providing opportunities for employees to express their opinions, concerns, and suggestions. This can occur through relatively simple initiatives such as explaining the newly formulated business strategy throughout the organization or formal information sharing program and providing employees with strategic business information. Open communication can also occur through access to information and/or an employee suggestion system (Bendickson et al., 2017; Evans & Davis, 2005). Because SMEs typically have fewer channels to communicate, it is not only important but is also more feasible than in larger organizations. Open communication is important because it has shown a positive relationship with organizational performance (Gibson, Porath, Benson, & Lawler III, 2007; Gittell et al., 2010). Information sharing practices can

also decrease uncertainty, clarify goals, and help connect work with organizational strategy.

(5) Compensation

Compensation serves at least two functional purposes: attracting qualified applicants and motivating existing employees. Compensation schemes may include a comparatively high level of pay, performance-contingent pay, team-based pay, profit sharing, and employee ownership (Bendickson et al., 2017; Evans & Davis, 2005; Pittino et al., 2016). Indeed, compensation has been shown to impact satisfaction, fairness, and turnover intentions of employees (Tekleab, Bartol, & Liu, 2005). Brown, Sturman, and Simmering (2003) also showed that pay-level practices and pay structures interact to affect financial performance. Additionally, pay for performance (i.e., performance-based pay) has also shown the ability to increase productivity (Cadsby, Song, & Tapon, 2007). Although SMEs may be limited in its ability to pay, they have the options of rewarding individuals through various types of ‘equity’ pay schemes. Indeed, effective compensation strategy is contingent upon specific measures of employee and organizational performance.

(6) Performance Appraisal

Performance appraisal is used to evaluate employee performance, based on objective results (e.g., sales) and subjective behaviors or competencies (e.g., customer service behaviors) (Murphy & Cleveland, 1995). Performance appraisal (PA) could be viewed as a part of the larger performance management (PM) system in which other specific procedures precede and follow PA (Aguinis, 2013). These procedures may include goal-setting (e.g., setting specific metrics and targets of performance), monitoring work progress, reviewing performance outcomes, providing constructive feedback and renewing performance measures. Thus, PA constitutes a critical part of how individual and organizational performance is measured in organizations.

Also, the result of PA is mostly always tied to some forms of rewards decisions. Thus, it is critical for the HR function to design a PA system that is viewed by employees as fair, equitable and free from politics (Murphy & Cleveland, 1995). Although annual performance reviews have been

identified as one of the seven deadly diseases (Deming, 1982) (e.g., some organizations have already moved away from it), it could be argued that PA will be here to stay.

(7) Career development and promotions

Promotions includes those practices that deal with providing opportunities and methods whereby employees can move up to higher level positions within an organization. Promotions can be used to reward good performance and define employees' career paths. Internal promotion can be viewed as a type of extrinsic reward that can motivate existing employees by providing them with opportunities to advance within the organization (Macky & Boxall, 2008). This opportunity may relate to such outcomes as higher levels of employee commitment and lower levels of turnover.

(8) Self-managed teams

Self-managed teams address the issues of power relationships and autonomy at an individual level. With self-managed teams, power is shifted down the chain of command granting many different teams authority over their decision-making. Examples of self- managed teams include employee participation programs, teams with task and decision-making authority, and extensive use of teams in general throughout the organization (Bendickson et al., 2017; Evans & Davis, 2005; Pittino et al., 2016). Teams can provide benefits in various ways. For example, Gibson et al. (2007) demonstrated that team-enabling practices significantly predicted quality. Delegation to self-managed teams not only provides empowerment for employees, but also gives employees a chance to demonstrate initiative and achieve personal growth and development (Heimovics, Herman, & Coughlin, 1993).

Table 2.3

Categories of HRM Practices in HPWS

HR Practice Category	Description	Examples
1. Recruiting and selection	Procedures used to evaluates relevant knowledge, skills, and abilities for job fit and organization fit.	<ul style="list-style-type: none"> • Selective screening / planning selection processes and staffing • Assessment of technical and interpersonal skills, attitudes, and/or personality • Applicant fit in the team and organization • Specific selection criteria based on organizational strategy

HR Practice Category	Description	Examples
		<ul style="list-style-type: none"> • Hiring selectivity or low selection ratio
2. Participation in decision making	Empowering employees via greater responsibility and access to resources	<ul style="list-style-type: none"> • Less defined tasks • Authority to make decisions • Employee involvement • Participative management • Problem-solving
3. Training and development	Formalized programs to develop knowledge skills and abilities.	<ul style="list-style-type: none"> • Training for career development • Younger workers learn from more experienced colleagues • Training for firm-specific skills • Use of training to improve performance • Training extensiveness
4. Communication and Information Sharing	Open vertical and horizontal communication channels providing access to information and opportunities to express viewpoints	<ul style="list-style-type: none"> • Explanation of business strategy • A formal information sharing program • Providing employees with strategic business information • Employees receive firm performance • Employee input and suggestion processes
5. Compensation	Rewards provide to employees based on their job duties, qualities and job performance.	<ul style="list-style-type: none"> • Profit/gain sharing employee ownership pay, competitive wage • Incentive compensation • External pay equity/ competitiveness • Pay for performance • Formal appraisal for pay
6. Performance appraisal	Measuring and improving individual and team performance by aligning individual and team performance with organizational strategies.	<ul style="list-style-type: none"> • Appraisal based on objective and subjective performance • Managing objectives tied to organizational strategies, and others. • Performance feedback • Appraisal based on strategic or team goals • Appraisal for development/potential
7. Career development and Promotion	Opportunities and methods whereby employees can move up to higher level positions within an organization	<ul style="list-style-type: none"> • Career paths and job ladders • Promotion from within • Career planning • Promotion objectively based on merit planning • Promotion opportunities
8. Self-managed teams	Redistribution of power downward by granting authority and responsibility to team structures	<ul style="list-style-type: none"> • Employee participation programs • Team with task and decision making authority • Extensive use of teams throughout the organization

Adapted from: Evans and Davis (2005) ; Bendickson et al.(2017) ; Pittino et al.(2016); Posthuma et al. (2013)

2.3 Major Theoretical Perspectives

As discussed in Chapter 1, several studies have found a positive association between HPWS both at the individual and organizational levels. Indeed,

there is an abundance of empirical evidence that testifies the mechanisms relating HPWS and organizational performance (Combs et al., 2006; Macduffie, 1995; Macky & Boxall, 2007; Messersmith & Guthrie, 2010; Ngo, Lau, & Foley, 2008; Rizov & Croucher, 2008; Rose & Kumar, 2006; Takeuchi et al., 2007; Tregaskis, Daniels, Glover, Butler, & Meyer, 2013). Based on the review of the literature, it was found that several theoretical perspectives have been employed to explain such relationships. Indeed, each theoretical piece forms a small part of a bigger picture; when complete, such a jigsaw puzzle produces a more complete view of the phenomenon. Two primary theories used in the literature are AMO theory (Appelbaum et al., 2000) and the RBV perspective (Barney, 1991).

2.3.1 Ability Motivation Opportunity theory (AMO)

Apart from being used as a theoretical basis for creating HPWS measures, AMO theory has been used to explain an organization's role in developing ability, creating motivation, and supporting opportunity of employee participation to achieve superior performance. Boxall and Purcell (2003) clearly indicated that HPWS positively affects performance via workers' ability, motivation and opportunity (AMO). In turn, these three components increase employee effectiveness and higher organization performance (Jiang et al., 2012; Savaneviciene & Stankeviciute, 2011).

According to Macky and Boxall (2007), *ability* consists of knowledge, skills, and abilities (KSAs), which are needed of employees to perform their work roles effectively. Examples of *ability-enhancing practices* aimed to increase employee ability include selective selection and comprehensive training. *Motivation-enhancing practices* aim to increase employee motivation-employee desire to perform-which can be enhanced by extrinsic or intrinsic motivators. These include practices such as contingent rewards, performance management, and internal promotion opportunities. *Opportunity-enhancing practices* focus on employee participation and empowerment. Employees receive work opportunity when they are able to utilize their abilities and skills in their work roles. Common examples include direct participation in job design and team work (Macky & Boxall, 2007). Table 2.4 illustrates the relationship between AMO and each component of HRM.

Table 2.4

The Components of HPWS based on AMO theory

AMO Theory	HPWS Activities
Ability	1. Recruitment and selection, 2. Training and development 3. Job planning 4. Job quality development 5. Problem-Solving Teams
Motivation	6. Reward system Compensation 7. Job security 8. Retention 9. Performance appraisal
Opportunity	10. Career development and promotion 11. Communication 12. Participation in decision making 13. Self management teams 14. Empowerment 15. Job design

In addition, AMO theory is a mechanism to ensure that the employee has the appropriate skills and abilities. Moreover, it can motivate the employee to engage in desired behaviors, apply discretionary behavior and resolve process exceptions. Furthermore, it can empower employees to contribute collectively in efforts toward organizational outcomes.

To illustrate, the association between HPWS and organizational innovation can be explained by the fact that employees can develop their knowledge, skills and abilities to innovate (Guest, 1997; Messersmith & Guthrie, 2010; Snell & Dean, 1992). That is, when organizations adopt HPWS, employees will have increased motivation, opportunity, and employee participation to develop new ideas that are important for organizational performance.

Empirically, Bailey et al. (2001) studied the effects of HRM practices aimed at increasing employee skills, abilities, and found their positive effects on employee performance. Another study in the health business sector has found that these three HRM components support employee participation, which in turn leads to performance improvement (Boselie, 2010).

2.3.2 Resource Based view Theory

From the RBV point of view, resources that are valuable, rare, inimitable and non-substitutable (VRIN) (Barney, 1991; Wernerfelt, 1984) form a basis for firms' survival (Pfeffer & Salancik, 1978) and sustainable growth (Barney, 1991). Through superior selection, development, compensation and sharing of information, firms that use HPWS are more likely to develop internal resources that are difficult to replicate by outside organizations (Barney, 1991). HPWS can generate these resources through selective selection of workers; improved training quality and skill development; improved commitment and motivation; and through the synergistic effects of each of these practices (Becker & Huselid, 2006). These internal resources can provide the basis for small firms to produce superior products and services, enabling them survival and growth potential (Barney, 1991). These internal resources are able to promote organizational survival and create added growth.

The HRM literature often relies on the RBV to describe the processes through which organizational performance is improved via HPWS adoption (Becker & Huselid, 2006; Delery & Doty, 1996; Lado & Wilson, 1994; Wright & McMahan, 1992). Despite its popularity in extant literature, RBV has also received criticism. An important criticism is that this perspective tends to operate at a very general level of abstraction, simply suggesting that people or 'human resources' have the potential to be a source of competitive advantage and, as a result, HR systems are important. Thus, this perspective merely infers that the link between HPWS and organizational performance is based on the value of talented employees as a source of competitive advantage.

The two theoretical perspectives have one common message: organizational performance does not flow directly from the HR practices per se but from the human talents that arise from the effective use of integrated HR practices (Barney & Wright, 1998; Delery, 1998; Lado & Wilson, 1994; Teece, Pisano, & Shuen, 1997; Way, 2002).

2.4 Linkages between HPWS and Organizational Performance

At the individual level of analysis, performance is a function of employees' ability, motivation and opportunity to make meaningful contributions and participate constructively (Appelbaum et al., 2000; Boxall & Purcell, 2003). If these determinants of performance are managed appropriately, it is likely that individuals' performance will help organizations improve their overall performance (Kehoe & Wright, 2013; Zhang & Morris, 2014). As such, talent acquisition practices (which seeks to attract those with strong educational background and professional knowledge) and HR programs aimed at developing employee skills are believed to translate to higher organizational performance Liao et al. (2009). Furthermore, better HRM practices have been found to be associated with lower employee turnover rates, higher employee satisfaction, higher employee commitment, higher labor productivity, lower injury rates and better safety performance Bendickson et al. (2017)

In explaining the relationship between HPWS and organization performance, researchers have drawn upon the Ability-Motivation-and-Opportunity theory (AMO) (Boxall & Macky, 2009) and the Resource-based View theory (RBV) (Barney, 1991). AMO theory suggests that effective HR practices can enhance employees' knowledge, skills and abilities (A), motivation (M) and the opportunities (O) to represent their capacities and thus increased organizational outcome (Boxall & Macky, 2009; Huselid, 1995). Similarly, the RBV perspective suggests that employees are a unique internal resource that is rare, valuable, difficult to imitate, irreplaceable (Barney, 1991).

2.4.1 Large firm research

A number of previous studies have examined the relationship between HPWS and organizational performance (Table 2.5). For example, Ahmad & Schroeder (2003) examined the seven HRM proposed by Pfeffer (1998) in Germany, Italy, Japan and USA. Using a survey collected from 800 employees, the finding provided support for the relationship between HRM practices and operational performance as measured by cost, quality, delivery, flexibility and organizational

commitment. Using RBV, Martín, Puig, Tena, and Llusar (2008) conducted their study on a sample of 226 firms in Spain and found that that HPWS practices contributed to firm performance by influencing the organization's human resource flexibility.

In another interesting study, Liao et al. (2009) surveyed employees from 91 banks in China and found that HPWS has a strong relationship with the individual performance and customer overall satisfaction with firm's service through an increase in employee human capital. In the study by Rose and Kumar (2006) found the association between HRM practices and organizational performance among Japanese multinationals companies. They also reported that firms with 'differentiation' strategies are more likely to have high involvement HR practices. Among the early studies on HPWS, Huselid, Jackson and Schuler (1997) conducted their study on 293 firms in the US and found a somewhat different result. Specifically, they found a positive link between strategic HRM practices (e.g., self-managed teams and participation) and firm performance, but technical HRM (e.g., selection) was not related to firm performance.

2.4.2 Small firm research

In the area of small firm research (Table 2.6), the literature reported that HRM can encompass various informal practices (Mayson & Barrett, 2006). In addition, the finding by Harney and Dundon (2006) investigated the presence of HPWS in six SMEs in Ireland reported that HRM is not the coherent set of practices typically identified in the literature but other was often informal and emergent. Furthermore, Kotey and Slade (2005) conducted a study on 371 SMEs in Australia reported that HRM practices remain quite informal Although Bacon and Hoque (2005) explained that the adoption HPWS in SMEs is likely limited to informal practices, Gray and Mabey (2005) argued that those that adopt more formal development practices are more likely to achieve high growth and well-positioned to reap the performance.

To date, relatively fewer studies have examined the relationship between the positions of HWPS practices in SMEs. Way (2002) conducted their study on 446 SMEs in the US and found that HPWS increased productivity and

lowered turnover. Similarly, the study by Cerdin and Som (2003) surveyed 28 French organizations (both large and SMEs firms) and found that SMEs' performance can be predicted by the presence of HPWS. Another study conducted by Aït Razouk (2011) investigated the use of HPWS among 275 SMEs in France using longitudinal data and found a positive influence on SMEs' performance including profitability and innovation. Furthermore, the results revealed that performance can be sustained over time. In an interesting study, which distinguished between family and non-family firms in Austria and Hungary, Pittino et al. (2016) found that in family business, the relationship between business owners and employees can substitute for the formal HPWS in terms of retaining employees.

Based on the review of the literature, both in large and small firms (as summarized in Tables 2.5 and 2.6), it is broadly hypothesized that HPWS will be positively associated with organizational performance. Specifically, the organizational performance outcome in this present research will be measured using sales, sales growth, return on investment (ROI) and employee turnover as manifest indicators. The first hypothesis is formulated as follows:

***Hypothesis 1:** HPWS will be positively related to organizational performance.*

Table 2.5

A summary of major empirical studies on the relationship between HPWS and organizational performance

Author	Country	Theory	HRM practice	Mediator/ Moderator	Method & Sample size	Outcome	Key finding
<i>1. Organizational Performance</i>							
Ahmad and Schroeder (2003)	DE IT JP US	RBV, Transaction cost theory, Human capital, Behavioral psychology	Employee security, selective hiring, compensation/incentives, extensive training, status differences, sharing information	None	<ul style="list-style-type: none"> Quantitative (Survey) Sample 800 employee in 43 plants 	Operational performance Cost, Quality, Delivery, Flexibility, Organizational commitment	The study generalizes the findings of seven HR practices, which were indicated by Pfeffer (1998). The findings provided overall support for the link between HRM practices and operational performance in the industry context.
Fu, Ma, Bosak, and Flood (2015)	CN	SHRM	Recruitment, training and development, performance management, remuneration and information sharing and participation.	Innovation performance	<ul style="list-style-type: none"> Quantitative (Survey) Sample 120 accounting firms 	Organizational Performance	Organizational ambidexterity is a powerful key for organizations to achieve high performance. Specifically, when organizations are more ambidextrous, the higher the performance organizations can be achieve.
Huselid, Jackson, and Schuler (1997)	US	Institutional Theory	Compensation, recruitment and training, employee relation, selection tests, appraisal and employee attitudes, teamwork, employee participation and empowerment, employee and manager communications, management and executive development	None	<ul style="list-style-type: none"> Quantitative (Survey) Sample 293 US firms 	Organizational performance	In this study, there is a positive relationship between SHRM and organizational performance, whereas the technical HRM effectiveness was not directly related to organizational performance.

Author	Country	Theory	HRM practice	Mediator/ Moderator	Method & Sample size	Outcome	Key finding
Lee et al.(2010)	TW	HRM	Training and development, teamwork, compensation / incentives, HR planning, performance appraisal, employee security	Business strategy	<ul style="list-style-type: none"> Quantitative (Survey) Sample 196 managers 	Organizational performance	HRM practices positively influence organizational performance and help organizational development.
Macduffie (1995)	16	RBV	Team, Training, Job rotation Contingent compensation, Extensive training Recruiting and hiring	None	<ul style="list-style-type: none"> Quantitative (Survey) Sample 62 automotive plants in 16 countries 	Operational performance	HPWS was related to increased productivity. Furthermore, HR practices in terms of innovation influence operational performance.
Martin-Tapia et al. (2009)	ES	RBV	Staffing, training, compensation, performance management, communication, participation	Environment uncertainty	<ul style="list-style-type: none"> Quantitative (Survey) Sample 1,556 employees and 414 CEOs 	Organizational performance	A positive impact between HPWS and export performance has been found in this study. The adoption of HPWS is more likely to enhance international sales efforts. The skills, knowledge, motivation, creativity, and opportunities have been provided to organizational members.
Takeuchi et al. (2007)	JP	RBV	Empowerment, job design, Selection, training and development, performance appraisal, incentives system, compensation	Social exchange	<ul style="list-style-type: none"> Quantitative (Survey) 324 managers from 76 organizations. 	Organizational Performance	HPWS was found to be positively linked with the level of collective human capital in an organization, with the degree of social exchange theory, in turn, associated with relative enhancement of organizational performance.
Zhang and Morris (2014)	DE IT JP	SET	Recruitment, training, compensation, employee	None	<ul style="list-style-type: none"> Quantitative (Survey) Samples 	Organizational performance	HPWS and employee performance was strongly correlated with organizational performance, and has a critical impact

Author	Country	Theory	HRM practice	Mediator/ Moderator	Method & Sample size	Outcome	Key finding
	US		involvement, job analysis, job description, performance appraisal, compensation, promotion and communication		168 employees		on employee performance.
2. Financial Performance							
Delery and Doty (1996)	US	Universalistic Contingency Configuration	Internal career opportunities, Training appraisal, Profit sharing, Participation, Job description, Job security	Strategic factors	<ul style="list-style-type: none"> Quantitative (Survey) Sample 1,050 banking 	Financial performance (ROA, ROE).	HPWS has a positive effect on organizational performance.
Jiang, Lepak, Hu, and Baer (2012)	US	AMO	Career opportunities, Empowerment, Selective staffing Rewards, Job security, Teamwork Training	Human capital, Employee motivation, Voluntary turn over, Operational outcome	<ul style="list-style-type: none"> Meta analysis Sample 120 organizations from 31,463 organizations 	Financial performance	Investment in HRM practices in terms of ability, motivation, and opportunity enhancing practices are associated with increased financial outcome. Ability - enhancing practices are more positively associated with human capital and less positively related to employee motivation than motivation-enhancing practices and opportunity-enhancing practices.
3. Turnover							
Ang, Bartram, McNeil, Leggat, and Stanton	AU	SET	Recruitment and selection, Performance management, Equal employment opportunity, cultural	Job satisfaction, employee engagement	<ul style="list-style-type: none"> Quantitative (Survey) Sample 193 employees and 58 managers 	Turnover	Employees who participate in HPWS compliance feel satisfied with their job role and commitment, which, in turn, leads to a decrease of intention to quit the job.

Author	Country	Theory	HRM practice	Mediator/ Moderator	Method & Sample size	Outcome	Key finding
(2013)			diversity, training and development, and participation in decision making				
Pao-Long and Wei-Ling (2002)	TW	HRM	Training and development, Teamwork, Benefits, Human resource planning, Performance appraisal	Competitive strategy	<ul style="list-style-type: none"> Quantitative (Survey) Sample 197 hi-tech firms 	Turnover.	HRM practices have significant effect on employee productivity. Meanwhile, HRM practices in terms of benefits and HR planning are negatively associated with employee turnover. Competitive strategies have been found to moderate the link between HRM practices and organizational performance.
Sun, Aryee, and Law (2007)	CN	SET	HPWP	Mediator = Service oriented OCB Moderator= Labour market, condition, Business strategy	<ul style="list-style-type: none"> Quantitative (Survey) Sample HR managers in 86 hotels 	Turnover rate Productivity	HRM practices have significant effect on OCB. Meanwhile OCB reduce turnover.
4. Job satisfaction							
Hassan, Nawaz, Abbas, and Saji (2013)	PK	SET	Employee empowerment, Appraisal system, Employee training	Job satisfaction affective commitment work pressure.	<ul style="list-style-type: none"> Quantitative (Survey) Sample 400 employees in banking sector 	Job satisfaction.	Positive relations among all variables have been found in this study. The linkage between independent and dependent variables is partially mediated via employee satisfaction.
Heffernan and Dundon	IR	Signaling theory, AMO	28 practices Employee resourcing, training and	Job satisfaction Affective	<ul style="list-style-type: none"> Quantitative (Survey) Sample 	Employee well-being in terms of work-	HPWS may increase employee well-being in terms of work- intensification experiences. The results identify to top

Author	Country	Theory	HRM practice	Mediator/ Moderator	Method & Sample size	Outcome	Key finding
(2016)			development, performance management and remuneration, employee involvement and communications	Commitment Job pressure	1700 employees from 85 offices	intensification experiences.	management that the stress' HPWS relationship is associated with are less of a concern to well-being and satisfaction, and low employee involvement.
Zhang, Zhu, Dowling, and Bartram (2013)	CN	RBV	Recruitment, training, compensation, employee participation and job security	None	<ul style="list-style-type: none"> Quantitative (survey) Sample 207 employees 	Job satisfaction	The findings showed that HPWS has a significant effect on job satisfaction
5. Other outcome variables							
Aryee, Walumbwala, Seidu, and Otaye (2016)	GH	Theory of performance	Selective staffing, Compensation system, Service quality, Participation in decision making, Service discretion	Service performance Firm-level market performance	<ul style="list-style-type: none"> Quantitative (Survey) Sample 353 employees 	Service quality	In this study, HPWS was concerned with overall human capital and the instruction of service, which is related to the quality of service.
Beltrán-Martín et al. (2008)	ES	RBV	Selective staffing, comprehensive training, Developmental performance, Equitable reward systems, Performance based pay	HR flexibility	<ul style="list-style-type: none"> Quantitative (Survey) Sample 226 employees in 427 Spanish firms 	Human resource (HR) flexibility	HPWS practices are positively related to the organizational performance and influence HR flexibility.
Braekkan (2012)	US	SET	21 practices including training programs, compensation, benefits	Psychological contract violations Relational	<ul style="list-style-type: none"> Quantitative (Survey) Sample 239 employees 	Psychological contract violations.	In this study, investments in HPWS practices is more likely less related to the perception of psychological contract violations in organizations.

Author	Country	Theory	HRM practice	Mediator/ Moderator	Method & Sample size	Outcome	Key finding
Liao et al. (2009)	CN	Motivation theory SDT SET Human capital	Training, information sharing, self-managed teams and participation, compensation, job design, performance appraisal Internal service Service discretion	Human capital POS Psychological empowerment	<ul style="list-style-type: none"> Quantitative (Survey) Sample 830 managers and 1,772 employees from 91 bank branches. 	Employee individual service performance	This study illustrated the relationship between the top management and employee perspectives on HPWS. This study showed that individual performance maintains a significant performance criterion for management and psychology research to evaluate the efficacy of HPWS. Employee perspective of HPWS was positively associated to individual service performance via the mediation role of employee human capital and POS and was positively related to individual KIS performance via the mediation role of employee human capital and psychological empowerment. The knowledge intensive service (KIS) performance was strongly connected to overall customer satisfaction in firm.

Total of studies (20)

Note: AU = Australia, CN= China, DE= Germany, ES = Spain, GH, Ghana, IR= Ireland, IT = Italy, JP = Japan, PK= Pakistan, TW= Taiwan, US= United States

Table 2.6

A summary of studies on the relationship between HPWS and organizational performance in the context of SMEs

Authors	Country	Theory	HRM practice	Mediator/ Moderator	Method & Sample size	Outcome	Key finding
1. Organizational Performance							
Ait Razouk (2011)	FR	SHRM, RBV, Configuration approach	Appraisal, participation, information, compensation, communication	None	<ul style="list-style-type: none"> Quantitative Sample 275 SMEs and 2978 French business units 	Organizational performance Profitability, Innovation, Social climate	HPWS is positively connected to profitability, innovation, and social climate. The study results showed that the organization which used HPWS are maintained and retain excellent both current and long term performance.
Bae et al. (2003)	KR TW SG TH	SHRM	Jobs with enriched designs, team-based work organization, employee autonomy	None	<ul style="list-style-type: none"> Quantitative Survey Sample 680 companies of MNC and Locally owned firms in four countries 	Organizational performance	HPWS adoption in locally owned businesses has a typically higher influence on firm performance than when utilized by multinational corporations (MNC) and their subsidiaries.
Cassell et al. (2002)	UK	HRM	Selection, Appraisals, Reward, Development, Strategy	None	<ul style="list-style-type: none"> Mixed methods In depth face to face interviews (Senior manager in 22 SMEs) Sample 100 senior managers in SMEs 	Organizational performance	The study results indicated that there is variety among SMEs in association to their implementation of HR practices. The study also showed the importance of criteria that involved in the adoption of HRM practices.
Chadwick, Way, Kerr, and Thacker	CA	Contingency theory	Culture management Industry munificence Industry capital intensity Differentiation strategy	Mediator = labor productivity	<ul style="list-style-type: none"> Quantitative Sample SMEs in variety of 	Organizational performance	The extent and nature of high-investment HR systems on objective labor productivity is dependent on the internal and external boundary conditions of

Authors	Country	Theory	HRM practice	Mediator/ Moderator	Method & Sample size	Outcome	Key finding
(2013)			Firm capital intensity Industry dynamism Industry growth	Moderator = Boundary conditions	industry sectors		small firms.
De Grip and Sieben (2009)	NL	HR systems	Incentive pay, recruitment and selection, teamwork, employment security, flexible job assignment, skills training, communication	None	<ul style="list-style-type: none"> Quantitative Sample 1319 pharmacies 	Organizational performance	The study indicated that the lack of the funds for developing and executing HR practices in small business, means that HPWS are unlikely to increase financial outcome within the organization.
De Kok and Uhlener (2001)	NL	RBV, Institutional, Transaction cost Economics, Behavioral Theory	Selection, Performance appraisals, compensation, training and development, job descriptions, team building	None	<ul style="list-style-type: none"> Mixed methods Semi- structured interviews Sample 125 employees in 16 small firms 	Organizational performance	The study indicated that organization with a large firm associate are more likely to show employer-based training programs including greater practices in terms of performance appraisal and employer-based training. It was also found less connected between a more growth-oriented strategy and the formality of two such practices.
Do et al. (2015)	VN	SDT Human Capital	Information Sharing, Performance Appraisals, Training, Innovation-led Strategy, Pay, Job Design, Service Discretion, Teamwork, Interdepartmental Service, Innovation-led HR Policy	Employee creativity & Collective human capital Moderator = Environment uncertainly	<ul style="list-style-type: none"> Mixed methods Sample 109 managers 526 employees 155 supervisors in 56 service firms 	Organizational Performance	The study showed the climates for initiative and psychological mediated the relationship between the HPWS adoption and employee creativity at individual level. At the same time, employee creativity at individual level and collective human capital at branch level mediated the relationship between HPWS adoption and branch-level innovation. Furthermore, environmental uncertainty moderated the relationship between branch-level innovation and branch market performance.

Authors	Country	Theory	HRM practice	Mediator/ Moderator	Method & Sample size	Outcome	Key finding
Gilman and Raby (2013)	FR UK	Institutional	Work organization, Communication arrangement, Training and skills development, Employment practices, Pay and reward practices	None	<ul style="list-style-type: none"> Quantitative Sample 211 employees in 2,000 SMEs 	Quality and productivity	The study conducted in France has been found that, SMEs have a significant effect on an orientation toward quality and productivity-associated practice and, focus on employee commitment and participation in workplace innovations. The study explained that the main approach adopted in SMEs similar HPWS practices.
Harney and Dundon (2006)	IE	Open Systems, Institutional, Resource Dependency	Development management, Performance appraisal, Team working	Managerial action,	<ul style="list-style-type: none"> Qualitative Case stud Sample 19 people owner-managers / HR managers 	Organizational performance	HRM rather was often informal in SMEs. In addition, resource decency and customers are positively influenced by firms characteristics in terms of ownership, unions, labor, and product market.
Kotey and Slade (2005)	AU	RBV	Recruitment and selection, training, Performance appraisal, development, HR policies and records	None	<ul style="list-style-type: none"> Sample 199 SMEs and 1330 employees 		Different sizes of firms related to the use of HRM practices. The study showed that in small firms, the diversity of HRM practices (i.e. training) were less formal for managers than for operatives.
Kroon et al. (2013)	NL	AMO, Resource-poverty perspective	Management, Staffing, Participation, in decision-making, Performance appraisal, teamwork, Compensation	None	<ul style="list-style-type: none"> Quantitative Sample 211 employees in 45 SMEs 		This study reported that the SMEs owners have high awareness in the value of human resource management, employees are more likely to perceive HPWS.

Authors	Country	Theory	HRM practice	Mediator/ Moderator	Method & Sample size	Outcome	Key finding
Rauch and Hatak (2016)		Human capital	Selection, Job description, Rewards, Performance appraisal, Training, Commitment, Empowerment, Communication,	None	<ul style="list-style-type: none"> • Meta analysis • Sample • 56 independent studies 	Organizational performance	The findings showed that HR-enhancing practices are associated with organizational performance. At the same time, HR-enhancing practices were more relevant for SME operating in high-tech sectors. Importantly, this study indicated that HR-enhancing practices are significant in the SME context.
Torre and Solari (2013)	IT	Organizational culture	Work organization, Coordination of work, Personal management policies	None	<ul style="list-style-type: none"> • Mixed methods Survey and In-depth interview from 8 SMEs • Sample 984 SMEs 	Organizational performance	The findings showed that decision-making power on work organization is an advantage of the owner/top management, while mean HRM practices play significant role in proposal-making stage. Change in smaller firms is managed self determination through the owner/top management, as the same time employee involvement obtains in larger firms. Approaches for change focus on identified occupational groups.
Zheng, O'Neill, and Morrison (2009)	CN		Market selection, Performance-based payment, Social benefits, Performance evaluation, training and development, decision making, Role of trade union	Commitment Congruence, Competency Cost effectiveness as reflected in a low staff turnover	<ul style="list-style-type: none"> • Mixed methods (Semi-structured interviews) • Sample 74 SMEs • Mail survey 300 managers from SMEs • 80 managers 	Organizational performance Sales, Market share, Growth potential	The use of HRM practices improves HRM outcomes which in turn lead to improved firm performance. The study showed that firms utilized HPWS are more likely to be closed with HR and organizational performance. Furthermore, the characteristic of SMEs (i.e. ownership, age, size firms) influence motivation, capacity, and ability of firms.
Zhu et al. (2018)	CN	SET	HPWS as a single dimension concept	Mediator = Entrepreneurial orientation /	<ul style="list-style-type: none"> • Quantitative • Sample 134 firms in manufacturing 	Organizational performance	The relationship between HPWS and corporate performance is more positive when organizational learning is stronger. Moreover, Entrepreneurial orientation

Authors	Country	Theory	HRM practice	Mediator/ Moderator	Method & Sample size	Outcome	Key finding
				Moderator = Organizational learning	and service industries		partially mediates the relationship between HPWS and organizational performance
2. Financial Performance							
Madison, Daspit, Turner, and Kellermans (2018)	US	Equity theory	Selective, Compensation Performance evaluation, Employee participation	Moderator = Bifurcated monitoring	<ul style="list-style-type: none"> Quantitative Sample 123 CEOs 	ROE ROA Profit margin	The study was introduced a unique problem into the family firm: the perception of organizational injustice. The success of HRM professional is contingent upon how family and nonfamily employees are treated within the firm.
3. HR outcomes							
Pittino et al. (2016)	AT HU	SET, Motivation Theory	Selective, staffing, Incentive training, Career Development, Extensive compensation, Performance appraisals, Employee participation	None	<ul style="list-style-type: none"> Quantitative Sample 1649 managers (917 in Austria, 732 in Hungary) 	Employee retention,	This study investigated the influent of the adoption of HPWS (i.e. the retention of talent employees) in family and non family firms. The finding showed that the mechanisms emerging from the family social capital play role as formal HR practices pointed at fostering employee commitment.
Rauch, Frese, and Utsch (2005)	DE	RBV Human capital	Training & development, Decision making, Personal initiative, Goal communication	Mediator = HR development & utilization Moderator = Human capital	<ul style="list-style-type: none"> Mixed - methods (Questionnaire and interview) Sample 201 owners (time 1) and 119SMEs (time 2) 	Employment growth	The study indicated that HR is significant variables predicting the growth of small firms. Employee HR development and utilization influence employment growth of firms. Furthermore, the finding also showed that when the human capital of employees was high, HR development and utilization was most effective.
Schmidt, Pohler, and Willness	CA & US	SET	HPWS 15 items	Mediator = Fairness Moderator =	<ul style="list-style-type: none"> Quantitative Sample 309 	Turnover intentions OCB Human capital	The study reported that HPWS can affect organization performance and that overall level of HR investments also impacts performance over above

Authors	Country	Theory	HRM practice	Mediator/ Moderator	Method & Sample size	Outcome	Key finding
(2018)				HPWS received by employee	participants from 354 firms	Quit Rate	approach differentiation. Meanwhile, HR differentiation has a negative effect on employees' job attitudes.
Wu, Hoque, Bacon, & Bou Llusar, (2015)	UK.	Congruence theory	17 HPWS Recruitment, Induction, off the job training, Internal labour market, Performance-based pay, Performance appraisal, team working, Team briefing, Consultation committee, employee attitude survey, quality circles, functional flexibility, benefits package, flexible working, opportunities practices, grievance procedures, Job security	None	<ul style="list-style-type: none"> Quantitative Sample 1564 work place (1010 large enterprises, 185 medium enterprises, and 369 small enterprises) 	Absence rate Labour turnover, Productivity, Financial performance	In the study, there was no association between HPWS and organizational performance in medium-sized firms. On the one hand, it lyhas also found positive relationship between HPWS performance in large firms ar association between HPWS and productivity in small firms

Total of studies (20)

Note: AT= Austria, AU = Australia, CN= China, DE= Germany, FR= France, HU= Hungary, IT = Italy, JP = Japan, NA= Netherlands, SQ= Singapore, TH= Thailand, TW= Taiwan, US= United States, UK= United Kingdom, VN= Vietnam

2.5 Proposed Mediating Mechanisms

Building upon the views discussed above, the present study further argues that HPWS is effective to the extent that it helps to positively affect employees' feelings and attitudes and inspire them to contribute to important organizational outcomes. The current research seeks to contribute to this body of knowledge by investigating the intervening mechanisms linking HPWS to organizational performance. In developing theory regarding the mediating processes through which HPWS influences firm performance, the researcher has adopted at least two theoretical perspectives to examine the relationship between HPWSs and organizational performance.

Based on a review of the literature, the present study has integrated social exchange theory (SET) (Blau, 1964) and self-determination theory (SDT) (Deci & Ryan, 1975) to underpin the linkage between HPWS and the performance among SMEs. It is believed that in contexts involving smaller organizations, these two mechanisms will play a strong mediating role. In so doing, the present study proposes that perceived organization support (POS) (Eisenberger et al., 1986) is an important psychological process underlying the social exchange between the employees and organizations. Furthermore, empowerment (Spreitzer, 1995) is proposed as a mediating variable that captures the motivation-based notions in SDT. Although this present study is not the first to propose these mediating mechanisms, few studies have examined them together and little is known about their differential mediating effects.

2.5.1 Social Exchange Theory (SET)

SET is one of the most widely used and cited theoretical perspectives in the field of management (Cropanzano & Mitchell, 2005; Snape & Redman, 2010). Part of the reason is that this theory forms such an integral part of organizational life. The basic tenet behind this theory is that the relationship between two or more parties is based on the norms of reciprocity, which indicates that when one part is treated well, the other party will likely feel obligated to return the favor or gratitude (Blau, 1964)

Applying this concept to the relationships among organizational members, it is posited that when organizations treat the employees well and care about their well-being, it is likely that employees will feel the need to return this kindness with gratitude, loyalty and citizenship behaviors (i.e., helping behaviors). The basics of exchange between organizations and employees occur in form of economics exchange (e.g., I work for you and you pay for my contributions). In contrast, relationships based on a social exchange, which occurs over time, is said to be based on trust and good will. Such a deep bond and relationship enable employees to have a positive attitude toward the organization and to influence better behavior in the workplace (Cropanzano & Mitchell, 2005; Snape & Redman, 2010).

Additionally, Allen et al (2003) pointed out that when organizations provide employees with an opportunity to make a contribution to the decision-making process, they will perceive that the organizations emphasize the importance of employee contributions. In addition, employees will perceive an increase of fairness levels (Bowen & Ostroff, 2004). Overall, effective HRM practices can make employees feel valued and appreciated and that the organization is concerned about their well-being (Eisenberger et al., 1986).

In summary, SET is a powerful theoretical lens which can be used to explain the trusting relationships between employee and organization. As will be discussed further, such a social exchange bond can serve as an important foundation for workplace attitudes and ultimately overall organization performance.

2.5.2 Self-Determination Theory (SDT)

SDT is another powerful lens through which to examine how HPWS affects the improvement in organizational performance. This perspective focuses on employees' motivation (Deci & Ryan, 1975)

From the perspective of SDT (Ryan & Deci, 2000) individuals' motivation can be distinguished in terms of a continuum ranging from controlled (i.e., extrinsic) motivation to purely autonomous (i.e., self-determined or intrinsic) motivation. Controlled motivation originates from factors external to the self such as rewards and punishments (external regulation), internal pressures such as to maintain or enhance one's self worth, or to avoid guilt or shame (introjected regulation), and

values that are regarded as personally important (identified regulation), or fully endorsed and assimilated into the self (integrated regulation). In contrast, intrinsic motivation is the most autonomous form of motivation, which occurs when a person experiences a task or an activity as truly enjoyable and satisfying such that external rewards are not needed.

In order to move from external regulation to intrinsic motivation, it is important for the three psychological needs to be satisfied: need for competence (enhancement of employees' skills and abilities), need for autonomy (psychological freedom) and need for relatedness (meaningful connections with others). Specifically, individuals want to feel that they are 'able' to perform their roles effectively; that they can independently exercise their own judgment in their work; that they are also cared for, listened to and valued by significant others.

Following this logic which will be discussed below, SDT can be used to explain that individual psychological needs and motivation can be enhanced and cultivated through HPWS. Specifically, the ideas underlying SDT is consistent with the rationale behind 'empowerment', which is founded upon four basic cognitions: meaning, competence, autonomy or self-determination, and impact (Spreitzer, 1995): However, to date, despite its recognized role of SDT, the theory seems to be absent from the HPWS literature García-Chas, Neira-Fontela, and Castro-Casal (2014).

2.5.3 The Mediating Role of Perceived Organizational Support (POS)

As discussed earlier, SET illustrates that the organization's long-term investment on developing its talent pools will go a long way in fostering positive employer-employee relationship. The present study proposes that HPWS will enable employees to develop a positive attitude towards the organizations. Specifically, the focus is on perceived organization support (POS), which refers to the employees' perception about how the organization values their contribution and concerns about their well-being (Eisenberger et al., 1986).

POS can have a positive impact on employees' attitudes and behaviors mainly because it creates a sense of obligation within the individuals to

repay the organization (Eisenberg, Fasolo, & LaMastro, 1990; Eisenberger et al., 1986). Moreover, POS has been found to have a major impact on employee well-being and outcome. This is in line with SET which states that employees extend their effort and loyalties in return for the rewards given to them by the organization. SET explains that when employees experience enhanced POS, they feel the obligation to increase their commitment to the organization, but also to show behaviors desired by the organization.

Why does HPWS lead to higher levels of POS? Specifically, HPWS is focused on providing rewards that are based on merits and also on investing in opportunities for career development and contribution to decision making for employees, which in turn will allow the employees to perceive a positive relationship with their organizations. Training is another approach to invest in employee development and this approach leads to deeper POS Wayne, Shore, and Liden (1997). Moreover, stability can help employees feel that their organization offers opportunities for long-term job security and career progression.

Several previous studies in this area illustrate the positive relationship between HPWS and POS (i.e. Allen et al., 2003; Liao et al., 2009; Snape & Redman, 2012; Zhang & Jiang, 2010). An early study by Rhoades and Eisenberger (2002) found a positive effect of HRM systems on POS. Wayne et al. (1997) further reported that training and development and promotion affect both the attitudes and the behaviors of the employee through POS which acted as a mediator. In another study, Allen et al. (2003) pointed out that HRM has a positive link with POS, which in turn affects employee turnover rates. Similarly, Nasurdin et al. (2008) showed that POS as a significant mediator between HRM (consisting of performance appraisal, training, and career development) and organization engagement. In addition, the study by Liao et al. (2009) found that HPWS comprising training, information sharing, participation, compensation, job design, and performance appraisal can have an effect on POS at an individual level. At the organizational level, Gavino et al. (2012) found that performance management process and promotional opportunity have a positive effect on POS, in turn leading to better service quality. Furthermore, Xiao and Björkman (2006) reported that HPWS tends to determine an exchange relationship between an organization and employees which, in turn, lead to higher levels of POS via skill

training, career planning skill development.

In summary, results of this literature review offer a deeper understanding of the relationship between HPWS and POS by showing that HPWS has a constructive influence on POS and other positive attitudes (Allen et al., 2003; Arefin et al., 2015; Baran, Shanock, & Miller, 2012; Gavino et al., 2012; Guest et al., 2012; Kuvaas, 2008; Liao et al., 2009; Nasurdin et al., 2008; Rhoades & Eisenberger, 2002; Riggle, Edmondson, & Hansen, 2009; Tremblay, Cloutier, Simard, Chênevert, & Vandenberghe, 2010; Wayne et al., 1997). Therefore, the adoption of HPWSs in an organization will likely have a influence on POS and subsequently organizational performance. Consequently, the present study posits the following hypothesis:

***Hypothesis 2:** Perceived organizational support (POS) will mediate the relationship between HPWS and organizational performance.*

2.5.4 The Mediating Role of Psychological Empowerment

As an alternative intervening mechanism linking HPWS and firms' performance, it is further proposed that individual psychological needs and motivation captured in the concept of 'psychological empowerment' can be enhanced and cultivated through HPWS. If properly designed and implemented, HPWS is likely to create a supportive work environment that is beneficial for increasing employees' perceptions of competence, autonomy and relatedness as indicated by SDT. Perceptions of such favorable climates will allow employees to become more intrinsically motivated to perform their work roles more effectively.

Psychological empowerment refers to the process of fostering and creating intrinsic motivation in the employee or individual whose influence on work activity in the organization leads to the employees' belief in their potential to do a success job (Spreitzer, 1995). According to Walton (1985), psychological empowerment is represented as being more commitment-oriented towards the organization. It motivates workers to have trust in their work roles which have an impact on the organization. The concept of psychological empowerment stresses the move away from 'employer control' to 'employee commitment' (Walton, 1985). Therefore, psychological empowerment is an instrument used to help employees to

concern themselves about the requirements of their work, to develop meaning for the work they are assigned and to improve their levels of ability (Laschinger, Finegan, Shamian, & Wilk, 2004).

According to Spreitzer (1995) psychological empowerment is similar to enhancing employee competency, promoting the psychological empowerment of mental facilities and developing individual feeling of trust in efficiency in order to work well together to achieve organizational goals. The process of the psychological empowerment has been focused on the work related roles of individuals through four cognitions: meaning, competence, autonomy or self-determination, and impact (Spreitzer, 1995): *Meaning* refers to the value of an individual's tasks or goals and the work role which is related to beliefs, values, attitudes and behaviors which make employees feel that their work is meaningful and more important. *Competence* can be thought of as self-efficacy whereby the employee trusts that he or she has the confidence to undertake their work role. *Impact* refers to the extent to which an individual perceives that he or she has some effect on their immediate work place. *Autonomy* refers to skill and competency to do the work by themselves (Avolio, Gardner, Walumbwa, Luthans, & May, 2004).

The adoption of HPWS helps enhance employee psychological empowerment in the workplace. This is because HPWS provides opportunities for employees to participate in their work role with greater skill and passion and this leads to a feeling of employee psychological empowerment (i.e., that their work is meaningful and that they can make a positive impact). Training opportunities can enhance employees' sense of self-efficacy by way of providing them with necessary job skills. Self-managed teams also likely foster feelings that one is independent in his/her work roles.

Empirically, Bonias, Bartram, Leggat, and Stanton (2010) demonstrated that psychological empowerment fully mediated the relationship between HPWS and the perception of the quality of patient care among 541 hospital employees in the Australian health service sector. The results showed that three components of psychological empowerment, which are autonomy, competence and meaningfulness, mediated the link between HPWS and the perception of quality of

care; but the impact was not significant on this relationship further emphasizing the benefits of the adoption of HPWS at the organization level.

Moreover, Scotti, Harmon, Behson, and Messina (2007) investigated how HPWS influence customer perceptions of service quality and patient satisfaction in Veterans Health Administration ambulatory care centers in the United States. They found that HPWS is linked to employee perceptions of their ability to deliver high-quality customer service and this is subsequently linked to customer perceptions of high-quality service. Therefore, perceived service quality is linked with customer satisfaction.

In another study, Aryee et al. (2012) attempted to link HPWS and performance in 37 branches of 2 banking institutions in Ghana by testing a multilevel model underlying the psychological empowerment process. They found that HPWS and psychological empowerment climate partially mediated the impact on firm-level HPWS on firm-level psychological empowerment.

A more recent meta-analysis by Chamberlin, Newton, and LePine (2018) which consist is 151 independent samples involving 53,200 employees confirmed the above findings by reported that psychological empowerment acted as a meditating mechanism between HPWS and their virtuous effects. Overall, based on previous research linking HPWS, psychological empowerment and performance outcomes, the present study hypothesizes that:

***Hypothesis 3:** Psychological empowerment will mediate the relationship between HPWS and organizational performance.*

2.6 The Antecedent Role of CEOs' Leadership

This present study hypothesizes further that leadership styles of SME owners' will have an independent positive effect on organizational performance and that the adoption of HPWS will be uniquely predicted by leadership styles. In developing the hypotheses, the study applies Upper Echelon theory (UET) (Hambrick, 2007; Hambrick & Mason, 1984) and the HRM Four Roles Model (Ulrich, 1997) to shed light on this phenomenon.

2.6.1 CEO's relationship-focused leadership behavior

Leadership of top executives is a major factor that can have an impact on organizational policy. This is consistent with strategic management theory according to which leaders set business goals and objectives to effectively guide organizational achievement. It has generally been acknowledged that CEOs play a vital role in promoting organizational performance (Hambrick, 2007; Hambrick & Finkelstein, 1987; Hambrick & Mason, 1984). Given a close proximity between leaders and their employees in small firms, it is likely that leadership will play an even stronger role in determining SMEs' success (Schwenk & Shrader, 1993).

The leadership literature has largely been focused on two primary types of leadership behaviors, namely task-oriented leadership behavior and relationship-focused or people-oriented leadership behavior (Bass, 1990; Yukl, 2012; Yukl, Gordon, & Taber, 2002). According to Stogdill (1950), his early studies of task-oriented and people-oriented leadership behaviors were conducted in 1945 by researchers at Ohio State University and University of Michigan. Task-oriented leadership behaviors refer to forming the roles of followers or subordinates, providing guidance and direction, using power, and behaving in ways to motivate and build an effective team to achieve organizational goals and objectives. Relationship-oriented leadership behaviors include showing concern and care for employees, caring about employees' welfare, concerning employees' and their families well-being.

This present study emphasizes the importance of the CEO's relationship-focused leadership behaviors rather than task-oriented leadership behaviors because it has been shown that relational capital plays a stronger role than formal practices in determining employee loyalty among family-owned firms (Pittino et al., 2016). It is expected that employees in small firms will expect their leaders to display benevolence, generosity, and concern for their welfare. Consistent with past studies (e.g., Carmeli, Ben-Hador, Waldman, & Rupp, 2009; Carmeli, Tishler, & Edmondson, 2012) CEO's relationship-focused leadership behaviors involving the extent to which leaders foster collaboration, trust, and open communication among employees, which in turn created a healthy workplace environment. More specifically, previous research showed that CEO relationship-focused leadership behaviors as a key antecedent for POS and have a positive effect

on organizational performance through HPWS (Kim, Eisenberger, & Baik, 2017; Kurtessis et al., 2017). To date, few studies have examined the relationship between a CEOs' leadership styles and firm performance, let alone their influence on the adoption of HPWS.

The present study will use a multi-dimensional scale of CEOs' relationship-focused leadership behaviors as developed by Wang et al. (2011) to study the effectiveness of CEOs' leadership on organizational performance. Specifically, the dimensions of relationship-focused leadership behaviors include relating and communicating, showing benevolence and being authoritative. Previous research have shown that CEOs' relationship-focused leadership behaviors are considered as motivators (Hart & Quinn, 1993) that can motivate and encourage employees to perform well, and this ultimately results in positive attitudes of employees and superior performance (Wang et al., 2011; Xi et al., 2016).

How can CEOs' leadership styles impact SMEs' performance and the adoption of HPWS? The present study addresses this question by drawing on UET (Hambrick, 2007; Hambrick & Mason, 1984), which provides a basis for understanding the influence and importance of top management. UET generally posits that organizational performance is often associated with the (Dwivedi & Lal, 2007) human capital of top management, derived from their demographic profile i.e. sex, age, educational background, and experience. In the first stage of a firm's life cycle, managers or owners play a crucial role in implementing organizational policies and strategies. Several arguments support the positive relationship between top managers' human capital and performance. First, formal education, exposure to and experience in other organizations can determine the unique set of skills or knowledge base that owners/managers bring to an organization (Boeker, 1997). Second, highly educated owners/managers seem to be more receptive to new ideas (Hambrick & Mason, 1984). Finally, prior experience and background knowledge play a prominent role in successful opportunity recognition (Shane, 2000). Additionally, the cognitive ability of CEOs (i.e. scrutinizing ideas, interpreting information) can exert influence on the decision-making process (Hambrick, 2007; Hambrick & Mason, 1984). Also, Dwivedi and Lal (2007) reported that other socio-economic factors, including age, education, occupation and income except for gender, were significant predictors of

organizational performance. Education, to some extent, serves as an indicator of a person's value systems and cognitive preferences (Hambrick & Mason, 1984). In addition, Herrmann and Datta (2005) pointed out that younger bosses have an open mind and are more able to adjust to new surroundings than do their older bosses. Hambrick (2007) and Geletkanycz, and Sanders (2004) indicated that the demographic characteristics of top management are valid proxies of executives' cognitive processes for developing more accurate prediction of strategic behaviors. This, in turn, contributes to the necessary skills needed to undertake complicated tasks in the organization.

Additionally, the present study draws from the Ulrich's HRM Four-Roles Model (Ulrich, 1997) to form the hypothesis. This model was developed by Dave Ulrich, (1997) in "Human Resource Champions: The Next Agenda for Adding Value and Delivery Results". The model suggests that good HR managers and professionals should possess at least four competencies to be effective in their roles: business partner, change agent, administrative expert and employee champion. In a strategic partner role, HR professionals need to participate in the process of defining organizational objectives, to align HR strategy with business objectives and to monitor the alignment of HR strategy with changing business objectives. In the change agent role, HR professionals need to focus on developing mechanisms for the shaping of organizational culture, processes and systems to cope with business transformations. As an administrative expert, HR people can increase organizational efficiency through effective HR processes. Finally, being an employee champion means that HR professionals need to identify and address the needs of employees to maintain the level of their commitment to the organization. Research indicates that the four roles contribute to the process of transformation and enhance the organization's ability (Conner & Ulrich, 1996; Ulrich, 1997).

A central focus of this present research is on SME owners/managers being an employee champion, which is closely related to the relations-based leadership style. According to Ulrich, (1997), being an employee advocate means that they know the concerns of their employees and uphold their concerns by encouraging various modes of communication such as employee surveys, team meetings, information sharing and so forth. As an employee advocate, SME

owners can play an integral role in organizational success by creating an organization an environment in which people can be motivated and happy. This also means establishing the organizational climate in which people have the competency, concern, and commitment to serve customers well. With ‘their people’ in mind, business owners with strong relations-based leadership style will provide employee with developmental opportunities for growth, employee assistance programs, and organization development interventions, due process approaches to receiving employee complaints as well as regularly scheduled communication opportunities.

In practice, SME owners not only run the operational portion of their business but also contribute the HR side. According to Becker and Huselid (2006), HRM systems are often implemented by top management. It is thus assumed that when they take on the role of an employee champion, this could lead to more adoptions of HRM practices that will subsequently send signals to employees that they are of value to their organizations. Indeed, a study by Kroon et al (2013) found that managers who have a strong belief in the value of HPWS, and who have more knowledge about effective HRM practices, lead their employees and demonstrate their higher levels of HPWS knowledge. Furthermore, CEOs, may contribute to the effectiveness of employees’ performance through encouraging a strong alignment between HPWS and organizational outcomes (Biron, Farndale, & Paauwe, 2011). According to Biswas (2009), the idea that HPWS is effective and contributes to organizational performance is linked with the perception of the managerial leadership style.

Building on these theoretical perspectives and empirical studies, it is proposed that relationship-focused CEOs will emphasis on showing concern for the feelings of employees, concerning employees’ and their families well-being, caring about employees’ welfare, treating employees with respect, and providing encourage support both at work and in employees’ personal lives (Song, Zhang, & Wu, 2014; Tsui, Schoonhoven, Meyer, Lau, & Milkovich, 2004) and that they are more likely to adopt HRM practices that are closely aligned with their leadership orientation. When employees perceive care, respect, and support inherent in a wide range of HRM practices, they will likely reciprocate the kindness and generosity with higher sense of responsibility and enthusiasm for work, thereby improving

organizational performance (Xu & Zhao, 2011). They are also more likely to feel empowered. Indeed, studies have shown a positive association between consideration (relationship-focused behaviors) and employees' attitudes, behaviors and performance (Judge & Piccolo, 2004; Wang et al., 2011).

Overall, it is expected that CEOs' relationship-focused leadership behaviors will provide a basis for the emergence of HPWS within small firms, which in turn will link positively to organizational performance via POS and empowerment. The present study thus formulates the following hypotheses:

***Hypothesis 4:** CEOs' relationship-focused leadership behaviors will relate positively to organizational performance.*

***Hypothesis 5:** HPWS will mediate the relationship between CEOs' relationship-focused leadership behaviors and organizational performance.*

***Hypothesis 6:** HPWS, perceived organization support (POS) and psychological empowerment will sequentially mediate the relationship between CEOs' relationship-focused leadership behaviors and organizational performance.*

2.7 The Conceptual Framework

The following conceptual model highlights the relationships between CEOs' relationship-focused leadership behaviors, HPWS, perceived organizational support (POS), Psychological empowerment, and organizational performance (See Figure 1).

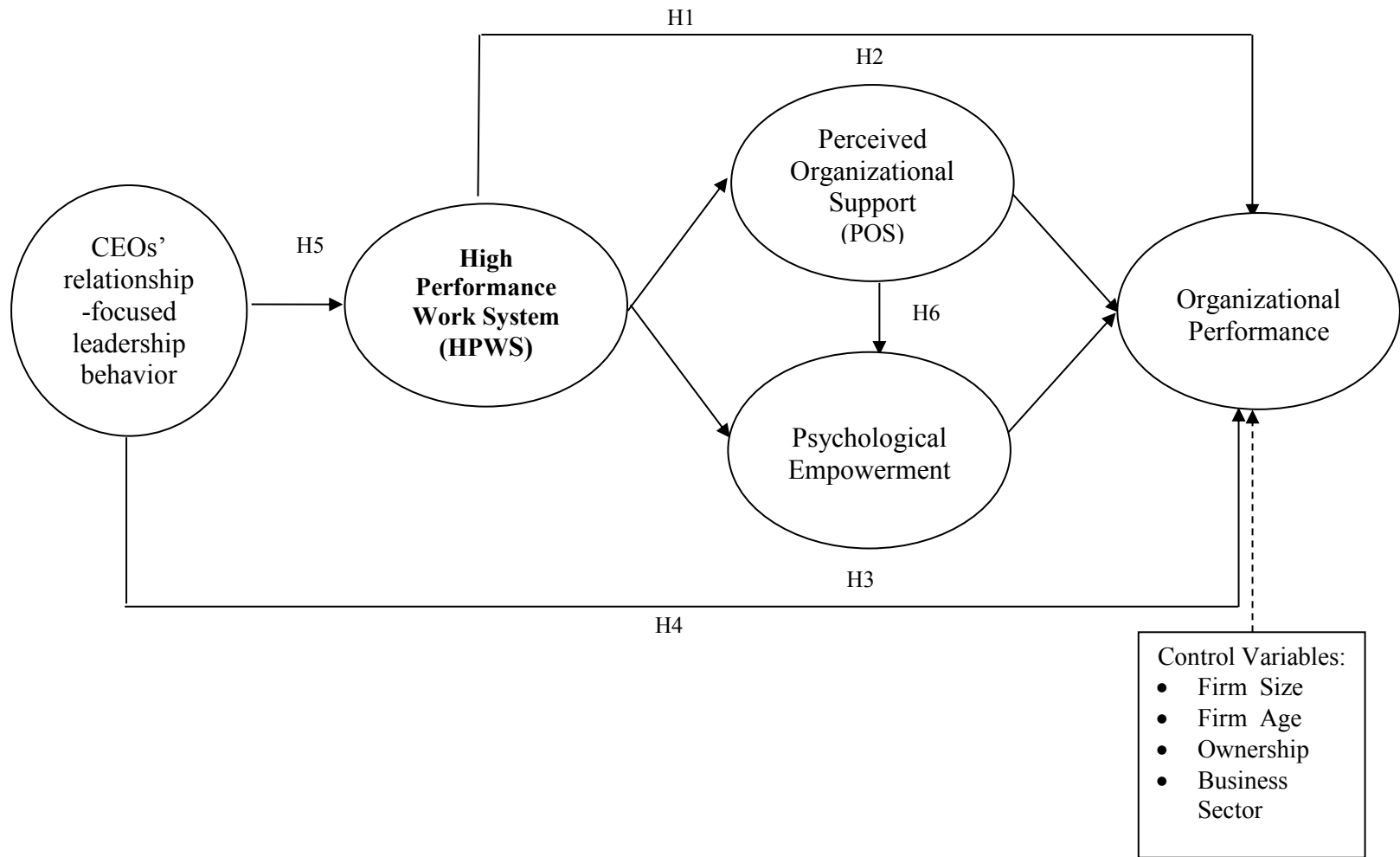


Figure: 2.1 Study Conceptual Framework

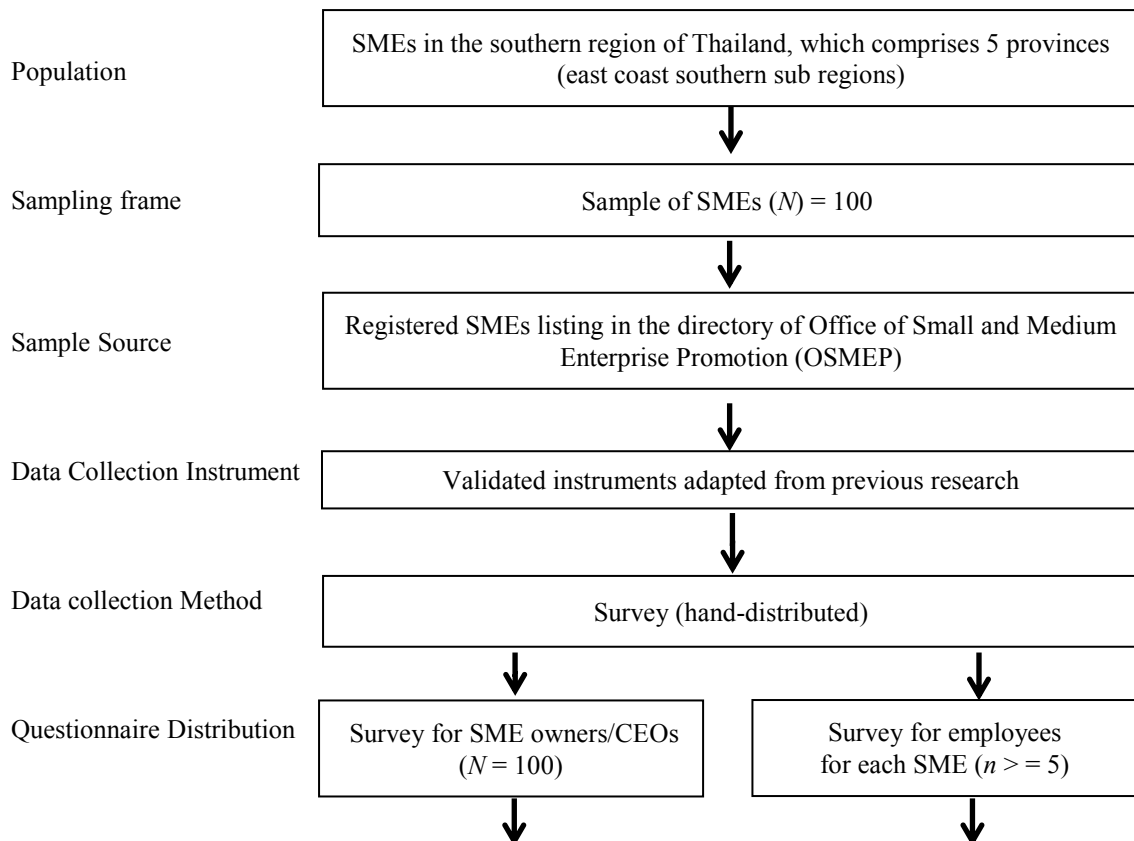
CHAPTER 3

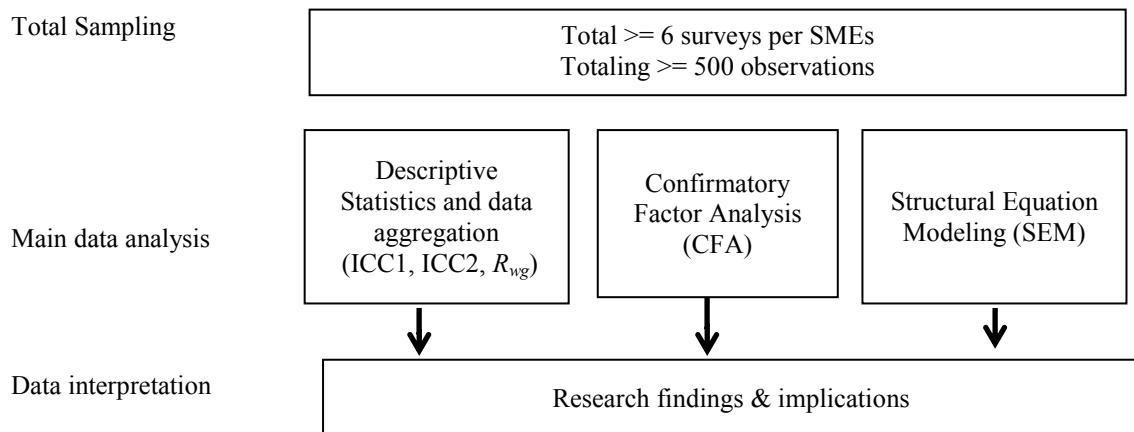
RESEARCH METHODOLOGY

3.1 Introduction

This research advances the existing literature by conducting a study of how and why HPWS relates to organizational performance. The researcher adopts a quantitative research method to conduct the present study in the SMEs context in Thailand. The first part of this chapter highlights the research methodology and design strategy. Justification of the selection of the population, sample size, unit of analysis and sampling procedures are discussed. The second part explains plans for data collection procedures, measurement instruments and data analysis. The research methodology procedure is outlined as follows (Figure 3.1)

Research design & Process Flow Chart





Figures 3.1. A summary of the research design and process

Note. Source Adapted from Suriyankietkaew (2015)

3.2 Population and Sample size

Thai SME were the targeted population for this present study. The details of the sampling frame, sample size and unit of analysis are discussed below.

3.2.1 Population

Description of SMEs Context

In Thailand, SMEs refer to Small- and Medium-sized Enterprises including manufacturing, wholesale and retail and service industries. Several criteria have also been used to divide business into large, medium, and small enterprises. The definitions of SMEs vary at different stages of development as discussed below.

Broadly speaking, according to the Ministry of Industry's Regulation issued under sections 4 and 5 of Small and Medium Enterprises Promotion Act in pursuant to defining the number of employees and amount fixed assets of Small and Medium Enterprise, B.E. 2545 (2002), the enterprise is regarded as SMEs when the headcount staff is not exceeding 200 workers and the fixed assets, excluding land, of not over 200 million Bath (The Office of SMEs Promotion, 2017).

There are 3 main criteria are used to classify SMEs i.e. number of employment, types of business, and the amount of assets as follows: (The Office of SMEs Promotion, 2017)

The size of SMEs using the number of employment or the value of the total fixed asset that does not include land from the regulations of the ministry of industry issued on the 11 of September 2002. The regulations of the ministry of industry issued on September 11, 2002 states the size of SMEs using the number of employment or the value of the total fixed asset that does not include land.

Business activities can be classified into 4 categories including the manufacturing sector, where the number of employment does not exceed 50 persons or fixed asset excluding land not exceeding THB 50 million, is considered as small enterprises. If the employment rate lies between 51-200 people or fixed asset exceeding THB 50 million but does not cross THB 200 million, then it is considered and medium enterprises.

The wholesale sector, where the employment does not exceed 25 persons or fixed asset excluding land not exceeding THB 50 million, is considered as small enterprises. If the employment rate lies between 26-50 persons or the fixed asset exceeds THB 50 million but does not cross THB 100 million then it is considered as medium enterprises.

The retail sector, where the employment does not exceed 15 persons or fixed asset excluding land exceeding THB 30 million, is considered as small enterprises. If the employment rate lies between 16-30 persons or the fixed asset does not exceed THB 60 million then it is considered as medium enterprises. The service sector, where the employment does not exceed 50 persons or fixed asset excluding land does exceed THB 50 million is considered as small enterprises. If the employment rate lies between 51-200 persons or the fixed asset exceeding THB 50 million but does not exceed THB 200 million then it is considered as medium enterprises.

Thus, as can be seen in the table below, the definitions of SMEs in Thailand are determined by the Small and Medium Enterprises Promotion Act B.E. 2543 (see Table 3.1).

Table 3.1

Definitions of SMEs by sectors

Sectors	Number of employment (employees)		Number of fixed assets (excluding lands)	
	Small	Medium	Small (THB million)	Medium (THB million)
Manufacturing	Not more than 50	51 - 200	Not more than 50	51 - 200
Wholesale	Not more than 25	26 - 50	Not more than 50	51 - 100
Retailing	Not more than 15	16 - 30	Not more than 50	31 - 60
Service	Not more than 50	51 - 200	Not more than 50	51 - 200

3.2.2 Sampling Frame

Although a population in this study can be framed to cover all SMEs business in Thailand, it is not possible from a practical standpoint to include every provinces of Thailand in the research study. The researcher thus chose a sampling frame comprising SMEs in the manufacturing and service sectors with fixed assets of less than 200 million Baht and fewer than 200 workers, and only focused on those that are located in 5 provinces in the southern region, namely “Eastern Coast Southern Sub Region: Surat Thani, Songkhla, Phattalung Chumphon, Nakhon Si Thammarat. In these five provinces, there are a total of 28,464 enterprises as of 2016 (The Office of SMEs Promotion, 2017). Note that the eastern coast southern sub region is the largest economic area in the southern region of Thailand. It has also greatly contributed to the economic and social growth (The office strategy management, 2017). Therefore, the researcher is interested in investigating the sample in this area.

This study aims to ensure the representative of the SMEs sample. In so doing, the sample frame in this study was established to align with the SMEs population, as referenced by OSMEP (2016). In this study, SMEs refer to small and medium enterprises that fall into the definition given by Promotion Act B.E. 2543 in all kind of business (see Table 3.2)

Table 3.2
The total numbers of SMEs in 5 provinces of Thailand at the end of 2016

Provinces	SME	LE	Total
Surat Thani	12,758	94	12,852
Songkhla	8,497	99	8596
Nakhon Si Thammarat	4,196	23	4,219
Chumphon	1,618	17	1,635
Phattalung	1,162	-	1,162
Total	28,231	233	28,464

Note. Source from (The office of SMEs promotion, 2017); SME = Small and Medium sized Enterprises; LE = Large Enterprises.

3.2.3 Unit of Analysis

The unit of analysis for this present study is the organization level. This is mainly because the outcome of interest is organizational performance. As discussed further below, although several of the variables were assessed (collected) at the individual level, they would be aggregated to the organizational level for data analyses.

3.2.4 Sample size

As there is no clear guidance on the appropriate number of organizational units examined in organization-level research, the researcher draws upon multilevel research, which indicates that a study sample of at least 100 organizational units with more than 5 employees each is an acceptable cluster size (Hox et al., 2010). Given that the response rate would be about 70-75 percent, the researcher decided to collect the data from 150 SMEs ($n = 150$) with at least 5 employees from each SME, totaling $n = 1,500$ employees. This sample should also be enough when considering the sample size and measurement items ratio, and also the response rate.

3.2.5 Sampling Technique

In order to have a random sample, the researcher selected a sample using a proportional stratified random sampling. Then, a simple random sampling was used as the way to choose a random sample of SMEs to derive the required 100 minimum. Specifically, 30 SMEs was randomly chosen from each province (See Table 3.3). This present research employed a multi-stage sampling

technique for the selection of the respondents. First, the proportional stratified sampling technique was used to categorize the number of SMEs into strata (30 SMEs [15 small and 15 medium sized enterprises] per province) (See Table 3.4). This technique ensures a proportional representation of all the provinces and also that a sample of enterprises of different sizes were obtained in the study.

Table 3.3

The numbers of sample size

Provinces	SMEs	Small	Medium	Sample size
Surat Thani	12,758	15	15	30
Songkhla	8,497	15	15	30
Nakhon Si Thammarat	4,196	15	15	30
Chumphon	1,618	15	15	30
Phattalung	1,162	15	15	30
Total	28,464	150	150	150

3.2.6 Data Collection Process

Ten ‘employee’ survey questionnaires and one ‘CEO’ survey questionnaires were hand-distributed to to each SME. The researchers received the permission from the SME owner to access the respondents. First, the respondents were informed in detail about the objectives of this present research and to rest assured that their personal identity will be kept anonymous. Then, they were asked to fill out the basic information about themselves and to assess their CEOs’ leadership and organizational performance as well as to assess their own POS and psychological empowerment. Upon completing the survey, each respondent was asked to staple and return the survey either to the researchers on the same day or to the administrative department from which the surveys were collected in the following week.

Over the course of three months, out of the 1,500 surveys distributed to 150 SMEs, 951 employees from 110 SMEs were returned, resulting in a 63.4% response rate. And 110 CEOs were completed and returned with a 73.33% response rate. Despite the sampling frame discussed earlier, the researcher had some difficulty in the data collection which led to a small change the number of SMEs from each respective province. Specifically, the respondents from at least 40 SMEs had not completed the surveys within the requested time frame (See table 3.4).

Table 3.4

The survey questionnaires results from CEOs and Employees

Provinces	CEOs' Survey Distributed	CEOs' Survey Returned	Employees' Survey Distributed	Employees' Surveys Returned
Songkhla	50	44	500	330
Nakhon Si	25	25	250	231
Phattalung	25	21	250	210
Chumphon	25	10	250	100
Surat Thani	25	10	250	80
Total	150	<i>N</i> = 110	1500	<i>N</i> = 951
Response Rate	100%	73.33%	100%	63.40%

Note. Nakhon = Nakhon Si Thammarat.

3.3 Measurement Instruments

The following sections discuss how measurement instruments and survey questionnaires were developed.

3.3.1 Survey Questionnaires

In this research, a survey method was used to collect the data. The development of the survey questionnaire is based on the review of the literature, theories, and previous research. Since all the items will be borrowed from established measures in international research, they will be back-translated into the Thai language. The questionnaires were divided into two parts. The first survey questionnaire, which is to be filled out by a CEO of each SME, consists of three sections as follows:

(1) Basic information on CEOs and SMEs

Basic information on CEOs and SMEs include gender, age, education, tenure, firm size, firm age, founder status and business sector.

(2) Organizational Performance

Organizational Performance was measured using the instrument developed by Delaney and Huselid (1996). This measurement of organizational performance is assessed relative to the performance of other firms in

the same industry. The items were constructed from seven items assessing respondents' perceptions of their organizational performance over the past three years relative to that of similar organizations (perceived organizational performance, $\alpha = .85$; Delaney & Huselid, 1996). This was measured on a 4-point Likert-scale ranging from *1- much worse to 4-much better*. Within the existing literature, subjective performance measures are commonly used indicators of performance. While objective measures are often unavailable and tend to lower the survey response rate (Kellermanns, Eddleston, Barnett, & Pearson, 2008), they correlate highly with subjective data and support the validity of subjective measures of performance (Ling & Kellermanns, 2010; Venkatraman & Ramanujam, 1986).

Table 3.5

Organizational performance measurement items

Construct	Items
How would you compare the organization's performance over the past years to that of other organizations that do the same kind of work?	
	1. Quality of product, service, or program
	2. Development of new products, service, or program
	3. Ability to attract essential employees
	4. Ability to retain essential employees
	5. Satisfaction of customers or clients
	6. Relations between management and other employees
	7. Relation among employees in general

(1) CEOs' relationship-focused leadership behavior

CEOs' relationship-focused leadership behavior was measured using the relationship-based leadership measure developed by Wang et al.'s (2011) 12-item scale comprising five components:

Table 3.6

CEOs' relationship-focused leadership behavior measurement items

Construct	Items
Relating and Communication	
	1. I have good skills in dealing with interpersonal relationships effectively.
	2. I am able to communicate well with employees
	3. I am good at balancing interpersonal relationships.

Construct	Items
	4. I get along with employees very well.
	5. I am able to facilitate interpersonal relationships.
Showing benevolence	6. I shows concerns for the employee's family members'
	7. I shows concerns for employee's personal life
	8. I treats employees like family members
	9. I shows love and care for subordinates
Being authoritative (Reverse-coded)	10. I ask employees to obey him/her fully and completely'
	11. Central decisions are made by me
	12. I make unilateral decisions and taking individual actions.

The second part of the survey, which is to be filled out by at least 5 employees of each of the SMEs, consists of three sections as follows:

Basic information

Basic information was measured using basic information about the respondents such as age, education, job position and tenure.

Specific Measures

(1) High performance work system

High performance work system (HPWS) was measured using eight practices, consisting of recruitment and selection, training and development, compensation, performance appraisal, self-managed teams, communication, participation in decision-making, and career development and promotion. These questions were measured based on a 5-point Likert-scale ranging from *1- strongly disagree to 5-strongly agree*. The items in each dimension were borrowed from previous research (See Table 3.8).

Table 3.7

High performance work system measurement items

Construct	Items
Recruitment and selection	<ol style="list-style-type: none"> 1. A strict selection procedure was used in our firm to hire new employees (Gong, Law, Chang, & Xin, 2009). 2. Techniques, such as structured interviews, work sample tests, or assessment centers, are used to assist in the selection process (Pittino et al., 2016). 3. Criteria are used to select new employees (Pittino et al., 2016).
Training & development	<ol style="list-style-type: none"> 4. Overall, I am satisfied with my training opportunities (Vandenberg, Richardson, & Eastman, 1999). 5. My company has provided me with on-going training, which enables me to do my job better (Vandenberg et al., 1999) 6. I am provided with sufficient opportunities for training and development (Julian Gould-Williams & Davies, 2005).
Participation in decision-making	<ol style="list-style-type: none"> 7. I have the chance to participate in important decisions about the future of my organization (Freyre, 2013). 8. In my job, I am allowed to make many decisions (Delery & Doty, 1996). 9. The job provides me with significant autonomy in making decisions (Morgeson & Humphrey, 2006).
Communication	<ol style="list-style-type: none"> 10. In my organization, goals, objectives and strategies are communicated to me (Ahmad & Schroeder, 2003). 11. I have enough important information to do my job properly (Freyre, 2013). 12. My organization keeps me informed about business issues and about how well it's doing (Julian Gould-Williams & Davies, 2005).
Compensation	<ol style="list-style-type: none"> 13. In my company, raises and promotions are tied to performance (Scott A Snell & Dean, 1992). 14. I feel the rewards I receive are directly related to my performance at work (Julian Gould-Williams & Davies, 2005). 15. There is a link between how well I perform my job and the likelihood of my receiving a raise in pay (Vandenberg et al., 1999).
Performance appraisal	<ol style="list-style-type: none"> 16. Supervisors get together with employees to set their personal goals (Jiang, 2013). 17. I receive feedback on my performance from other people in my organization (such as my manager or co-workers (Morgeson & Humphrey, 2006). 18. Performance is based on objective, quantifiable results (Lepak & Snell, 2002).
Self-management team	<ol style="list-style-type: none"> 19. Team working is strongly encouraged in my organization (Datta et al., 2005).

Construct	Items
Career development	20. Employee work together in teams (Brigitte Kroon et al., 2013).
	21. I feel that employees in my organization recognized about working toward team in performing a major part of their work roles (Truss, 1999).
	22. I have the opportunity for advancement in my organization (Price & Mueller, 1981).
	23. I have a good chance to get ahead in my company (Price & Mueller, 1981).
	24. I have the opportunities I want to be promoted in my organization (Julian Gould-Williams & Davies, 2005).

(2) *Perceived organizational support*

Perceived organization support (POS) was measured using Rhoades and Eisenberger's 2002 6-item scale, and was measured on a 5-point Likert-scale ranging from 1- *strongly disagree* to 5-*strongly agree* (See Table 3.9).

Table 3.8

Perceived organization support measurement items

Construct	Items
	1. My organization takes pride in my accomplishment.
	2. My organization values my contribution and well-being..
	3. My organization really cares about well-being'
	4. My organization appreciates my contribution
	5. My organization considers my aspirations and values
	6. My organization shows little concern for me

(3) *Psychological empowerment*

Employees' psychological empowerment was measured using Spreitzer's (1995) 12-item scale comprising four dimensions. This was measured on a 5-point Likert-scale ranging from 1- *strongly disagree* to 5 - *strongly agree* (See Table 3.10).

Table 3.9

Psychological empowerment measurement items

Construct	Items
Meaning	1. The work I do is very important to me. 2. My job activities are personally meaningful to me. 3. The work I do is meaningful to me.
Competence	4. I am confident about my ability to do my job. 5. I am self-assured about my capabilities to perform my work activities. 6. I have mastered the skills necessary for my job.
Autonomy / Self- determination	7. I have significant autonomy in determining how I do my job. 8. I can decide on my own how to go about doing my work. 9. I have considerable opportunity for independence and freedom in how I do my job.
Impact	10. My impact on what happens in my department is large. 11. I have a great deal of control over what happens in my department. 12. I have significant influence over what happens in my department.

Control variables

The researcher controlled firm-level variables including firm size, firm age, ownership (family vs. non-family), and business sector (Chrisman, Chua, & Litz, 2004; S. Kim, Wright, & Su, 2010; Madison et al., 2018; M. Zhang et al., 2013). Firm age was calculated based on its founding date (McClellan & Collins, 2011). Example questions including “How long has your firm been in operation” (Guthrie, Flood, Liu, MacCurtain, & Armstrong, 2011). Firm size is linked to the benefit of HPWS approach in organization (Liao et al., 2009). The final control variable is ownership, where the previous study found a relationship between performance and HR practices (Sun, Aryee, & Law, 2007).

CHAPTER 4

ANALYSIS

4.1 Introduction

This chapter is structured into five sections. In the first section, the data preparation and management is presented. The second section deals with the descriptive characteristics of respondents (i.e., CEOs and employee respondents). The third section presents data aggregation. In the fourth section of chapter, the measurement models of all the study variables were validated through a series of confirmatory factor analysis. Note that parceling techniques were used to reduce the number of items in the measurement models. The final section of the chapter presents the results regarding the proposed relationships of the study variables. All the statistical abbreviations and symbols used in this chapter are presented in Table 4.1.

Table 4.1

Statistical abbreviations and symbols

Abbreviation / symbol	Definition
<i>AVE</i>	Average variance extracted
<i>CI</i>	Confidence interval
<i>CR</i>	Composite reliability
<i>DE</i>	Direct effects
<i>df</i>	Degrees of freedom
<i>F</i>	<i>F</i> distribution
<i>ICC</i>	Intraclass correlation coefficient
<i>IE</i>	Indirect effects
<i>M</i>	Sample mean
<i>r</i>	Estimate of the Pearson product-moment correlation Coefficient
<i>R²</i>	Multiple correlation squared; measure of strength of association
<i>R_{wg}</i>	Within-group agreement
<i>SD</i>	Standard deviation
<i>t</i>	The sample value of the <i>t</i> -test statistic
<i>TE</i>	Total effects
<i>ns</i>	Not statistically significant
<i>N</i>	Total number of cases
<i>α</i>	Cronbach's index of internal consistency (a form of reliability)
<i>β</i>	Beta
<i>Δdf</i>	Difference is degree of freedom
<i>Δχ²</i>	Chi-square difference
<i>χ²</i>	Chi-square
<i>χ²/df</i>	Normed Fit Chi-square

4.2 Data Preparation and Management

The raw data obtained from the survey were entered into SPSS Program (Version 23.00). In this research, there are two different datasets. The first dataset came from 110 CEOs in 110 SMEs, whereas the second dataset was obtained from 951 employees nested in these SMEs.

The researcher first checked the missing values in both data sets using frequencies in SPSS and it was found that 3 CEO survey questionnaires had missing values (i.e., 2.7 % of the total questionnaires received), whereas 4 employee survey questionnaires had missing values or about (i.e., 0.4 % of the total questionnaires received). Like most research in social sciences, the author considered this to be Missing at Random (MAR), which means that the probability that an observation is missing could theoretically depend on the information for that particular subject that is present in the dataset (i.e., reason for missingness is based on other observed individual characteristics). But the researcher feels that this was not a serious issue for the present research because it has been suggested that less than 10% of missing values is usually considered acceptable (Hair et al., 2010). However, to correct for the missing values, the authors decided to replace these missing values with the sample mean values.

As will be discussed further below, because the purpose of this research is to analyze the data at the organizational level, the data at the individual level ($N = 951$) has to be aggregated to the organizational level. Thus, the employee dataset was combined with the CEO dataset in SPSS Program using the unique SME and employee IDs. The merged dataset that resulted from this procedure has $N = 110$.

4.3 Descriptive Statistic

The demographic profile of the survey respondents is presented in Table 4.2 (CEO dataset) and Table 4.3 (employee dataset). The results are presented as frequency and percentage. The means and standard deviations of the study

variables are presented in Tables 4.4, 4.5, and 4.6. The analyses in this section were conducted using SPSS.

4.3.1 The Demographic Profiles of SMEs and their CEOs

As presented in Table 4.2, the majority of the CEOs (59.1 %) were male. Most CEOs were 31 – 40 years old (32.7%). As for the educational level, 47.3% of the CEOs graduated with a master's degree, 42.7 % had a bachelor's degree and 6.4% had a PhD degree. The majority of the CEOs had prior work experience in other organizations (57.3%), whereas 42.7% had no prior work experience. Moreover, 57.3% of the CEOs were founders, whereas 42.7% were successors. Also, the majority of the SMEs were in the service sector (54.5%) and 45.5% were in the manufacturing sector. Most of the SMEs were small-sized (57.3%), whereas the rest were medium-sized (42.7%). Regarding firm ages, 34.5% of the SMEs have been around for 1 and 10 years. Most SMEs had the annual income of around 1,000,001-5,000,000 THB (39.1%).

Table 4.2

Demographic profiles of SMEs and their CEOs

Demographic Variable	Category	Frequency	Percent (%)
Business Sector	Manufacturing	50	45.5
	Service	60	54.5
Firm size	Small (> 50)	63	57.3
	Medium (51 – 200)	47	42.7
CEO Gender	Male	65	59.1
	Female	42	38.2
	Missing	3	2.7
Founder Status	Owner	63	57.3
	Successor	47	42.7
Work Experience	Yes	63	57.3
	No	47	42.7
CEO Age (in years)	21 - 30	9	8.2
	31 - 40	36	32.7
	41 - 50	35	31.8
	51 - 60	24	21.8
	More than 60	6	5.5
CEO Education	PhD	4	6.4
	Masters	47	47.3
	Bachelors	52	42.7

Demographic Variable	Category	Frequency	Percent (%)
	Below Bachelors	7	3.6
Firm Age (in years)	1 - 10	38	34.5
	11 - 20	37	33.6
	21 - 30	22	20
	More than 31	13	11.8
Business Income (THB)	Less than 1,000,000	35	31.8
	1,000,001- 5,000,000	43	39.1
	5,000,001- 10,000,000	17	15.5
	More than 10,000,000	15	13.6
Total		<i>N</i> = 110	100

4.3.2 The Demographic Profiles of Respondents

As shown in Table 4.3, the majority of the employee respondents were female (65.5%). Most respondents were 21- 30 years old (44.4%). With respect to the education background, 59.1 % of the respondents had a Bachelor's degree. Most respondents had tenure of less than 5 years (67.9%). Furthermore, 50.7% of respondents were employed in the service sector and 49.3% were in the manufacturing sector. At the same time, 51.9% of the employees were from the small sized enterprise and 48.1% were employed in the medium sized enterprises. In addition, 87.6% of the respondents were full-time employees, whereas 12.4% were temporary workers. Most respondents had a monthly salary of around 10,001- 20,000 THB (60%).

Table 4.3

Demographic profiles of respondents

Demographic Variable	Category	Frequency	Percent (%)
Business Sector	Manufacturing	469	49.3
	Service	482	50.7
Firm size	Small	494	51.9
	Medium	457	48.1
Gender	Male	324	34.1
	Female	623	65.5
	Missing	4	0.4
Positions	Full Time	833	87.6
	Temporary Worker	118	12.4
Age (in years)	10 - 20	10	1.1
	21 - 30	422	44.4
	31 - 40	363	38.2

Demographic Variable	Category	Frequency	Percent (%)
	41 - 50	122	12.8
	51 - 60	34	3.6
Education	Masters	22	38.6
	Bachelors	562	59.1
	Below Bachelors	367	2.3
Tenure (in years)	Less than 5	646	67.9
	6 - 10	173	18.2
	11 - 15	79	8.3
	16 - 20	39	4.1
	21 - 25	9	0.9
	26 - 30	5	0.5
Monthly income (THB)	Less than 10,000	296	31.1
	10,001 - 20,000	571	60.0
	20,001 - 30,000	49	5.2
	30,001 - 40,000	22	2.3
	More than 40,001	13	1.4
Total		<i>N</i> = 951	100

4.3.3 The Presence of HPWS among SMEs

One of the primary objectives of this present research is to investigate the mean levels of HPWS that exists in the present sample of SMEs. Specifically, the means and standard deviation scores of the 8 HPWS practices are presented in Table 4.4. To interpret the findings, a mean score of 1.00 – 1.80 would be considered lowest; a score of 1.81 – 2.6 would be considered low; a score of 2.61 – 3.20 would be considered moderate; a score from 3.21 – 4.20 would be considered high; and, a score of 4.21 – 5.00 would be considered highest (Fisher, 1953; Moidunny, 2009). The length of the cell proper obtained as follows: $(UL - LL) / NC = [(5-1)/5] = 0.80$ UL: Uppermost Limit, LL: Lowermost Limit, NC: Number of cells.

As shown in Table 4.4, the results demonstrate that SMEs the present sample had implemented HPWS at a high level ($M = 3.70$, $SD = .36$). The results further revealed that selective staffing was used the most ($M = 3.90$, $SD = .39$) followed by self-managed teams ($M = 3.84$, $SD = .48$). Quite understandably, the result also showed that rewards and career development were least adopted in SMEs ($M = 3.51$, $SD = .49$ and $M = 3.52$, $SD = .42$ respectively), which suggests an area for improvement.

Table 4.4

Mean scores, SD and levels for HR practices

Variables	HR Practices	<i>M</i>	<i>SD</i>	Levels
Ability	Selective staffing	3.90	.39	High
	Intensive training	3.79	.38	High
Motivation	Rewards	3.51	.49	High
	Performance appraisals	3.68	.35	High
	Career development	3.52	.42	High
Opportunity	Employee participation	3.55	.41	High
	Communication	3.70	.39	High
	Self-managed teams	3.84	.48	High
	HPWS	3.70	.36	High

Note. *N* = 110; **p* < 0.05; *M* = Mean; *SD* = Standard deviation;

Although not formally hypothesized, the researcher wanted to examine the difference in the mean levels of HPWS between small- and medium-sized enterprises using T-Tests. As shown in Table 4.5, the results indicated that there were roughly similar levels of HPWS practices in both small- and medium-sized enterprises, except for employee participation and self-managed teams. Specifically, small-sized enterprises appeared to have implemented higher levels of employee participation ($t = 2.537, p < .05$) and self-managed teams ($t = 2.522, p < .05$).

Table 4.5

Comparative results of mean on HPWS levels between small and medium size enterprises in SMEs

Variables	Total		Small		Medium		<i>t</i> -test
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Selective staffing	3.88	.70	3.85	.66	3.93	.73	-1.755
Intensive training	3.77	.69	3.80	.66	3.74	.72	1.126
Employee participation	3.54	.73	3.59	.66	3.47	.79	2.537*
Communication	3.68	.69	3.72	.65	3.63	.74	1.953
Rewards	3.49	.81	3.53	.78	3.44	.84	1.677
Performance appraisals	3.66	.69	3.69	.66	3.63	.73	1.437
Self-managed teams	3.80	.75	3.86	.72	3.74	.78	2.522*
Career development	3.50	.72	3.52	.69	3.48	.76	.864
HPWS	3.66	.58	3.69	.54	3.63	.62	1.638

Note. Based on *N* = 951 employees in 110 SMEs; **p* < 0.05; *M* = Mean; *SD* = Standard deviation

Although not formally hypothesized, the researcher wanted to examine the difference in the mean levels of HPWS between small- and medium-sized enterprises using T-Tests. As shown in Table 4.6, the results indicated that there were roughly similar levels of HPWS practices in both manufacturing and service sectors.

Table 4.6

Comparative results of mean on HPWS levels between manufacturing and service sectors in SMEs

Variables	Total		Manufacturing		Service		t-test
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Selective staffing	3.88	.70	3.84	.75	3.93	.64	-1.951
Intensive training	3.77	.69	3.77	.67	3.77	.70	.161
Employee participation	3.54	.73	3.56	.68	3.51	.77	1.015
Communication	3.68	.69	3.64	.66	3.72	.72	-1.661
Rewards	3.49	.81	3.50	.78	3.47	.84	.452
Performance appraisals	3.66	.69	3.68	.67	3.65	.72	.665
Self-managed teams	3.80	.75	3.78	.73	3.82	.77	-.709
Career development	3.50	.72	3.50	.68	3.50	.76	.055
HPWS	3.66	.58	3.66	.56	3.67	.60	-.284

Note. Based on $N = 951$ employees in 110 SMEs; *M* = Mean; *SD* = Standard deviation

Although not formally hypothesized, the researcher wanted to examine the difference in the mean levels of HPWS between male and female employees using T-Tests. As shown in Table 4.7, the results indicated that there were roughly similar levels of HPWS practices in both male and female, except for self-managed teams. Specifically, male employees appeared to have implemented higher levels of self-managed teams ($t = 2.365, p < .05$).

Table 4.7

Comparative results of mean on HPWS levels between male and female employees in SMEs

Variables	Total		Male		Female		<i>t</i> -test
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Selective staffing	3.88	.70	3.88	.63	3.89	.73	-.212
Intensive training	3.77	.69	3.80	.70	3.76	.68	.977
Employee participation	3.54	.73	3.56	.66	3.52	.77	.758
Communication	3.68	.69	3.65	.64	3.70	.72	-1.048
Rewards	3.49	.81	3.52	.79	3.47	.82	.810
Performance appraisals	3.66	.69	3.72	.64	3.63	.72	1.870
Self-managed teams	3.80	.75	3.88	.66	3.76	.79	2.365*
Career development	3.50	.72	3.55	.71	3.47	.73	1.420
HPWS	3.66	.58	3.69	.53	3.65	.61	1.049

Note. Based on $N = 951$ employees in 110 SMEs; * $p < 0.05$; *M* = Mean; *SD* = Standard deviation

Although not formally hypothesized, the researcher wanted to examine the difference in the mean levels of HPWS between fulltime and part-time employees using T-Tests. As shown in Table 4.8, the results indicated that there were roughly similar levels of HPWS practices in both fulltime and part-time employees, except for selective staffing, communication and performance appraisals. Specifically, full-time employees appeared to have implemented higher levels of selective staffing ($t = 2.086, p < .05$), communication ($t = 2.124, p < .05$), and performance appraisals ($t = 2.131, p < .05$).

Table 4.8

Comparative results of mean on HPWS levels between fulltime and part-time employees in SMEs

Variables	Total		Full-time		Part-time		<i>t</i> -test
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Selective staffing	3.88	.70	3.90	.72	3.76	.52	2.086*
Intensive training	3.77	.69	3.76	.68	3.87	.70	-1.582
Employee participation	3.54	.73	3.54	.74	3.51	.65	.416
Communication	3.68	.69	3.70	.70	3.55	.68	2.124*
Rewards	3.49	.81	3.49	.82	3.42	.78	.877
Performance appraisals	3.66	.69	3.68	.69	3.53	.69	2.131*
Self-managed teams	3.80	.75	3.80	.76	3.77	.66	.478
Career development	3.50	.72	3.52	.74	3.39	.57	1.718
HPWS	3.66	.58	3.67	.59	3.60	.53	1.273

Note. Based on $N = 951$ employees in 110 SMEs; * $p < 0.05$; *M* = Mean; *SD* = Standard deviation

Furthermore, the researcher wanted to examine the mean levels of HPWS in this present research with those of previous HPWS studies that have been conducted in Thailand. As shown in table 4.9, the implementation of HPWS in the present sample was high ($M = 3.70$, $SD = .36$), whereas that in the hospital setting was surprisingly moderate ($M = 2.85$, $SD = .59$) (Ruanggoon, 2016). However, organizations in the hotel in Thailand had implemented the HPWS at a similarly high level ($M = 3.71$, $SD = .60$) (Limpitikranon, 2017). Note that the findings should be interpreted with caution because each study used different measurement HPWS instruments (albeit with similar 5-level Likert scales).

Table 4.9

Comparative results of Mean on HPWS of each context in Thailand

Context / Authors	Variables/Scales Used	<i>M</i>	<i>SD</i>	Levels
SMEs (Present study)	HPWS A composite five-point scale that measured the extent to which a firm utilized the HR practices of selective staffing, intensive training, employee participation, rewards, performance appraisals, career development, communication, and self-managed teams.	3.70	.36	High
Hospitals (Ruanggoon, 2016)	HPWS A composite five-point scale that measured the extent to which a firm utilized the HR practices of selective staffing, intensive training, employee participation, rewards, and performance appraisals.	2.85	.59	Moderate
Hotels (Limpitikranon, 2017)	HPWS A composite five-point scale that measured the extent to which a firm utilized the HR practices of selective staffing, intensive training, employee participation, rewards, teamwork, and communication.	3.71	.60	High

Note. $N = 110$; $*p < 0.05$; M = Mean; SD = Standard deviation;

4.4 Measurement

In this section, the content and construct validity of questionnaires, and the pilot test results are presented.

4.4.1 Content and Construct Validity

In social research, there are two key principles of validity and reliability (Bryman, 2016). *Validity* is defined as the degree to which a measurement device is accurate in measuring what it is aimed to measure (Mason, 2017). *Validity* is an indication of the extent to which an assessment measures a specific construct in a particular context. Accordingly, a measure tends to have a higher level of validity for one particular situation but not for a different situation (Herman, Osmundson, & Dietel, 2010). Researchers typically evaluate content validity and construct validity.

(1) Content Validity

Content validity is defined as a subjective assessment of the level of consistency between the items comprising the scale and the theoretical meaning of each (Hair, Black, Babin, Anderson, & Tatham, 2009; Malhotra & Birks, 2007). It is the level to which the scale items capture major facets of a construct (Rungtusanatham, 1998). Content validity is typically generated via expert or researcher judgment (Hair et al., 2009; Malhotra & Birks, 2007). The current study will assess the content validity of the variables through the use of five expert judges who investigated whether the scale items cover the full domain in terms of the concepts and the constructs being measured. Based on the “*Item of Consistency*” (*IOC*) method, a score of 0.6 for each specific item is a required cutoff value (i.e., approval from at least four experts are needed for each item).

(2) Reliability

Reliability is defined as the degree to which a measure is consistent, stable and produces replicable results overtime (Bryman, 2016; Malhotra & Birks, 2007). Coefficient alpha (also known as Cronbach’s alpha) is the most accepted measure used by researchers to test the reliability in quantitative research (Hair et al., 2009; Malhotra & Birks, 2007). Furthermore, Kline (2013) has indicated that values between 0.7 and 0.8 for Cronbach’s alpha are an acceptable reliability

coefficient. Nonetheless, due to the diversity of the measured constructs, values less than 0.7 (but more than 0.6) are acceptable (Kline, 2013). However, a main problem of coefficient alpha is its positive relationship between the numbers of scale items, and scales with too many items and this can enhance the value of the coefficient alpha including several redundant items (Hair et al., 2009; Malhotra & Birks, 2007). As a results, reliability measurements obtained by confirmatory factor analysis (CFA) were suggested to deal with the problem (Hair et al., 2009). Additionally, Hair et al. (2009) ave indicated both the composite reliability (CR) and the average variance extracted (AVE), and measures of reliability, which are believed to offer more precise results.

The widely used method for estimating intra-scale is CR, which is defined as the degree to which a bundle of indicators contribute to their measurement of a construct (Koufteros, 1999). It is a measure of the homogeneity and internal consistency of the items that comprise a scale. Constructs that are highly reliable are those in which the indicators are strongly intercorrelated and thus pointing out that all of the indicators reflect, in measuring, the same latent construct. Bagozzi and Yi (1988) have shown values of 0.6 or higher for CR are acceptable. While, values of 0.8 or higher are normally considered preferable (Koufteros, 1999).

Additionally, the AVE is a credible supplementary measure to the CR (Hair, Black, Babin, Anderson, & Tatham, 2006; Koufteros, 1999). The AVE is defined as form of measure of the overall amount of variance in the indicators accounted for underlying the latent construct (Koufteros, 1999). In addition, the indicators are illustrative of how the latent construct leads to greater values for AVE. Bagozzi and Yi (1988) have suggested that an AVE level of 0.5 or greater is typically considered acceptable. Accordingly, Cronbach's alpha, composite reliabilities (CR) estimates (Bagozzi & Yi, 1988) and the average variance extracted (AVE) (Bagozzi, Yi, & Phillips, 1991) play significant roles in assessing the reliability of the study constructs.

(3) Construct Validity

According to Malhotra and Birks (2007), even though the content validity of the constructs was investigated, each of these scales is not sufficient to measure validity but they do provide a 'common-sense' interpretation of the scores of a scale. Therefore, a more formal evaluation of scale validity can be

achieved by examining *construct validity*.

As recommended by Hair, Anderson, Tatham, and Black (1998), to assess the discriminant validity of the variables, a series of confirmatory factor analysis (CFA) was conducted to evaluate the distinctiveness of key variables. The overall model's chi-square, the comparative fit index (CFI), the Tucker-Lewis Index (TLI), the root mean square error of approximation (RMSEA) and Standardized root mean residual (SRMR) (See Table 4.10).

Table 4.10

Summary of goodness-of-fit indices

Fit Index	Acceptable fit
Absolute fit measures	
Chi-square (χ^2)	Non-significant with a p-value of at least 0.05
Normed Fit Chi-square (χ^2/df)	Values less than 3 indicate a reasonable fit.
.Root Mean Square Error of Approximation (RMSEA)	Values less than 0.08 indicate adequate fit.
.Standardized root mean residual (SRMR)	Values less than 0.08 indicate adequate fit.
Incremental fit measures	
Tucker-Lewis Index (TLI) - also known as Buntler-Bonett Non Normed Fit Index (NNFI)	Values > 0.95 indicate good fit; values between 0.90 & 0.95 indicate adequate fit.
Comparative Fit Index (CFI) - identical to Relative Non-centrality Index (RNI)	Values > 0.95 indicate good fit; values between 0.90 & 0.95 indicate adequate fit.

Source: Adapted from Hair, Black, Babin, Anderson, & Tatham, (2010)

(4) IOC Results

Index of Item of Consistency (IOC) was used to evaluate the content validity at the items. Specifically, content validity assesses whether the questionnaire items are associated with the theoretically relevant constructs of interest. The survey questionnaire containing all the study items (i.e., CEOs' leadership behaviors, HPWS, POS, psychological empowerment and organizational performance) was sent to 5 experts in the area of HRM and organizational behaviors. The passing criterion is ≥ 0.60 (i.e., the approval from at least three experts is needed for each questionnaire item).

As shown in the Appendix C, the results showed that the IOC scores for each questions ranged between 0.60 - 1.00, indicating that all the measurement items had sufficient content validity.

4.4.2 Pilot Test

A pilot test was conducted to examine the reliability, the item interpretation among the respondents before the actual survey was conducted (Bolton & Roy, 2004; Su & Parham, 2002). Isaac and Michael (1995) suggested that at least 10 to 30 participants be included in a pilot testing. For this present research, 30 questionnaires were sent to the employees in three SMEs in Hat Yai District, Songkhla Province. The reliability test was performed using Cronbach's alphas. Fornell and Larcker (1981) suggested that the value of Cronbach's alpha should be greater than 0.7 to be considered acceptable. As shown in Table 4.11, the result showed that all the Cronbach's alpha coefficients were larger than 0.7 and some even higher than 0.9, thus providing further evidence that the measures were quite reliable.

Table 4.11

Reliability analysis results (Pilot Test) of employees

Variables	Number of items	Cronbach's Alpha
CEO leadership	3	0.89
HPWS	24	0.98
POS	6	0.91
Psychological empowerment	12	0.94
Organizational performance	7	0.94

Note. CEO leadership = CEOs' relationship-focused leadership behaviors; HPWS = High Performance Work System; POS = Perceived Organizational Support

4.5 Data Aggregation

This research follows the common aggregation approach used in organizational-level research (e.g., Ostroff, 1992; A. Ryan, Schmit, & Johnson, 1996; Wang et al., 2011). Specifically, the researcher needed to aggregate the individual-level data related to employees' perceptions of HPWS, POS and psychological empowerment ($N=951$) to the organizational level ($N=110$). CEO leadership

behaviors and organizational performance were assessed by the CEOs and thus there was no need to aggregate these variables to the organizational level.

First, the researcher ran a one-way ANOVA in SPSS using the organizations as the independent variable and HPWS, POS and psychological empowerment as dependent variables to check if these variables are influenced by the differences in the organizations. This procedure used the mean square between (MSB) and the mean square within (MSW) informed in the ANOVA output. The researcher then used a number of indices to examine whether it was possible to aggregate individual-level variables to the organizational level including ICC (Intraclass Correlation) (1) and ICC (2) and R_{wg} . ICC (1) represents the proportion of variance of the variables measured at the individual level to the variance at the organizational level (James et al., 1984; Ostroff, 1992). In other words, this is a measure of the extent to which the variance in the study variables could be attributed to the differences among the organizations. LeBreton and Senter (2008) suggested that an ICC (1) $> .05$ represents a small to medium effect for the individual-constructs to have meaningful implications at the organizational level. Practically speaking, this would indicate that the individual respondents shared some similar characteristics that could be attributed to their being in the same organizations. ICC (2) on the other hand measures the reliability of the group-level means of the variables. Research indicates that ICCs (2) less than 0.40 are poor, those from 0.40 to 0.75 are fair to good, and those > 0.75 are excellent (Bliese, 1998; Fleiss, 1986). Finally, R_{wg} was also computed to make sure that there was sufficient within-group agreement among the employees within the same organizations (James et al., 1984). The R_{wg} of $> .80-.90$ would indicate high levels of agreement among employees (LeBreton & Senter, 2008).

As shown in Table 4.12, all the F -tests (ANOVA) were significant, which provides preliminary evidence for the organizational-level effect. Furthermore, all the ICCs and R_{wg} were above the aforementioned cut-off values. These results indicate that it is appropriate to aggregate HPWS, POS and psychological empowerment to the organizational level.

Table 4.12

Evaluation of data aggregation

Variable	$R_{wg(j)}$	ICC ₍₁₎	ICC ₍₂₎	ANOVA (<i>F</i> -tests/ <i>p</i> -value)
High Performance Work System	0.92	0.29	0.78	4.49, 0.000***
Selective staffing	0.82	0.24	0.73	3.73, 0.000***
Intensive training	0.78	0.20	0.69	3.20, 0.000***
Employee participation	0.78	0.18	0.66	2.90, 0.000***
Communication	0.78	0.20	0.69	3.22, 0.000***
Rewards	0.72	0.28	0.77	4.36, 0.000***
Performance appraisals	0.80	0.15	0.60	2.51, 0.000***
Self-management teams	0.79	0.29	0.78	4.55, 0.000***
Career development	0.79	0.23	0.73	3.64, 0.000***
Empowerment	0.89	0.21	0.70	3.35, 0.000***
Self determination	0.82	0.16	0.63	2.71, 0.000***
Competence	0.83	0.09	0.47	1.87, 0.000***
Impact	0.79	0.23	0.73	3.64, 0.000***
Meaning	0.78	0.20	0.69	3.22, 0.000***
Perceived Organizational Support	0.89	0.28	0.77	4.42, 0.000***

Note. Based on $N = 951$ employees in 110 organization; *** $p < 0.001$; ICC = intraclass correlation coefficient; R_{wg} = within-group agreement; ANOVA = analysis of variance

4.6 CFA Results for Individual Constructs

In regards to Anderson and Gerbing (1988), the data analysis in the current study used two-step approach to estimate a model, which relevance in estimating the measurement model before to estimating the proposed structural model. In this section, results of the CFAs of the study constructs (i.e., CEOs' leadership behaviors HPWS, POS, psychological empowerment, organizational performance) are presented. Note that several indices were used to assess the model fits, including the overall model's chi-square, the comparative fit index (CFI), the Tucker-Lewis Index (TLI), and the root mean square error of approximation (RMSEA). To indicate a good fit, CFI and TLI should be above 0.90 (L. t. Hu & Bentler, 1999) and RMSEA should be between 0.05 and 0.08 (MacCallum, Browne, & Sugawara, 1996). The Mplus program version 7 was examined the measurement models and also the relationships among the constructs (Muthén & Muthén, 2012).

4.6.1 CFA Results for CEOs' Relationship-Focused Leadership Behaviors

According to Wang et al. (2011) and Xi et al. (2016), CEOs' relationship-focused leadership behaviors could be divided into relating and communication, showing benevolence and being authoritative. Accordingly, a second-order measurement model of CEOs' relationship-focused leadership behaviors was estimated. Specifically, 12 manifest indicators were used for the three primary factors (i.e., 5 for relating and communication; 4 for showing benevolence; 3 for being authoritative). Table 4.13 and Figure 4.1 present the second-order measurement model of CEOs' relationship-focused leadership behaviors.

Table 4.13

CFA results of CEOs' relationship-focused leadership behaviors

Confirmatory Factor Analysis (Second-Order Factor) CEOs' relationship-focused leadership behaviors 12 items		Factor Loadings	<i>M</i>	<i>SD</i>		
<i>Relating and communication AVE = .50 CR = .82</i>		.74	3.90	.45		
1. I have good skills in dealing with interpersonal relationships effectively		.55	4.31	.55		
2. I am able to communicate well with employees		.76	4.22	.54		
3. I am good at balancing interpersonal relationships.		.74	4.17	.48		
4. I get along with employees very well.		.77	4.24	.57		
5. I am able to facilitate interpersonal relationships.		.65	4.18	.62		
<i>Showing benevolence AVE = .66 CR = .89</i>		.74	3.83	.55		
6. I show concern for employee's family members'		.84	4.34	.54		
7. I show concern for employee's personal life		.84	4.45	.55		
8. I treat employees like family		.79	4.32	.57		
9. I show love and care for subordinates		.81	4.41	.53		
<i>Being authoritative (Reverse-coded) AVE = .76 CR = .90</i>		-0.02	3.15	.53		
10. I ask employees to obey him/her fully and completely'		.83	2.57	1.1		
11. Central decisions are made by me		1.00	2.43	1.0		
12. I make unilateral decisions and taking individual actions.		.77	2.25	1.0		
Statistic Values of CFA results						
χ^2	<i>df</i>	P-Value	RMSEA	CFI	TLI	SRMR
75.07	51	0.0157	0.06	0.96	0.95	0.05

Note. *N* = 110; **p* < 0.05; *M* = Mean; *SD* = Standard deviation

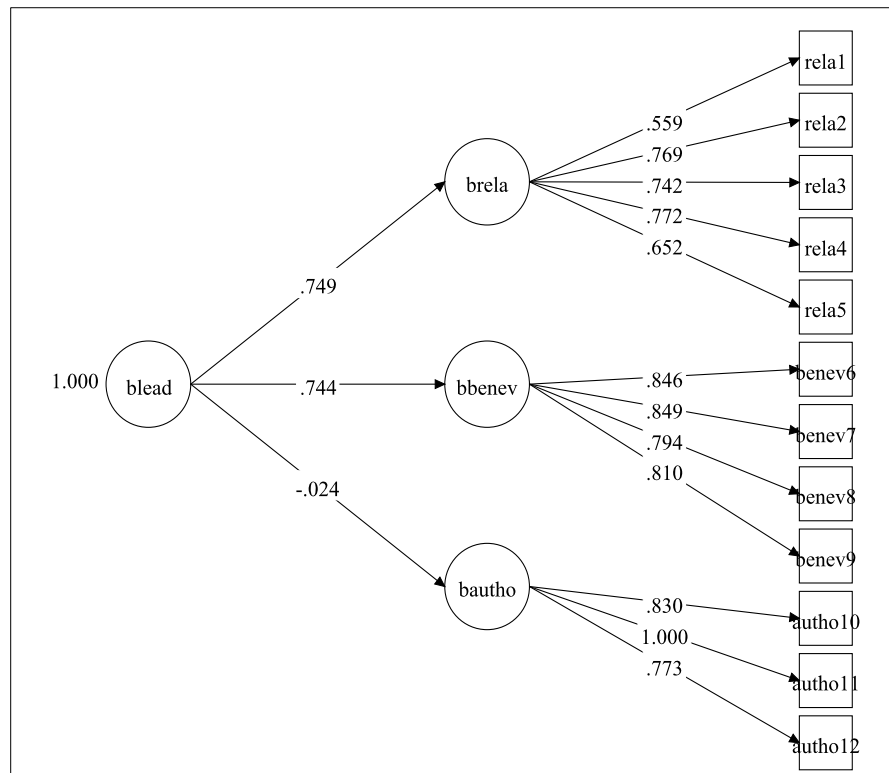


Figure 4.1. CFA Results of CEOs' relationship-focused leadership behaviors

Note. Path coefficients are standardized model results STDYX from Mplus; brela = CEO-self-rated relationship-based behaviors; bbenev = benevolence behaviors, and bautho = authority behaviors

As expected, the results showed that the 12 items loaded on the three aforementioned dimensions. The goodness of fit indices showed that the measurement model achieved a good fit with the data ($\chi^2 = 75.07$, $df = 51$, CFI = .96; TLI = .95; RMSEA = .06; SRMR = 0.05). Although all of the items have statistically significant relationships with their factors ($p < .001$), it was found that being authoritative did not have a significant relationship with the relations-based leadership factor (i.e., the loading was -0.02), whereas all other factor loadings were above the cut-off value of .50, ranging from 0.74 for relating and communication to 0.74 for showing benevolence. Based on this finding, the researcher thus made a tough call to remove this variable from further analysis.

As shown in Table 4.14 and Figure 4.2, after removing being authoritative, the nine remaining items of the two leadership dimensions loaded on the leadership factor. The goodness of fit indices showed that the measurement model achieved a good fit with the data ($\chi^2 = 39.95$, $df = 25$, CFI = .97; TLI = .95;

RMSEA = .07; SRMR = 0.04). All of the items have statistically significant relationships with their factors ($p < .05$).

Table 4.14

CFA results of CEOs' relationship-focused leadership behaviors

Confirmatory Factor Analysis (Second-Order Factor) CEOs' relationship-focused leadership behaviors 9 Items		Factor Loadings	<i>M</i>	<i>SD</i>		
<i>Relating and communication AVE = .49 CR = .87</i>		.90	4.22	.42		
1. I have good skills in dealing with interpersonal relationships effectively		.56	4.31	.55		
2. I am able to communicate well with employees		.76	4.22	.54		
3. I am good at balancing interpersonal relationships.		.74	4.17	.48		
4. I get along with employees very well.		.77	4.24	.57		
5. I am able to facilitate interpersonal relationships.		.65	4.18	.62		
<i>Showing benevolence AVE = .54 CR = .89</i>		.61	4.38	.48		
6. I show concern for employee's family members'		.84	4.34	.54		
7. I show concern for employee's personal life		.84	4.45	.55		
8. I treat employees like family		.79	4.32	.57		
9. I show love and care for subordinates		.81	4.41	.53		
Statistic Values of CFA results						
χ^2	<i>df</i>	P-Value	RMSEA	CFI	TLI	SRMR
39.95	25	0.0295	0.07	0.97	0.95	0.04

Note. $N = 110$; $*p < 0.05$; M = Mean; SD = Standard deviation

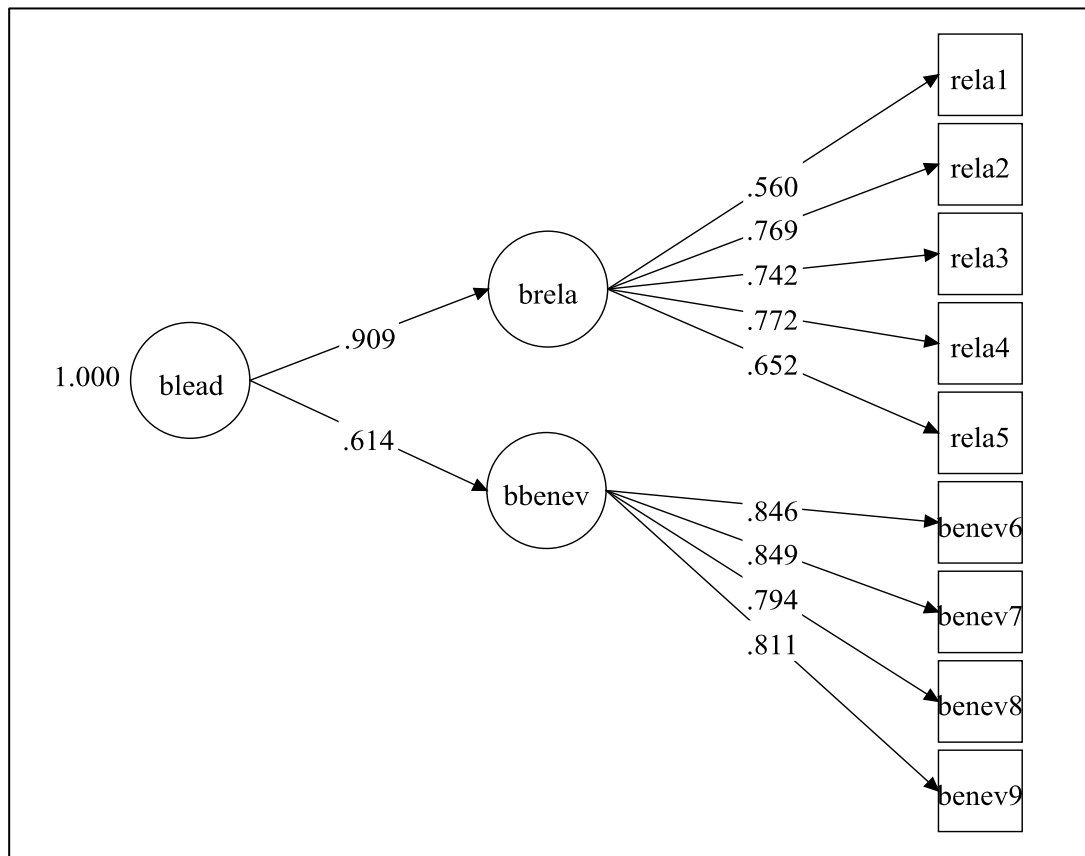


Figure 4.2 CFA Model Results of CEOs' relationship-focused leadership behaviors

Note. Path coefficients are standardized model results STDYX from Mplus; brela, bbenev, and bautho = CEO self rated benevolence.

4.6.2 CFA Results for High Performance Work System

As for HPWS, a second-order measurement model containing 8 lower factors including selective staffing, intensive training, employee participation, communication, rewards, performance appraisals, self-management teams and career development was estimated. Three manifest indicators were used for each lower factor. Table 4,15 and Figure 4.3 present the second-order measurement model of HPWS.

Specifically, the results indicated that the measurement model achieved a good fit with the data ($\chi^2 = 603.43$, $df = 244$, CFI = .90; TLI = .88; RMSEA = .11). The χ^2/df value was lower than 3.0, which indicated a good fit. TLI and CFI were greater than 0.8 (Bentler, 1990), whereas RMSEA was 0.11. Although RMSEA was somewhat higher than the general acceptable cut off value of 0.08, past

research indicates that this could be a result of sample size, which is quite low in the case of this present research (e.g. Pornprasertmanit, Lee, & Preacher, 2014). Furthermore, it has been indicated that RMSEA of 0.08 – 0.10 is acceptable (Hair et al., 2010; MacCallum et al., 1996)..

Specifically, the first-order factors loaded significantly on the HPWS factor with coefficient values ranging from 0.77 for selective staffing and self-management teams to 0.95 for career development. The loadings of the twenty-four manifest indicators to the lower factors were all above 0.86 and all were statistically significant. Standardized factor loadings were significant and higher than 0.7 (Hair et al., 2010). All the scales showed both convergent and discriminant validities as the composite reliability (CR) values were above 0.7 and the average variance extracted (AVE) values were above 0.5.as shown in table 4.15. This indicates a strong relationship between the 8 first-order factors and the second-order factor, thus demonstrating the convergent validity of the postulated second-order model (Koufteros, Babbar, & Kaighobadi, 2009).

Table 4.15

CFA results of High Performance Work System

Confirmatory Factor Analysis (Second-Order Factor) High Performance Work System (HPWS) 24 Items	Factor Loadings	<i>M</i>	<i>SD</i>
<i>Selective staffing AVE = .54 CR = .93</i>	0.77	3.90	.39
1. A strict selection procedure was used in our firm to hire new employees	0.94	3.84	.41
2. Techniques, such as structured interviews, work sample tests, or assessment centers, are used to assist in the selection process in my company.	0.86	4.01	.42
3. Hiring criteria are used to select new employees in our firms.	0.92	3.84	.41
<i>Intensive training AVE = .51 CR = .93</i>	0.86	3.79	.38
4. Overall, I am satisfied with my training opportunities.	0.88	3.81	.40
5. My company has provided me with on-going training, which enables me to do my job better	0.87	3.68	.41
6. I am provided with sufficient opportunities for training and development	0.95	3.87	.42
<i>Employee participation AVE = .58 CR = .95</i>	0.91	3.55	.41
7. I have the chance to participate in important decisions about the future of my organization.	0.93	3.46	.45
8. In my job, I am allowed to make many decisions.	0.95	3.55	.40

Confirmatory Factor Analysis (Second-Order Factor) High Performance Work System (HPWS) 24 Items		Factor Loadings	<i>M</i>	<i>SD</i>		
9.	The job provides me with significant autonomy in making decisions.	0.90	3.64	.44		
<i>Communication AVE = .51 CR = .91</i>		0.94	3.70	.39		
10.	In my organization, goals, objectives and strategies are communicated to me.	0.86	3.64	.45		
11.	I have enough important information to do my job properly.	0.87	3.81	.35		
12.	My organization keeps me informed about business issues and about how well it's doing.	0.90	3.64	.46		
<i>Rewards and Compensation AVE = .58 CR = .94</i>		0.88	3.51	.49		
13.	In my company, raises and promotions are tied to performance	0.95	3.39	.52		
14.	I feel the rewards I receive are directly related to my performance at work.	0.95	3.59	.50		
15.	There is a link between how well I perform my job and the likelihood of my receiving a raise in pay.	0.86	3.54	.53		
<i>Performance appraisals AVE = .50 CR = .91</i>		0.93	3.68	.35		
16.	Supervisors get together with employees to set their personal goals.	0.88	3.60	.42		
17.	I receive feedback on my performance from other people in my organization (such as my manager or co-workers).	0.89	3.72	.35		
18.	Performance is based on objective, quantifiable results	0.88	3.71	.37		
<i>Self-managed teams AVE = .88 CR = 1.00</i>		0.77	3.84	.48		
19.	Team working is strongly encouraged in my organization.	0.95	3.77	.51		
20.	Employee work together in teams	0.96	3.78	.53		
21.	I feel that employees in my organization recognized about working toward team in performing a major part of their work roles.	0.91	3.97	.48		
<i>Career development AVE .59 CR = .96</i>		0.95	3.52	.42		
22.	I have the opportunity for advancement in my organization	0.95	3.49	.48		
23.	I have a good chance to get ahead in my company	0.91	3.52	.40		
24.	I have the opportunities I want to be promoted in my organization.	0.94	3.54	.45		
Statistic Values of CFA results						
χ^2	<i>df</i>	P-Value	RMSEA	CFI	TLI	SRMR
603.43	244	0.000	0.11	0.90	0.88	0.05

Note. *N* = 110; **p* < 0.05; *M* = Mean; *SD* = Standard deviation;

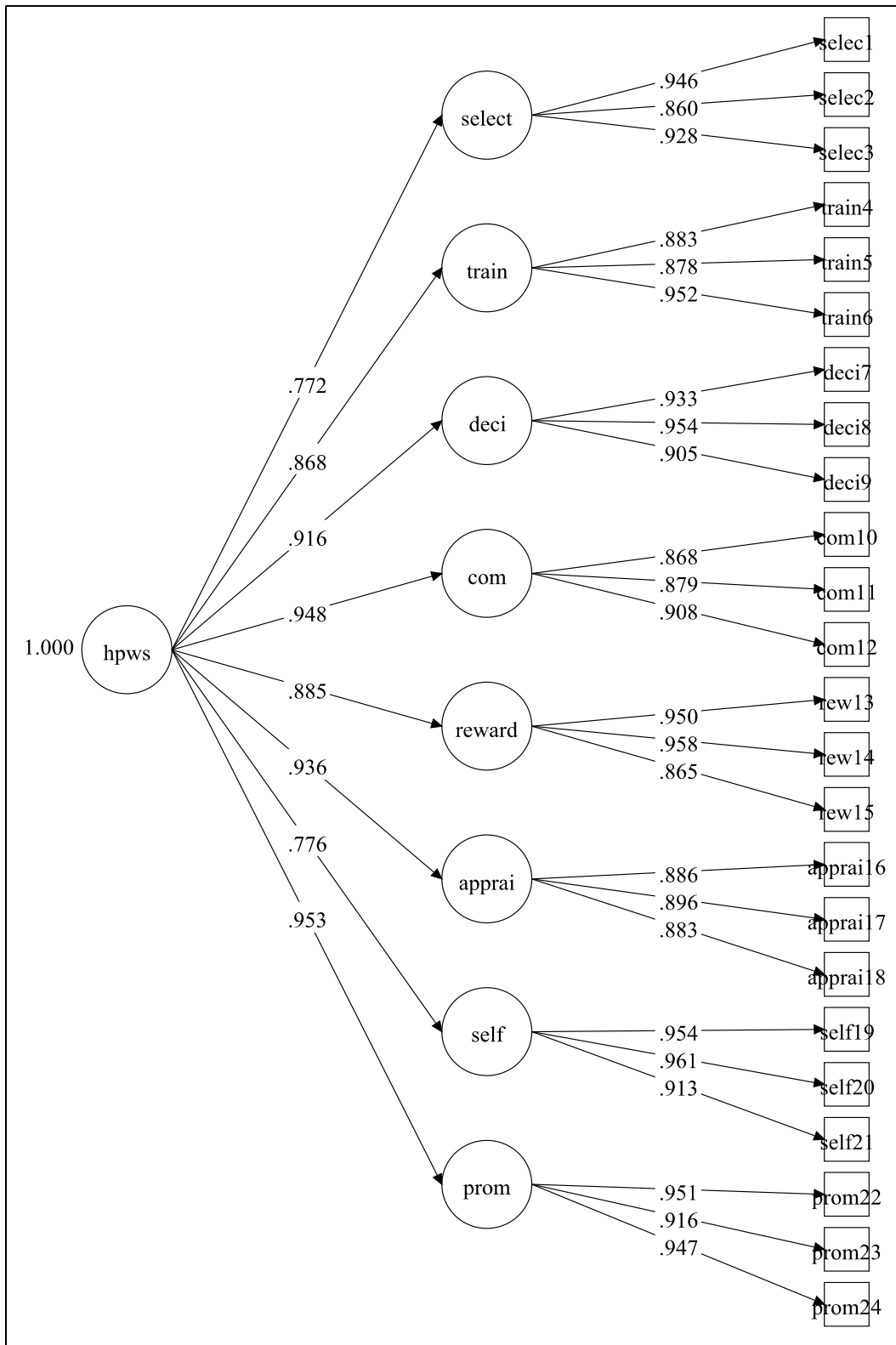


Figure 4.3 CFA Model Results HPWS

Note. Path coefficients are standardized model results STDYX from Mplus; select = selective staffing, train=intensive training, deci=employee participation, com=communication, reward=rewards and compensation, apprai=performance appraisals, self=self-managed teams, prom=career development.

4.6.3 CFA Results for Psychological Empowerment

A second-order measurement model of psychological empowerment comprising four latent factors including meaning, competence, autonomy and impact was estimated. Three manifest indicators were used for each of the factors. Figure 4.4 presents the second-order measurement model of psychological empowerment.

Consistent with the findings of recent research (e.g. Jiang et al., 2012), the CFA results showed that the second-order model provided an acceptable fit to the data ($\chi^2 = 160.36$; $df = 50$; CFI = .93; TLI = .91; RMSEA = .05; SRMR = 0.05). All of the items have statistically significant relationships with their factors ($p < .005$). As shown in Table 4.16, the researcher can conclude that the scales were reliable and valid. All scales were reliable as composite reliability (CR) values were above 0.7. The Average Variance Extracted (AVE) confirmed the convergent validity as the AVE values were above 0.5 (Fornell & Larcker, 1981). The factor loadings of the lower factor were above 0.7, ranging from 0.75 for meaning to 0.84 for impact. The loadings of the twelve indicators are all above 0.87 and all were statistically significant. This indicates a strong relationship between the four first-order factors and the second-order factor, thus demonstrating the convergent validity of the postulated second-order model (Koufteros et al., 2009).

Table 4.16

CFA results of psychological empowerment

Confirmatory Factor Analysis of Psychological Empowerment	Factor Loadings	<i>M</i>	<i>SD</i>
<i>Meaning AVE = .86 CR = .95</i>	0.75	3.78	.37
1. My impact on what happens in my department is large.	0.91	3.87	.39
2. I have a great deal of control over what happens in my department.	0.91	3.71	.37
3. I have significant influence over what happens in my department.	0.96	3.77	.41
<i>Competence AVE = .79 CR = .92</i>	0.78	3.84	.29
4. I am confident about my ability to do my job.	0.90	3.85	.33
5. I am self-assured about my capabilities to perform my work activities.	0.95	3.84	.31
6. I have mastered the skills necessary for my job.	0.81	3.81	.32
<i>Autonomy / Self determination AVE = .90 CR = .96</i>	0.85	3.68	.43

Confirmatory Factor Analysis of Psychological Empowerment		Factor Loadings	M	SD
7. The work I do is very important to me.		0.94	3.71	.42
8. My job activities are personally meaningful to me.		0.98	3.69	.45
9. The work I do is meaningful to me.		0.92	3.64	.46
Impact AVE = .84 CR = .94		0.84	3.64	.38
10. I have significant autonomy in determining how I do my job.		0.87	3.74	.39
11. I can decide on my own how to go about doing my work.		0.96	3.63	.40
12. I have considerable opportunity for independence and freedom in how I do my job.		0.90	3.54	.41

Statistic Values of CFA results						
χ^2	df	P-Value	RMSEA	CFI	TLI	SRMR
160.36	50	0.0000	0.14	0.93	0.91	0.05

Note. N= 110; *p < 0.05; M = Mean; SD = Standard deviation

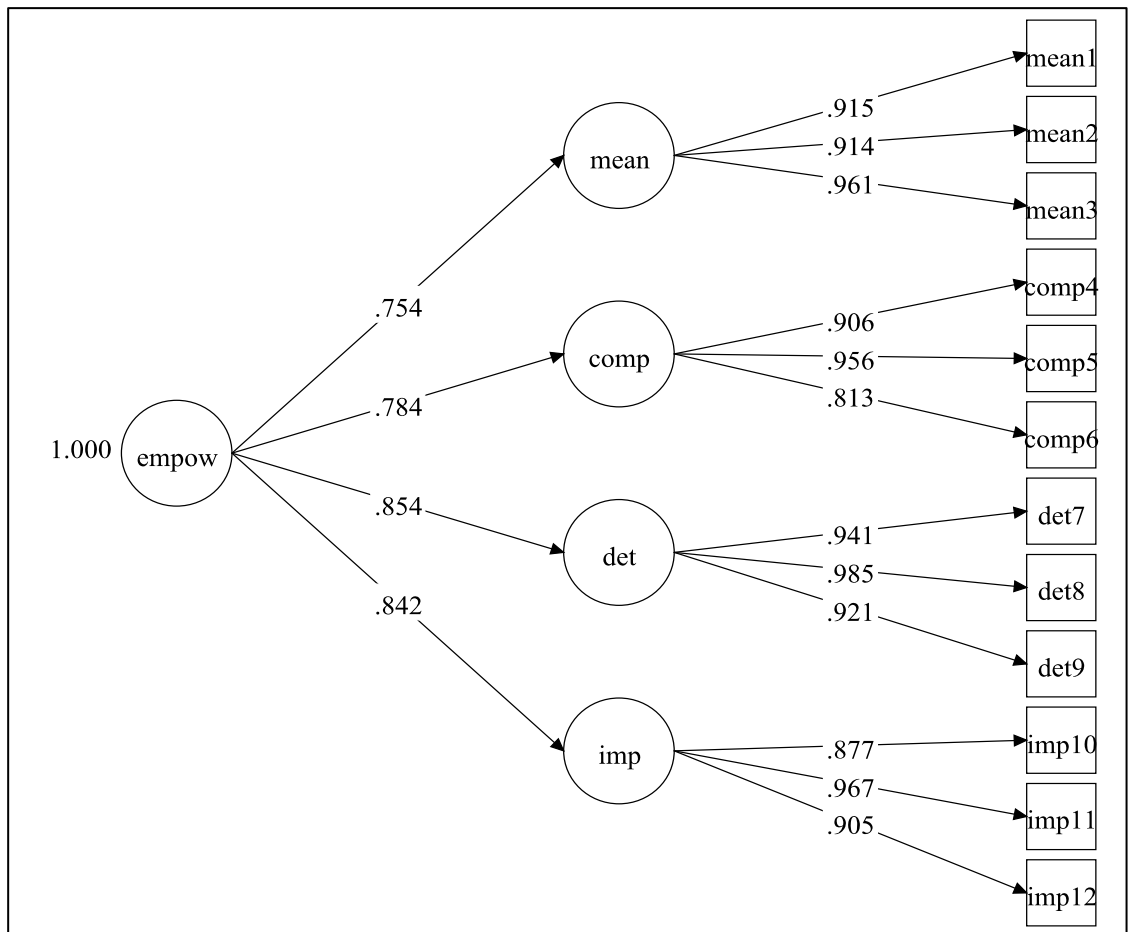


Figure 4.4 CFA Model Results of Psychological Empowerment

Note. Path coefficients are standardized model results STDYX from Mplus; mean=meaning, comp=competence, set=self-determination, imp=impact.

4.6.4 Confirmatory Factor Analysis Results for POS

POS was measured using six items. All the standardized factor loadings of the three dimensions were above 0.70 (Hair, 2010), ranging from .82 to .96, and all the t -values were significant at $p < 0.001$. Most of the goodness-of-fit indices suggested an acceptable fit ($\chi^2 = 9.994$; $df = 5$; CFI = .099; TLI = .98; RMSEA = .09; SRMR = 0.01), and the χ^2 / df was 1.99 which is lower than 2.5 indicate a good fit. Both the internal consistency and the convergent validity of the scale were high, where the composite reliability was above 0.9, and the AVE was 0.69. Table 4.17 and Figure 4.5 present the final measurement model of POS.

Table 4.17

CFA results of Perceived Organizational Support

Confirmatory Factor Analysis of POS		Factor Loadings	<i>M</i>	<i>SD</i>		
Perceived Organizational Support AVE = .69 CR = .96						
My organization takes pride in my accomplishment		0.82	4.92	0.71		
My organization really cares about my well-being at work		0.89	5.18	0.74		
My organization values my contributions to its well – being		0.95	5.15	0.68		
My organization appreciates my contribution		0.96	5.17	0.69		
My organization considers my aspirations and values		0.94	5.08	0.63		
My organization shows little concern for me		0.86	5.35	0.72		
Statistic Values of CFA results						
χ^2	df	P-Value	RMSEA	CFI	TLI	SRMR
9.994	5	0.0754	0.09	0.99	0.98	0.01

Note. $N = 110$; $*p < 0.05$; M = Mean; SD = Standard deviation

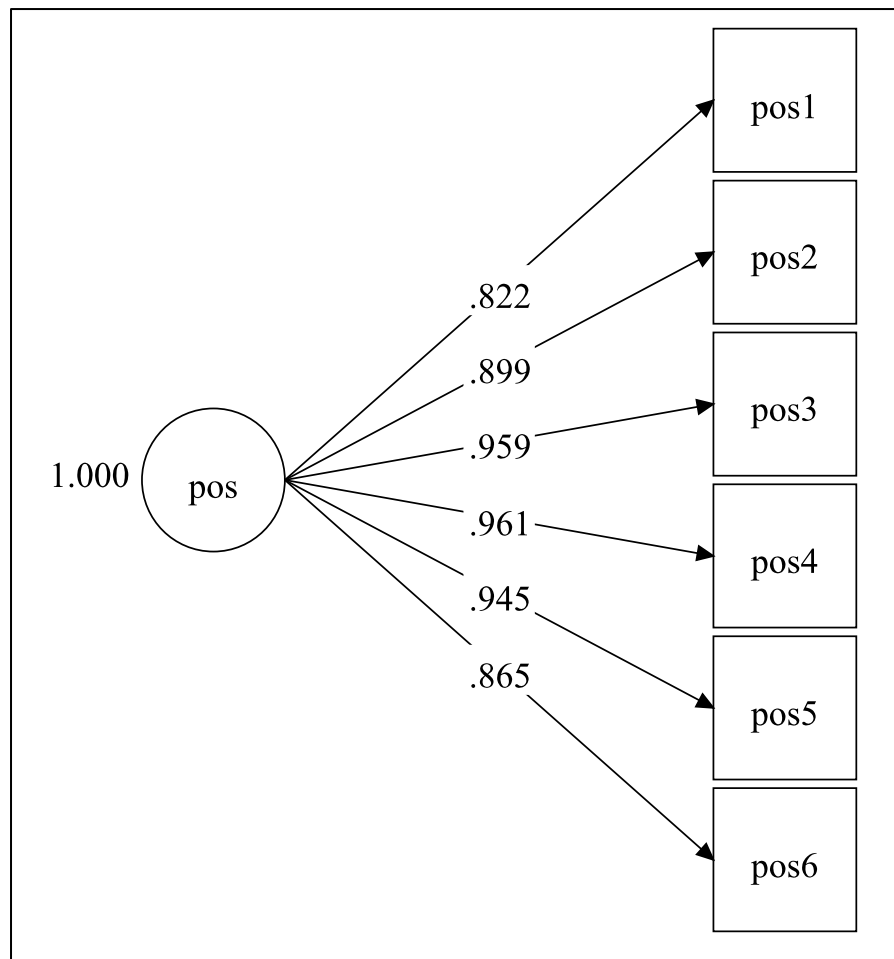


Figure 4.5 CFA Model Results of Perceived Organizational Support

Note. Path coefficients are standardized model results STDYX from Mplus; pos1-pos6 = Perceived Organizational Support

4.6.5 CFA Results for Organizational Performance

As shown in Table 4.18, organizational performance was measured using seven items. All the standardized factor loadings of the four dimensions were above 0.44 (Hair, 2010), ranging from .44 to .87, and all the t -values were significant at $p < 0.05$. Most of the goodness-of-fit indices suggested an acceptable fit ($\chi^2 = 33.211$; $df = 13$; CFI = .95; TLI = .92; RMSEA = .12; SRMR = 0.05). The organizational performance scale had high internal consistency where the composite reliability was above 0.7. The scale also had acceptable convergent validity where the AVE was .45. The seven-indicator model of organizational performance is illustrated in Figure 4.6

Table 4.18

CFA results of organizational performance

Confirmatory Factor Analysis of Organizational Performance				Factor Loadings	<i>M</i>	<i>SD</i>
Organizational Performance AVE = .45 CR = .85					3.85	.52
How would you compare the organization's performance over the past 3 years to that of other organizations that do the same kind of work?						
	Quality of product, service, or program	0.87	3.88	0.48		
	Development of new products, service, or program	0.80	3.87	0.50		
	Ability to attract essential employees	0.49	3.49	0.51		
	Ability to retain essential employees	0.64	3.47	0.59		
	Satisfaction of customers or clients	0.84	3.84	0.49		
	Relations between management and other employees	0.44	3.75	0.55		
	Relation among employees in general	0.47	3.75	0.54		
Statistic Values of CFA results						
χ^2	<i>df</i>	P-Value	RMSEA	CFI	TLI	SRMR
33.211	13	0.0016	0.12	0.95	0.92	0.05

Note. *N* = 110; All factor loadings are significant at $p < .001$ level; AVE= average variance extracted;

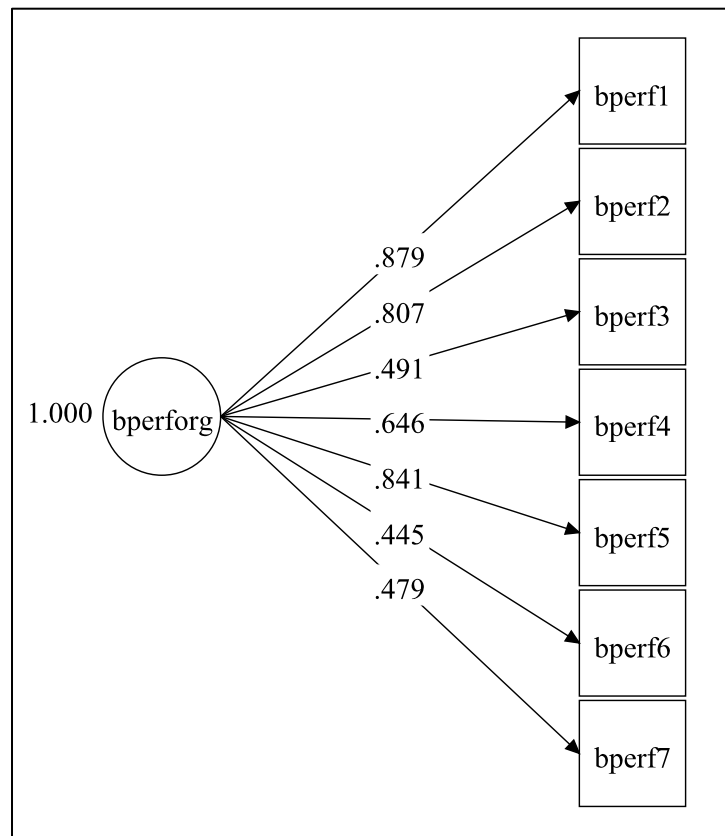


Figure 4.6 CFA Model Results Organizational Performance

Note. Path coefficients are standardized model results STDYX from Mplus; bperf= CEO self rated performance.

4.7 Item Parceling

Although the CFA results showed that all the latent factors to be used in this present study had acceptable fits to the data, the researcher is aware that there were too many measurement items to be used for the present sample size of 110. Thus, the researcher decided to use parceling techniques to reduce the requirements on item-sample size ratio (Little, Cunningham, Shahar, & Widaman, 2002). Specifically, parceling is used most commonly in multivariate research to enhance psychometric properties of the measurement models. A parcel can be defined as an aggregate-level indicator comprised of the average of two or more items. The researcher employed two specific techniques for each of the latent variables.

4.7.1 Multidimensional (Internal-Consistency Approach)

This study employed the internal-consistency approach to item parceling for multidimensional constructs, namely, CEOs' relationship-focused behaviors, HPWS and psychological empowerment. The approach has been used in previous HPWS and leadership research (e.g. Rogg, Schmidt, Shull, & Schmitt, 2001; Rosen, Levy, & Hall, 2006; Salanova, Agut, & Peiró, 2005; Smidts, Pruyn, & Van Riel, 2001). According to Little et al. (2002), the internal-consistency approach performs parcels by the facets, which acts as the categorizing criteria. Therefore, items from each facet are transformed to form the parcels. This approach provides keep clear the multidimensional nature of the construct in the model, improve the internal consistency of parcels and allows the unique element of a facet involved in other constructs (Little et al., 2002). The results for CEOs' relationship-focused leadership behaviors, HPWS and psychological empowerment are shown in Table 4.17, 4.18 and 4.19, respectively.

For CEOs' relationship-focused behaviors, the items were combined into two different parcels, namely, relating and communication and showing benevolence. All the standardized factor loadings of the two dimensions were above 0.50 (Hair, 2010), ranging from .66 to .74, and all the *t*-values were significant at $p < 0.001$. The fit indices indicated that this two-factor model fit the data well ($\chi^2 = 0.00$; $df = 0$; CFI = 1.00; TLI = 1.00; RMSEA = .00; SRMR = 0.00).

The scale had high internal consistency where the composite reliability was .66. The scale also had acceptable convergent validity where the AVE was .50. The two-indicator model of CEOs' relationship-focused behaviors is illustrated in Figure 4.7

Table 4.19

CFA results of CEOs' relationship-focused leadership behaviors

Factors	Measurement Items	Factor Loadings				
CEOs' leadership	<i>To what extent do the following statements describe your relationship with CEO?</i> AVE = .50; CR = .66					
	1. Relating and communication	0.74				
	2. Showing benevolence	0.66				
Statistic Values of CFA results						
χ^2	<i>df</i>	P-Value	RMSEA	CFI	TLI	SRMR
0.00	0	0.000	0.00	1.00	1.00	0.00

Note. $N = 110$; All factor loadings are significant at $p < .001$ level; AVE= average variance extracted; CR= composite reliability

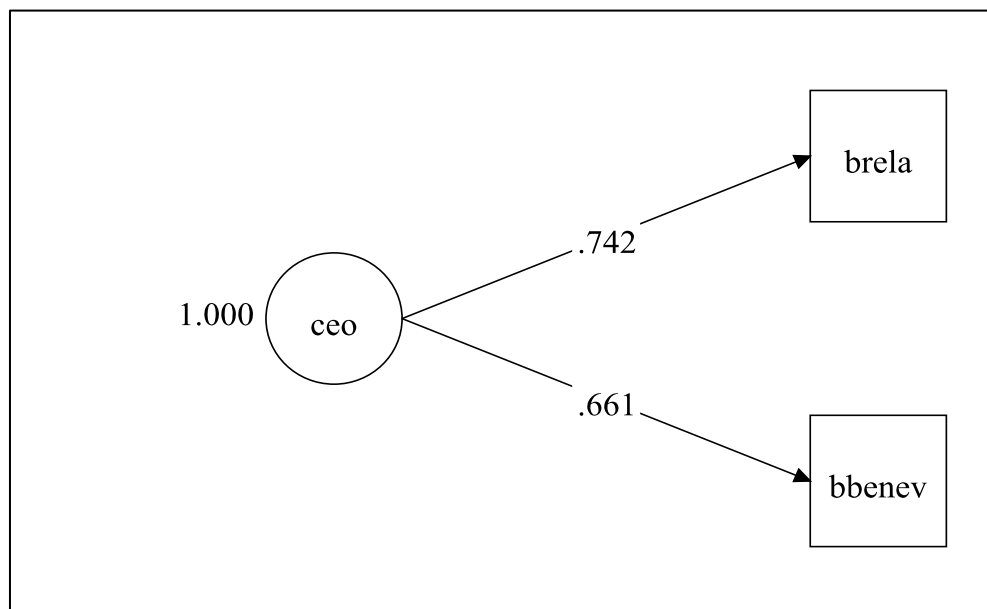


Figure 4.7 CFA Model Results CEOs' relationship-focused leadership behaviors

Note. Path coefficients are standardized model results STDYX from Mplus; brela, bbenev, and bautho = CEO self rated benevolence.

for HPWS, the items measuring HPWS were also combined to form three specific dimensions that are often used in HPWS research, namely, ability, motivation and opportunity (Gould-Williams, Mostafa, & Bottomley, 2013; Jiang et

al., 2012). Specifically, selection and training were combined to form the ability dimension; compensation, performance appraisals and career development were combined to form the motivation dimension; finally, employee participation, communications, and self-managed teams were combined to form the opportunity dimension.

The results showed that this two-factor model had an acceptable fit to the data ($\chi^2 = 0.00$; $df = 0$; CFI = 1.00; TLI = 1.00; RMSEA = .00; SRMR = 0.00). The χ^2/df value was 0.00, lower than 2.5 indicate a good fit. All the standardized factor loadings of the three dimensions were above 0.70 (Hair, 2010), ranging from .86 to .99, and all the t -values were significant at $p < 0.001$. The HPWS scale had high internal consistency where the composite reliability was 0.94. The scale also had acceptable convergent validity where the AVE was .85. The three-indicator measurement model of HPWS is illustrated in Figure 4. 8.

Table 4.20

CFA results of HPWS

Factors	Measurement Items	Factor Loadings				
High Performance Work System	<i>To what extent do the following statements describe your relationship with HPWS?</i>					
	AVE = 0.85; CR = .94					
	1. Ability	0.866				
	2. Motivation	0.910				
	3. Opportunity	0.999				
Statistic Values of CFA results						
χ^2	df	P-Value	RMSEA	CFI	TLI	SRMR
0.00	0	0.000	0.00	1.00	1.00	0.00

Note. $N = 110$; All factor loadings are significant at $p < .001$ level; AVE= average variance extracted; CR= composite reliability

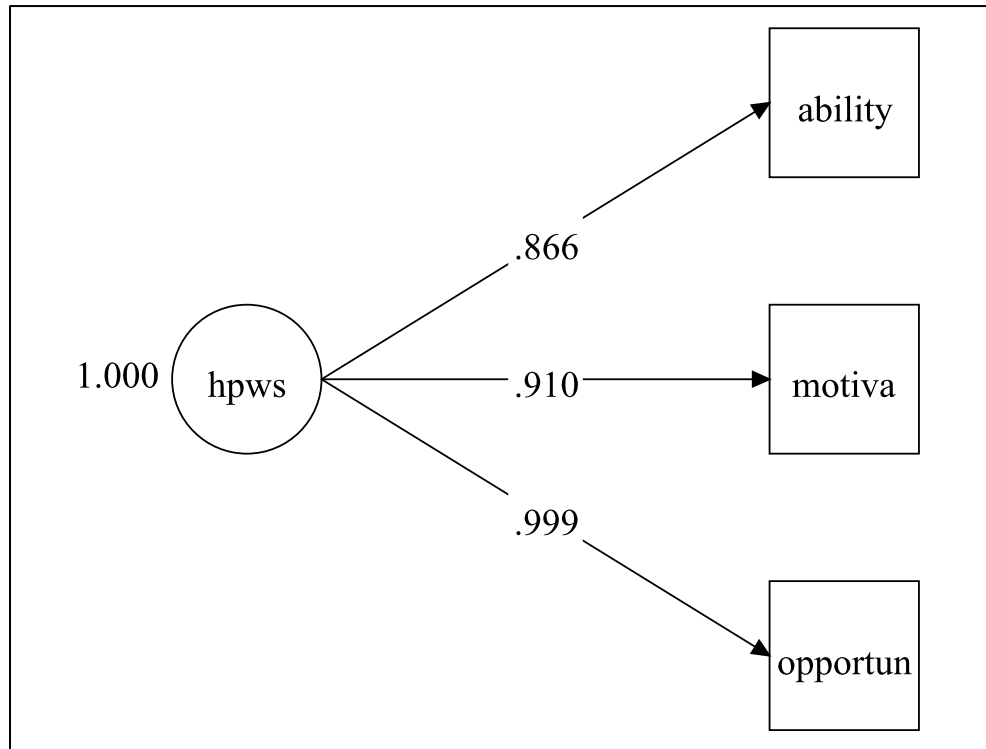


Figure 4.8 CFA Model Results HPWS

Note. Path coefficients are standardized model results STDYX from Mplus; ability, motiva = Employee self rated HPWS.

Finally, the items measuring psychological empowerment were combined to form four specific dimensions, namely, impact, meaning, competence and autonomy. The fit indices indicated that this two-factor model fitted the data quite well ($\chi^2 = 6.665$; $df = 2$; CFI = 0.97; TLI = 0.93; RMSEA = 0.14; SRMR = 0.02). However, it is acknowledged that the RMSEA was quite high, which, as discussed earlier, could have been caused by the small sample size. All the standardized factor loadings of the four dimensions were above 0.70 (Hair, 2010), ranging from .73 to .86, and all the t -values were significant at $p < 0.001$. The composite reliability was 0.87 and the AVE was .63. The four-indicator model of psychological empowerment is illustrated in Figure 4.9.

Table 4.21

CFA results of psychological empowerment

Factors	Measurement Items	Factor Loadings				
Psychological Empowerment	<i>To what extent do the following statements describe your relationship with Empowerment?</i> <i>AVE = .63; CR = .87</i>					
	• Meaning	0.73				
	• Competence	0.77				
	• Autonomy / Self determination	0.83				
	• Impact	0.86				
Statistic Values of CFA results						
χ^2	<i>df</i>	P-Value	RMSEA	CFI	TLI	SRMR
6.665	2	0.0359	0.14	0.97	0.93	0.02

Note. $N = 110$; All factor loadings are significant at $p < .001$ level; AVE= average variance extracted; CR= composite reliability

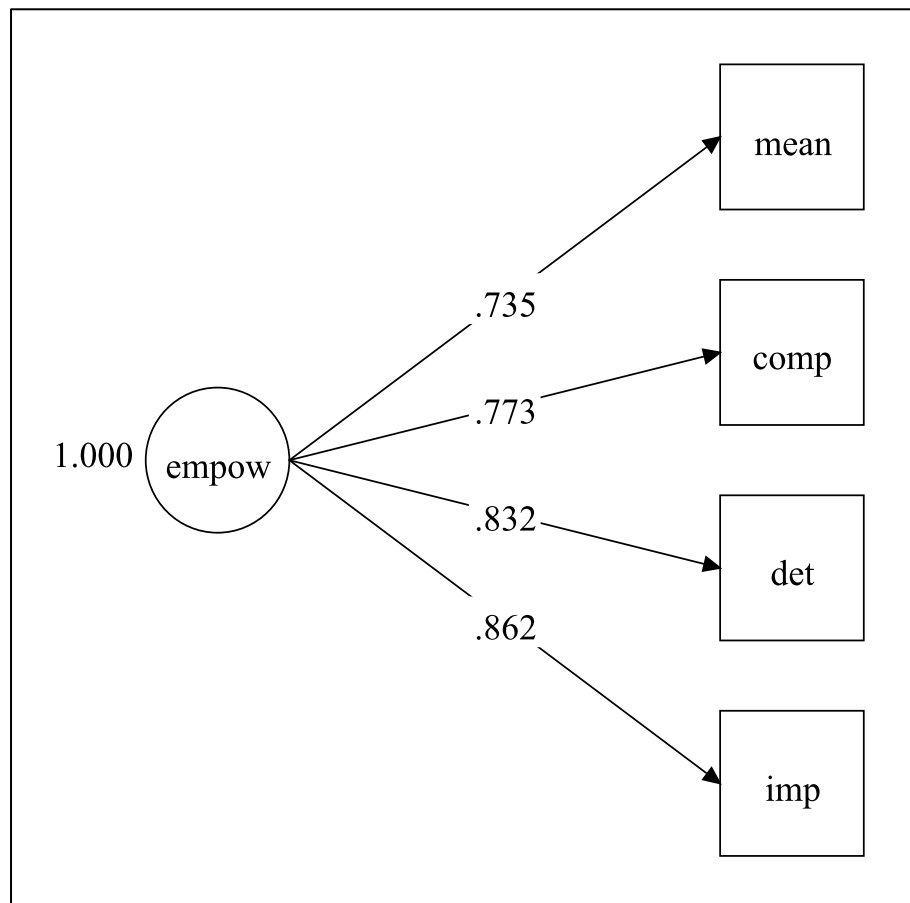


Figure 4.9 Confirmatory Analysis Model Results Psychological Empowerment

Note. Path coefficients are standardized model results STDYX from Mplus; mean=meaning, comp=competence, set=self-determination, imp=impact.

4.7.2 Unidimensional (Random Assignment)

As POS and organizational performance were unidimensional constructs, the researcher used the random assignment technique recommended by Little et al. (2002). This approach could be accomplished by assigning each item, randomly and without replacement, to one of the parcel groupings. Specifically, three and four groupings of items were created for POS and organizational performance, respectively.

As for POS, the six items were randomly assigned to form three parcels. As shown in Table 4.22, the fit indices indicated that this two-factor model fit the data well ($\chi^2 = 0.000$; $df = 0$; CFI = 1.00; TLI = 1.00; RMSEA = 0.00; SRMR = 0.00). All the standardized factor loadings of the three items were above 0.70 (Hair, 2010), ranging from .91 to .94, and all the t -values were significant at $p < 0.001$. The perceived organizational support scale had high internal consistency where the composite reliability was 0.95. The scale also had acceptable convergent validity where the AVE was .87. The three-indicator model of the perceived organizational support is illustrated in Figure 4.10.

Table 4.22

CFA results of Perceived Organizational Support

Factors	Measurement Items	Factor Loadings				
Perceived Organizational Support	<i>To what extent do the following statements describe your relationship with POS? AVE =0.87; CR =.95</i>					
	• POSnew1	0.91				
	• POSnew2	0.95				
	• POSnew3	0.94				
Statistic Values of CFA results						
χ^2	df	P-Value	RMSEA	CFI	TLI	SRMR
0.000	0	0.000	0.00	1.00	1.00	0.00

Note. $N = 110$; All factor loadings are significant at $p < .001$ level; AVE= average variance extracted; CR= composite reliability

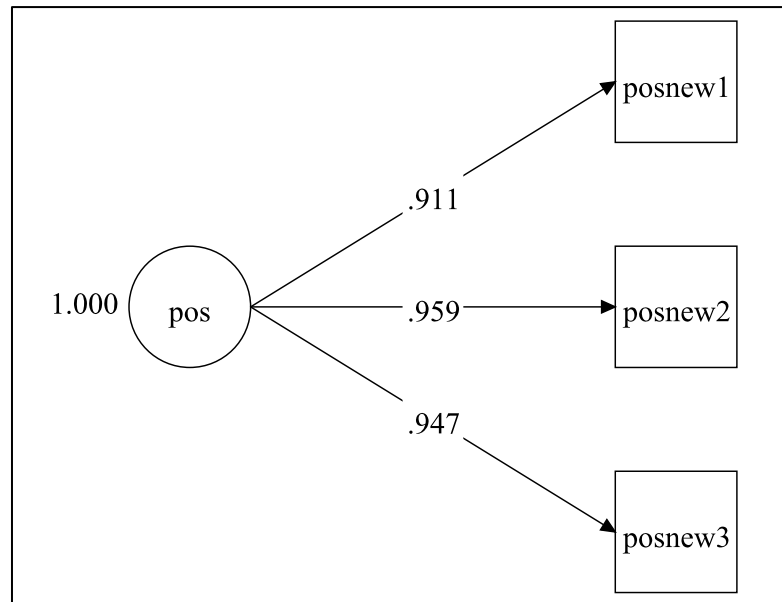


Figure 4.10 Confirmatory Analysis Model Results of Perceived Organizational Support

Note. Path coefficients are standardized model results STDYX from Mplus

As for organizational performance, the seven items measuring organizational performance were randomly assigned to create three parcels (with one item left intact). As shown in Table 4.19 the fit indices indicated that this two-factor model fit the data well ($\chi^2 = 1.688$; $df = 2$; $\chi^2/df = 0.84$; CFI = 1.00; TLI = 1.00; RMSEA = 0.00; SRMR = 0.01). All the standardized factor loadings of the four items were 0.50 (Hair, 2010), ranging from .51 to .94, and all the t -values were significant at $p < 0.001$. The scale had high internal consistency where the composite reliability was 0.80, and the AVE was .51. The four-indicator model is illustrated in Figure 4.11.

Table 4.23

CFA results of organizational performance

Factors	Measurement Items	Factor Loadings				
Organizational Performance	<i>To what extent are you satisfied with the following previous organizational performance indicators?</i> AVE = .51 ; CR = .80					
	• bPerfn1	0.51				
	• bPerfn2	0.79				
	• bPerfn3	0.94				
	• bPerfn4	0.55				
Statistic Values of CFA results						
χ^2	df	P-Value	RMSEA	CFI	TLI	SRMR
1.688	2	0.4299	0.00	1.00	1.00	0.01

Note. $N = 110$; All factor loadings are significant at $p < .001$ level; AVE= average variance extracted; CR= composite reliability

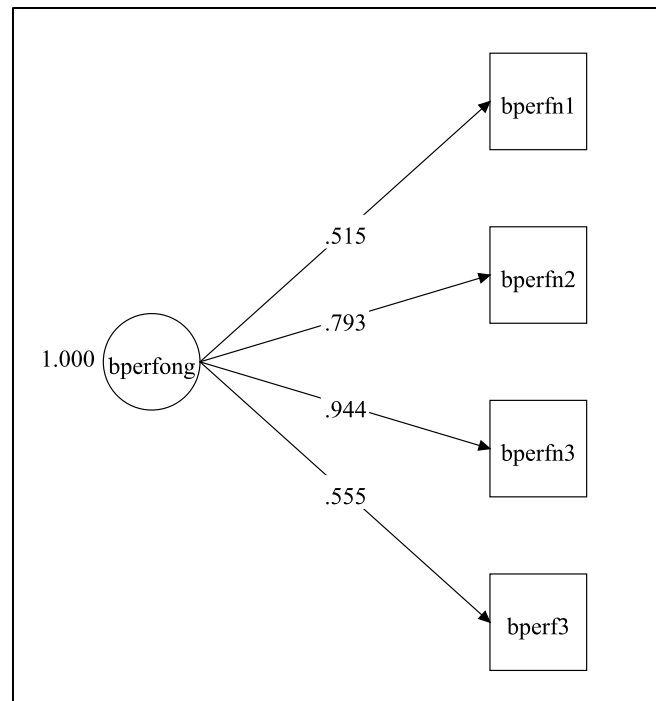


Figure 4.11 Confirmatory Analysis Model Results of Organizational Performance

Note. Path coefficients are standardized model results STDYX from Mplus; bperfn1 – bperfn3 = CEO self rated organizational performance.

4.8 CFA Results for the Overall Measurement Model

The parceled items obtained from the procedures discussed above were used as the basis for constructing the overall measurement model. Specifically, the indicators retained from the individual variables-CEOs' relationship-focused leadership behaviors (comprising two items), HPWS (comprising three items), POS (comprising three items), psychological empowerment (comprising four items), and organizational performance (comprising four items)-were used to construct the overall measurement model.

A series of confirmatory factor analyses (CFAs) were conducted to evaluate the proposed 5-factor model. As shown in Table 4.23, this model fitted the data well ($\chi^2 = 190.85$, $df = 94$, $p < .001$; CFI = .93; TLI = .91; SRME = 0.05; RMSEA = .09, Model 1) and was significantly better than other alternative models, suggesting that the proposed 5-factor model provides the best acceptable fit to the data.

The χ^2/df value was 2.03, which was lower than 3.0, indicating a good fit. TLI was 0.91 and CFI was 0.93, which were higher than the acceptable values of 0.9 (Hair et al., 2010), whereas RMSEA was 0.09. Although RMSEA was somewhat higher than the general acceptable cut off value of 0.08, past research indicates that this could be a result of sample size, which is quite low in the case of this present research (e.g. Pornprasertmanit, Lee, & Preacher, 2014). Furthermore, it has been indicated that RMSEA of 0.08 – 0.10 is acceptable (Hair et al., 2010; MacCallum et al., 1996).

Table 4.24

Comparisons of measurement models

Model	χ^2	df	RMSEA	CFI	TLI	SRMR	Model	$\Delta\chi^2/\Delta df$
1. Five-factor	190.85	94	0.09	0.93	0.91	0.05		
2. Four-factor (1)	371.77	98	0.16	0.80	0.76	0.06	2vs.1	180.915/4**
3. Four-factor (2)	309.19	98	0.14	0.85	0.81	0.07	3vs.1	118.336/4**
4. Three-factor (1)	401.20	101	0.16	0.78	0.75	0.12	4vs.1	210.346/7**
5. Three-factor (2)	418.62	101	0.17	0.77	0.73	0.07	5vs.1	227.767/7**
6. One-factor	594.31	104	0.21	0.65	0.60	0.12	6vs.1	403.46/10**

Note. $N = 110$; ** $p < 0.001$; Five-factor (Hypothesized); Four-factor (1) (HPWS and POS merged); Four-factor (2) (HPWS and Empowerment merged); Three-factor (1)(POS, Empowerment and

Organizational performance merged); Three-factor (2) (HPWS, POS and Empowerment merged); One-factor (All constructs merged)

In validate and test the measurement model is based on reflective measurement, namely, that an overarching construct predicts the factors that comprise model (DeVellis, 2016).

In assessing the convergent validity of the measurement items, the item loadings on their respective constructs were examined (Hulland, 1999). As shown in Table 4.24 and Figure 4.11, the CFA results indicated that all the standardized factor loadings were above 0.50 (Hair, 2010), ranging from .52 to .98. Furthermore, the AVEs ranged from .50-.87, which exceeded the recommended value of .50 (Fornell & Larcker, 1981). In addition, the CRs of constructs also ranged from .66 to .95, exceeding the recommended value of .60 (Bagozzi & Yi, 1988). All the *t*-values were significant at $p < 0.001$.

Table 4.25

CFA results of the overall measurement model

Factors	Measurement Items	Factor Loadings
CEO	<i>To what extent do the following statements describe your relationship with CEO? AVE =.50; CR =.66</i>	
	• Relating and communication	0.78
	• Showing benevolence	0.62
High Performance Work System	<i>To what extent do the following statements describe your relationship with HPWS? AVE =0.86; CR =.94</i>	
	• Ability	0.87
	• Motivation	0.93
	• Opportunity	0.98
Perceived Organizational Performance	<i>To what extent do the following statements describe your relationship with POS? AVE =0.87; CR =.95</i>	
	• POSnew1	0.91
	• POSnew2	0.96
	• POSnew3	0.93
Psychological Empowerment	<i>To what extent do the following statements describe your relationship with Empowerment? AVE =.63; CR =.87</i>	
	• Meaning	0.78
	• Competence	0.75
	• Autonomy / Self determination	0.84

Factors	Measurement Items	Factor Loadings				
	• Impact	0.82				
Organizational Performance	<i>To what extent are you satisfied with the following previous organizational performance indicators?</i> <i>AVE =0.51; CR =.80;</i>					
	• bPerfn1	0.52				
	• bPerfn2	0.80				
	• bPerfn3	0.92				
	• bPerfn4	0.56				
Statistic Values of CFA results						
χ^2	<i>df</i>	P-Value	RMSEA	CFI	TLI	SRMR
190.851	94	0.000	0.90	0.93	0.91	0.05

Note. $N = 110$; All factor loadings are significant at $p < .001$; AVE= average variance extracted; CR= composite reliability

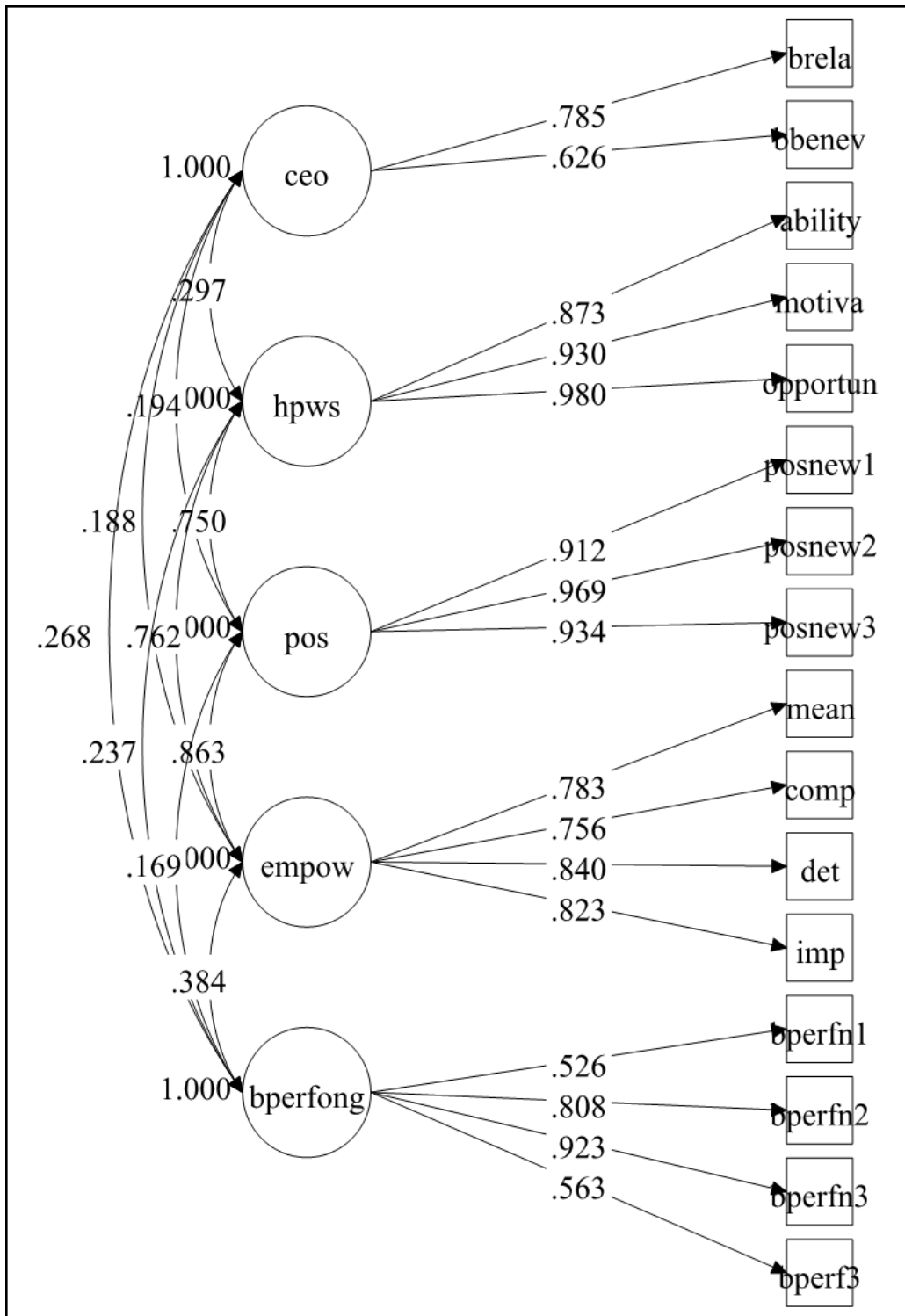


Figure 4.12 CFA Results for the Overall Measurement Model

Note. Path coefficients are standardized model results STDYX from Mplus

4.9 Bivariate Inter-Factor Correlations of the Constructs

Given the fit of the measurement models using aggregated (i.e., HPWS, POS, and psychological empowerment) and organizational-level constructs (i.e., CEOs relations-based leadership and organizational performance), the researcher then examined the bivariate inter-factor correlations of the constructs ($N = 110$). As indicated in Table 4.25, the results showed the expected direction of associations among the constructs. HPWS was related significantly to CEOs' relationship-focused leadership ($r = .244, p < .05$). POS was related significantly to HPWS ($r = .732, p < .01$). Psychological empowerment was related significantly to HPWS ($r = .706, p < .01$) and also POS ($r = .786, p < .01$). Organizational performance was related significantly to CEOs' relationship-focused leadership ($r = .314, p < .01$), HPWS ($r = .250, p < .01$), POS ($r = .180, p > .05$) and psychological empowerment ($r = .332, p < .01$). Overall, correlation results suggest that all the study variables had significant and positive associations with each other (i.e., r values ranging from .180 to .786).

Table 4.26

Descriptive Statistics, Correlations, and Reliability Estimates

Variables	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. CEO Leadership	4.30	.39	(.656)				
2. HPWS	3.71	.36	.244*	(.946)			
3. POS	5.15	.65	.156	.732**	(.957)		
4. Empowerment	3.74	.32	.128	.706**	.786**	(.872)	
5. Org Performance	3.80	.53	.314**	.250**	.180	.332**	(.785)

Note. $N = 110$; * $p < 0.05$; ** $p < 0.01$; Cronbach's alphas reported in parentheses; CEO = CEOs' relationship-focused leadership behaviors; Empowerment = Psychological Empowerment; HPWS = High Performance Work System; POS = Perceived Organizational Support; Org Performance = Organizational Performance

4.10 Structural Models

As strong support was found for the validity and reliability of the measurement instruments, the hypothesized structural model was examined. Note that all structural paths were freely estimated (i.e., a saturated model). The results of

mediation effects test include total, direct, and indirect effects and confidence intervals (CIs) are also presented.

4.10.1 SEM Path Coefficient Testing

As shown in Table 4.26 and Figure 4.12, five out of ten paths were significant in the expected directions. Specifically, CEOs' relationship-focused leadership behaviors had a direct positive relationship with HPWS ($\beta = 0.29, p < .05$) but not with POS ($\beta = -0.03, p > .05$) or psychological empowerment ($\beta = -0.02, p > .05$) or organizational performance ($\beta = 0.23, p > .05$). This finding fails to provide support to Hypothesis 4. HPWS had a positive relationship with POS ($\beta = 0.75, p < 0.001$) and also psychological empowerment ($\beta = 0.27, p < 0.05$) but not with organizational performance ($\beta = 0.17, p > .05$). This finding fails to provide support to Hypothesis 1. POS had a positive relationship with psychological empowerment ($\beta = 0.66, p < .001$) but not with organizational performance ($\beta = -0.63, p > .05$). Finally, psychological empowerment had a positive relationship with organizational performance ($\beta = 0.94, p < 0.05$).

Table 4.27

SEM Path Coefficient and its significance

Constructs	Constructs	Estimate	<i>z</i>	p-value
CEO Leadership	→ HPWS	0.29	2.15	0.032*
CEO Leadership	→ POS	-0.03	-0.27	0.790
CEO Leadership	→ Psychological Empowerment	-0.02	-0.22	0.830
CEO Leadership	→ Organizational Performance	0.23	1.06	0.290
HPWS	→ POS	0.75	6.08	0.000***
HPWS	→ Psychological Empowerment	0.27	2.02	0.043*
HPWS	→ Organizational Performance	-0.08	-0.38	0.701
POS	→ Psychological Empowerment	0.66	4.54	0.000***
POS	→ Organizational Performance	-0.63	-1.83	0.066
Empowerment	→ Organizational Performance	0.94	2.45	0.014*

Note. $N = 110$; * $p < 0.05$; ** $p < 0.01$, *** $p < 0.001$; CEO = CEOs' relationship-focused leadership behaviors; Empowerment = Psychological Empowerment; HPWS = High Performance Work System; POS = Perceived Organizational Support; Org Performance = Organizational Performance

As for the control variables (firm size, firm age, ownership, and business sector), the researcher found that none of them were significant predictors of business performance and thus were removed from further analysis.

4.10.2 Indirect Effect Testing

To examine the indirect effects, the researcher used a bootstrap procedure (Preacher & Hayes, 2008). This procedure approximates the sampling distribution to obtain confidence intervals, which provide more accurate results than using standard techniques involving Sobel tests (Hayes & Preacher, 2010). Specifically, a bootstrapped standard errors based on 10,000 resampling were used. As shown in Table 4.27, the results showed that the indirect effect of HPWS on organizational performance via POS was non-significant (-0.481; 95% CI [-0.966; -0.005]), thus failing to provide support to Hypothesis 2. Furthermore, the indirect effect of HPWS on organizational performance via psychological empowerment was also non-significant (0.257; 95% CI [-0.048; 0.562]), thus failing to provide support to Hypothesis 3. In addition, the indirect effect of CEOs' relationship-focused leadership behaviors on organizational performance via HPWS was non-significant (-0.025; 95% CI [-0.221; 0.079]), thus failing to provide support to Hypothesis 5. However, the indirect of CEOs' relationship-focused leadership behaviors on organizational performance via HPWS, POS, and psychological empowerment was the statistically significant (0.147; 95% CI [0.031; 0.514]), thus providing support for Hypothesis 6.

Table 4.28

Total, Direct, and Indirect Effects

Hypothesized paths	<i>Total</i>	<i>Direct</i>	<i>Indirect</i>	<i>CI</i> s	
HPWS → POS → Org Performance			-0.481	-0.966	0.005
HPWS → Empowerment → Org Performance			0.257	-0.048	0.562
CEO → HPWS → Org Performance			-0.025	-0.221	0.079
CEO → HPWS → POS → Empowerment → Org Performance	0.147			0.031	0.514
CEO → Org Performance	0.278	0.245		-0.098	0.309

Note. $N = 110$; *CI*s = 95% Confidence Intervals; CEO = CEOs' relationship-focused leadership behaviors; Empowerment = Psychological Empowerment; HPWS = High Performance Work System; POS = Perceived Organizational Support; Org Performance = Organizational Performance

As shown in Figure 4.12, the results revealed that the theoretical model could explain about 8 percent of the variance in HPWS ($R^2= 0.08$), 56.3 percent of the variance in POS ($R^2= 0.563$), and 77.5 percent of the variance in psychological empowerment ($R^2= 0.775$) and finally, 30 percent of the variance of organizational performance ($R^2= 0.30$). These findings are quite meaningful in practice, given that the study variables were collected from different sources (both the CEOs and employees).

Table 4.28, which summarize the study findings with respect to the six study hypotheses. Overall, only Hypothesis 6, a central hypothesis of the present study, was supported, which further lends credence to the proposed sequential mediation model. These findings emphasize the important role of CEOs' relationship-focused leadership behaviors in predicting the adoption of HPWS as well as the roles of employee POS and psychological empowerment in explaining the HPWS-organizational performance relationship. Specifically, HPWS, POS, and psychological empowerment sequentially mediated the relationship between CEOs' relationship-focused leadership behaviors and organizational performance.

Table 4.29

Summary of Hypotheses testing results

	Hypothesized Relationship	Result
H ₁	HPWS → Org Performance	Not Supported
H ₂	HPWS → POS → Orga Performance	Not Supported
H ₃	HPWS → Empowerment → Organizational Performance	Not Supported
H ₄	CEO → Org Performance	Not Supported
H ₅	CEO → HPWS → Organizational Performance	Not Supported
H ₆	CEO → HPWS → POS → Empowerment → Org Performance	Supported

Note. CEO = CEOs' relationship-focused leadership behaviors; Empowerment = Psychological Empowerment; HPWS = High Performance Work System; POS = Perceived Organizational Support

4.11 Summary

In this chapter, the proposed measurement and theoretical models were tested using structural equation modeling (SEM). The results showed that CEOs' relationship-focused leadership behaviors and HPWS are indirectly linked to firm performance via the roles of employees' perceptions (i.e., POS) and motivation (i.e., psychological empowerment)

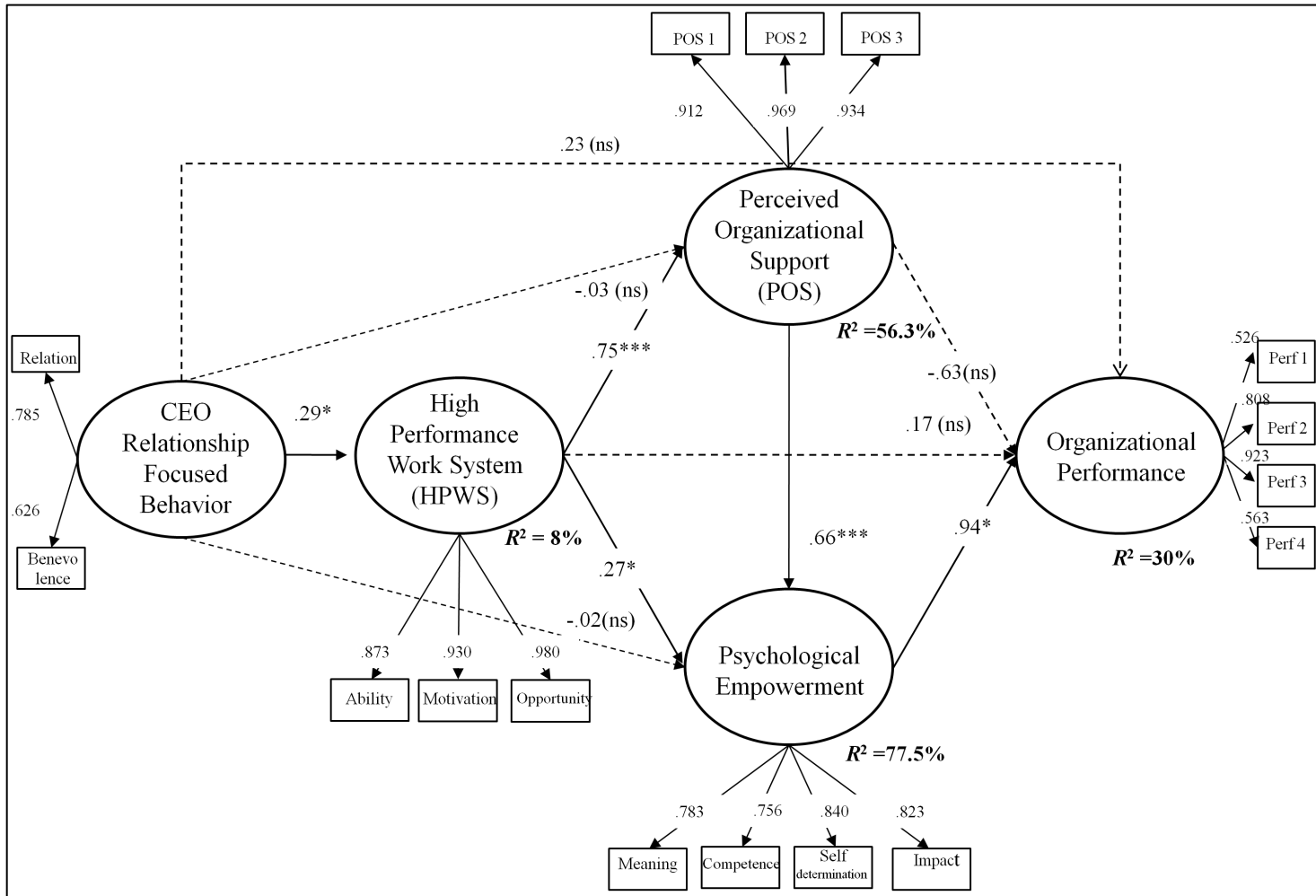


Figure 4.13 HPWS, POS, and psychological empowerment sequentially mediating the relationship between CEO leadership and organizational performance

CHAPTER 5

DISCUSSION

This chapter incorporates the extant literature to discuss the results of the current study. This chapter is divided into four main sections. The first section summarizes the key findings with respect to the study objectives and hypotheses. The discussion section provides theoretical explanations for the findings. Next, the contributions of the present research and the implications for practitioners are discussed. The final section provides a discussion of the limitations of the current study and recommendations for further research.

5.1 Key Findings

To recapitulate what was stated in Chapter 1, the major objectives of this present research were (1) to examine the characteristics of HPWS in the context of SMEs in the southern region of Thailand covering 5 provinces including Surat Thani, Songkhla, Phattalung, Chumphon and Nakhon Si Thammarat) and the extent to which it is actually implemented; (2) to examine the association between HPWS and organizational performance; (3) to examine the extent to which SMEs' owners' leadership behaviors influence the adoption and implementation of HPWS; and (4) to examine the mediating roles of perceived organizational support (POS) and psychological empowerment in explaining the effect of HPWS organizational performance. The study contributes to HRM and leadership literatures in several respects. Specifically, the current research provides a novel insight into the roles of relationship-focused CEO leadership behaviors among Thai SMEs sector and the psychological mechanisms that underlie the impact of HPWS. The findings illustrate that SMEs can better equip themselves for sustainable growth through the creation of position work environment.

5.2 Discussion

5.2.1 The Presence of HPWS

The descriptive statistics showed that SMEs in the southern region of Thailand had implemented the HPWS at a high level. On average, SMEs' utilization of HPWS is about $M = 3.70$, $SD = .36$. In other words, a score implies a more extensive utilization of HPWS. The selective staffing was used most ($M = 3.90$, $SD = .39$), followed by self-managed teams ($M = 3.84$, $SD = .48$), and intensive training ($M = 3.79$, $SD = .38$). However, rewards and career development were least adopted in SMEs organization ($M = 3.51$, $SD = .49$ and $M = 3.52$, $SD = .42$, respectively). However, although the mean values indicate that these practices are implemented quite well by the SMEs, it should be acknowledged that they fell in the range of 3.00-4.00, which indicate a gap for further improvement, especially in the areas of rewards and career development. As for career development practices, it seems that employees in SMEs have fewer opportunities to be internally promoted and to be fairly rewarded when compared with large enterprises SMEs. Thus, SME owners should reconsider their internal promotion strategies and also explore other proper compensation methods including overtime pay, annual bonuses in order to motivate employees and increases their level of enthusiasm. However, it should also be acknowledged that SMEs may have limited resources that could be allocated for these purposes; thus, it is proposed that SMEs may find it useful to engage in other forms of motivational practices to help compensate for the perceived lack of rewards and career development opportunities. This may include a consideration of job enlargement or job enrichment so that employees could feel motivated to perform their work roles.

It was also interesting to observe that the overall mean score of HR practices in small-sized enterprise ($M = 3.69$, $SD = .54$) were slightly higher than medium-sized enterprise ($M = 3.63$, $SD = .62$), except for selective staffing practices. Statistically, the small-sized enterprises have utilized two practices including self-managed teams and employee participation to a slightly greater degree than the medium-sized enterprises. Indeed, in small businesses, there are fewer rules and

perhaps a more flexible managerial systems than those of medium businesses (Aloulou & Fayolle, 2005). Furthermore, leaders in small business are likely closer to their employees and thus are more involved in employees' daily operations than those in medium- or large-sized businesses. In organizations with few employees, it is also easier for CEOs to allow their employee to express opinions and make independent decision in the process of work. Thus, in terms of self-managed teams' practices, employees in small business could perceive more autonomy with their work roles and day-to-day activities.

5.2.2 The Proposed Theoretical Model

The result showed that CEOs' relationship-focused leadership behaviors had a direct positive relationship with HPWS ($\beta= 0.29, p<.05$). HPWS also had a positive relationship with POS ($\beta = 0.75, p < 0.001$) and also psychological empowerment ($\beta=0.27, p < 0.05$). POS also had a positive relationship with psychological empowerment ($\beta=0.66, p<.001$), whereas psychological empowerment had a positive relationship with organizational performance ($\beta= 0.94, p<0.05$). These results showed that the indirect effect of CEOs' relationship-focused leadership on organizational performance via the roles of HPWS, POS and psychological empowerment was statistically significant (.147; 95% CI [.031; .514]). CEO leadership could explain about 8 percent of the variance in HPWS ($R^2= 0.08$), 56.3 percent of the variance in POS ($R^2= 0.563$), 77.5 percent of the variance in psychological empowerment ($R^2= 0.775$) and 30 percent of the variance of organizational performance ($R^2= 0.30$). The following sections discuss findings in light of the study hypotheses.

The Role of CEO Leadership

In this present research, the researcher proposed that SMEs with higher level of CEOs' relationship-focused leadership behaviors will be more likely to adopt and implement HPWS, in turn leading to employee perceptions and motivation, and ultimately organizational performance among SMEs operating in the south of Thailand. Overall, the findings showed that CEOs' relationship-focused leadership behaviors led to the adoption of HPWS. Meanwhile, HPWS was not directly related to organizational performance. The results supported the hypothesis

that the relationship between HPWS and organizational performance is likely indirect and that it could be mediated by POS and psychological empowerment.

The current findings provided evidence that CEOs' relationship-focused leadership behaviors could result in the adoption of HPWS. Why is this the case? The researcher believes that CEOs who care about developing relationship with their employees are likely more aware of the value to be gained from HR practices (Wang et al., 2011; Xi et al., 2016). The current findings also indicated that CEOs' relationship-focused leadership behaviors had an effect on organizational performance through the mediating roles of POS and psychological empowerment. This is consistent with a study conducted in China (Wang et al., 2011), which showed that the relationship-focused behaviors of CEOs are related to employees' attitudes and, via these attitudes, they promoted behavior among employees that, in turn, lead to organizational performance. There is evidence that, the CEO's relationship-focused behaviors can motivate and encourage employees to perform well, and this ultimately results in superior organizational performance. Indeed, when employees perceive full support from their employer, it could in turn positively impact their individual performance, which is reciprocal in nature. This rationale is supported by previous studies which found that CEO's relationship-focused behaviors are viewed as motivators (Hart & Quinn, 1993) that lead to positive attitudes of employees towards organizations (Xi et al., 2016). CEOs should pay more attention to the role of POS as a powerful driver of the social exchange process that could in turn lead to employees' psychological empowerment (Bogler & Nir, 2012; Ertürk & Vurgun, 2015).

The Role of HPWS

The finding also showed that HPWS was not positively related to the organizational performance. This aligns with the view that employee attitudes are a significant element in the link between HPWS and organizational performance (Becker, Huselid, Pickus, & Spratt, 1997; Heffernan & Dundon, 2016). The study results are consistent with the basic rationales of social exchange theory (Blau, 1964) which suggests that HPWS influence employees to feel that their employers care and are supportive of them and generates a sense regarding the extent to which the organization appreciates their contribution and cares about their well-being.

Employees with a heightened sense of POS exhibit increase in their role performance (Rhoades & Eisenberger, 2002). Furthermore, when CEOs implement HPWS in their organizations, it could lead to higher levels of POS, which in turn enhances employee's sense of self-determination and perceived impact of work in the organization by inspire employee empowerment that they get from doing meaningful work and self-efficacy in performing work well to fulfill their organizational tasks (Spreitzer, 1995). Thus, the findings suggests that when employees feel organizationally supported, they will become more confident that they have skills and ability (self-efficacy) and authority (impact) to complete organizational tasks.

In sum, based on the results of the research, it can be concluded that HPWS could predict organizational performance among SMEs in the southern region of Thailand. SMEs in this current sample appeared to have implemented the HPWS at a high level. The HPWS practices in terms of selective of staffing, self-managed teams, and intensive training were utilized most. However, rewards and career development were least adopted in SMEs organization. Furthermore, leadership styles of CEOs in SMEs shape HPWS adoption and implementation. Specifically, SMEs led by CEOs with higher level of relationship-focused leadership behaviors (Wang et al., 2011; Xi et al., 2016) are more likely to adopt HPWS in their organization, in turn leading to higher levels of perceived organization support (POS) and psychological empowerment, and ultimately higher levels of organizational performance. Several important contributions emerged from these study findings.

5.3 Implications of the Study

The findings that emerged from this present study have several implications and contributions.

5.3.1 Theoretical Implication

First and foremost, the findings from the present study provide additional support to the notion that HPWS may be a successful endeavor for both large and small business organizations (Becker & Huselid, 2006). Although Bacon and Hoque (2005) explained that the adoption HPWS in SMEs is likely limited to

informal practices, the present study argues that it is a matter of degree rather than a discrete difference that separates the existence or non-existence of formal HRM practices. Indeed, Kroon et al. (2013) indicated that even within a population of small firms, there tends to be a considerable variation in the adoption of HPWS. Furthermore, as business firms grow bigger, it becomes almost inevitable for them to adopt some forms of formal HRM practices and perhaps to hire specialists (e.g., HR managers) to run the HR functions. This finding is consistent with Gray and Mabey (2005), who argued that small firms that adopt more formal HRM practices are more likely to achieve higher growth and will also be better positioned to reap the performance benefits in the future.

Second, to the best of the authors' knowledge, this present study is among the first to examine the role of CEOs' leadership styles in predicting the adoption of HPWS. Whereas past studies suggest that CEOs (i.e., their HRM knowledge) could play a critical role in the design of HRM practices in small firms (Qiao, Wang, & Wei, 2015), none of the previous study has actually examined the effect of CEO leadership on HPWS. Consistent with the upper echelon perspective, the study findings showed that CEOs' relationship-focused (e.g., showing concern and care for employees, caring about employees' welfare, providing support) could directly influence the adoption of HPWS. This finding is consistent with previous research which indicates that the relational capital (e.g., relationships among management and employees) tends to play a particularly strong role in family-owned firms (Pittino et al., 2016).

Third, the present study provides an important insight into the role of employee's psychological empowerment. This finding indicates that psychological empowerment, which is enhanced by CEOs' relationship-focused leadership, inspires employee performance. When HPWS had been implemented, employees should be supported in order to reach superior organizational performance. The study indicates that perceptions of psychological empowerment that results from the presence of HPWS could influence employees' behavior and ultimately, firm performance.

5.3.2 Practical Implications

This research provides several useful implications for policy related to the development of SMEs. Although SMEs constitute a major source of employment and generate significant domestic and export earnings, they face a number of inherent difficulties in developing their own capacities to meet the demands of the changing business environment. As indicated by The Office of SMEs Promotion (2017), owners of family-owned businesses tend to lack leadership and management skills as well as the HRM knowledge that is required to attract and retain skilled employees. Although it is true that owners of SMEs usually utilize their personal work experiences to start their own businesses, the hard reality is that when their businesses grow bigger, good management skills become indispensable. Thus, it is important for the government to equip SMEs (and their top leaders) with necessary resources and skills that could be used to meet these inherent challenges. Continuous training (i.e., a provision of leadership skills and HRM practices) and building network or communities of practices among SMEs that would allow them to access and share valuable HRM knowledge and experiences could be an effective way to overcome these challenges.

Despite the lack of financial resources, in order to motivate employees, owners of small firms should focus on other HR approaches to compensate for the lack of career advancement opportunities such as job enlargement, job enrichment and job rotations (Delaney & Huselid, 1996; Hornsby & Kuratko, 2003; Wood & Wall, 2007). Flexible-working conditions for employees (i.e. term-time working, flexible working hours, flexible scheduling, and flexible benefits) may also compensate for the lack of formal HPWS practices. A greater degree of flexibility as a way of increasing productivity particularly and extrinsic motivation (Wood & Wall, 2007) can reduce the absenteeism levels of employees and intention to quit job or employee burnout. Additionally, since there is a wide entry of generation X and Y employees into SMEs' workplace, SMEs will find it useful to consider prioritizing flexible work and work-life balance programs that may be particularly desired by young workers.

5.4 Study Limitations and future research

Despite the contributions, there were several limitations that should be acknowledged. First, the results with respects to causality cannot be substantiated because the present research made use of a cross-sectional method. This method was unable to finish exact details on the precise development of the correlations between the variables of the research. Rather, the research findings detail the levels of association only. Furthermore, the present study only examined the mediating roles of POS and psychological empowerment as attitudinal pathways through which HPWS influences organizational performance. The examination of other mediating variables in tandem (e.g., employee skills and performance-related behaviors such as customer service performance) may provide a more comprehensive picture of the above findings.

It should also be acknowledged that the present study used a single-level analysis based on the aggregated data (e.g., POS and empowerment). Although this approach has been used in prior studies as discussed in Chapter 1, it could lead to a loss of information at the within level. Future research should consider using a more advanced statistical procedure such as multilevel SEM, which utilizes the full information from both the individual and organizational levels of analysis. An example of this is the 2-1-2 MSEM designs discussed by Preacher et al. (2010).

Also, the generalizability of the present study's findings could also limit, as this research was only conducted on SMEs operating in the southern region of Thailand. Future studies should attempt to replicate the current findings in other business contexts, both in Thailand and elsewhere. Thailand is a country of high power distance and the influence of benevolent leaders could be particularly salient in the present context.

Moreover, it should be noted that there are multidimensional perspectives to measuring organizational-level outcomes including the use of financial outcomes (i.e. profits and net margin), organizational outcomes (i.e. productivity, quality, and client satisfaction) or HR outcomes (i.e. employees' attitudes and behavior) (Guest, 1997; Vermeeren et al., 2014). According to Dyer and Reeves (1995), organizational and HR outcomes are more proximal outcomes that are

closely linked to the HR practices. In this study, the researcher focuses on the organizational and HR outcomes, whereas financial outcomes were not considered. Thus, to gain a better understanding of the impact of HPWS on organizational performance, future research should consider using financial dimensions (Macduffie, 1995; Vermeeren et al., 2014).

Finally, with respect to the research methodology, although the sample size for this present study is consistent with that within the existing HPWS literature, future research should consider providing a longer period of time perhaps more than three month for the respondents to complete the surveys. They can also consider mailing out the survey to the respondents with return, postage-paid envelopes instead of hand-distributing the survey to them. Also, future research should incorporate a mixed-method design to gain a richer understanding of this phenomenon.

5.5 Conclusion

Overall, the results of this study underscore the importance of HRM in SMEs sector in terms of affecting organizational outcomes. Considering the growing literature HRM research, this study advances the knowledge in the strategic HRM literature by highlighting the role of CEO leadership on HPWS and the psychological mediating mechanisms. The results indicated that the relationship between CEOs' relationship-focused and organizational performance were sequentially mediated by HPWS, POS, psychological empowerment. Firms with higher levels of CEOs' relationship-focused are more likely to adopt and implement HPWS, in turn leading to higher levels of POS, psychological empowerment, and ultimately organizational performance. The findings lend full support to the hypotheses that CEOs play an important role in determining the adoption of HPWS in the SME sector and that the relationship between HPWS and organizational performance is mediated by employees' motivation (i.e., psychological empowerment) and perceptions (i.e., perceived organization support) processes. These findings emphasize that the employee-focused environment that puts a premium on promoting employee's motivation and positive outcomes could play a central role in distinguishing high- vs. low-performing firms. The researcher encourages future research to further

elucidate the extent to which HPWS can affect firm performance and also the psychological processes underlying this important relationship. Investigating these factors in additional research seems interesting to provide responses to achieve superior organizational performance.

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APPENDICES

Appendix A
CEOs' Survey Questionnaire

Appendix A

CEOs' Survey

Code _____

แบบสอบถาม CEOs' Survey

ระบบบริหารงานที่มีประสิทธิภาพสูงและบทบาทลักษณะของผู้นำกับผลการดำเนินงานของ
วิสาหกิจขนาดเล็กและขนาดกลาง (SMEs) ในภาคใต้

เรียน ผู้ตอบแบบสอบถามที่เคารพ

ข้าพเจ้าใคร่ขอความอนุเคราะห์ท่านในการกรอกแบบสอบถามสำหรับใช้ในการศึกษาเกี่ยวกับระบบ
บริหารงานที่มีประสิทธิภาพสูงและบทบาทลักษณะของผู้นำกับผลการดำเนินงานของวิสาหกิจขนาดเล็ก
และขนาดกลาง โดยข้อมูลที่ได้รับจากท่านนับเป็นประโยชน์ทางวิชาการอย่างยิ่งอันจะนำไปสู่
การพัฒนาการบริหารทรัพยากรมนุษย์ที่จะส่งผลต่อการดำเนินงานของวิสาหกิจขนาดเล็กและ
ขนาดกลางในภาคใต้ แบบสอบถามนี้จะใช้เวลาประมาณ 10-15 นาที โดยแบบสอบถามแบ่งออก
เป็น 3 ตอน จำนวน 3 หน้า

ในการตอบแบบสอบถามนี้ขอให้ท่านผู้ตอบแบบสอบถามมั่นใจว่าคำตอบของท่านจะถูกเก็บไว้เป็น
ความลับจะไม่ถูกเปิดเผยให้ผู้อื่นรับทราบโดยเด็ดขาดและไม่มีการให้ข้อมูลดังกล่าวกับบุคคลภายนอก
โดยไม่ได้รับอนุญาตจากท่านทั้งนี้ผู้วิจัยจะนำข้อมูลที่ได้มาวิเคราะห์ในภาพรวมด้วยโปรแกรมสถิติ
เท่านั้น

หากท่านยินดีตอบแบบสอบถาม กรุณาทำเครื่องหมาย ✓

ยินดีตอบแบบสอบถาม

ขอขอบพระคุณอย่างสูงในความร่วมมือมา ณ โอกาสนี้

นางสาว โอรีสา ชุมพงศ์

นักศึกษาระดับปริญญาเอก หลักสูตรปรัชญาดุษฎีบัณฑิต

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ตอนที่ 1 คำถามในส่วนนี้ เกี่ยวกับผลการปฏิบัติงานขององค์กรในปีที่ผ่านมา โปรดทำเครื่องหมาย ✓ ลงในช่องที่ตรงกับความเป็นจริงมากที่สุด

ในช่วง 1 ปีที่ผ่านมาท่านคิดว่า ผลการดำเนินงานขององค์กรของท่านในประเด็นต่อไปนี้อยู่ในระดับใดเมื่อเปรียบเทียบกับคู่แข่งในภาคธุรกิจเดียวกัน	แย่กว่าองค์กรอื่นๆ (1)	แย่กว่าองค์กรอื่นๆเล็กน้อย (2)	ดีกว่าองค์กรอื่นๆเล็กน้อย (3)	ดีกว่าองค์กรอื่นๆ (4)
1. คุณภาพสินค้าและการบริการ				
2. การพัฒนาสินค้าและการบริการ				
3. ความสามารถในการดึงดูดคนเก่งมาทำงานด้วย				
4. ความสามารถในการเก็บรักษาคนเก่งเอาไว้ในองค์กร				
5. ความพึงพอใจของลูกค้า				
6. ความสัมพันธ์ระหว่างพนักงานในองค์กร (ความสามัคคี)				
7. ความสัมพันธ์อันดีระหว่างฝ่ายบริหารและพนักงาน				

ตอนที่ 2 คำถามในส่วนนี้ เกี่ยวกับภาวะผู้นำองค์กร โปรดทำเครื่องหมาย ✓ ลงในช่องที่ตรงกับความเป็นจริง

คุณเห็นด้วยกับข้อความต่อไปนี้มากน้อยเพียงใด	ไม่เห็นด้วยอย่างยิ่ง (1)	ไม่เห็นด้วย (2)	เฉย ๆ (3)	เห็นด้วย (4)	เห็นด้วยมากที่สุด (5)
การเสริมสร้างสัมพันธภาพ และการสื่อสาร					
1. ฉันมีทักษะที่ดีในการสร้างความสัมพันธ์กับผู้อื่น					
2. ฉันสามารถสื่อสารกับพนักงาน ได้อย่างดี					
3. ฉันสามารถรักษาสมดุลในการมีสัมพันธ์กับผู้อื่น					
4. ฉันสามารถเข้ากันได้ดีกับพนักงาน					
5. ฉันสามารถช่วยให้พนักงานในองค์กรมีความสัมพันธ์ที่ดีระหว่างกัน					

คุณเห็นด้วยกับข้อความต่อไปนี้ มากน้อยเพียงใด	ไม่ เห็นด้วย อย่างยิ่ง (1)	ไม่ เห็น ด้วย (2)	เลข ๆ (3)	เห็น ด้วย (4)	เห็น ด้วย มาก ที่สุด (5)
การแสดงความมีเมตตากรุณาต่อลูกน้อง					
6. ฉันเป็นห่วงเป็นใยครอบครัวของพนักงาน					
7. ฉันเป็นห่วงเป็นใยในสารทุกข์สุกดิบของพนักงาน					
8. ฉันให้การดูแลพนักงาน เสมือนเป็นครอบครัวตนเอง					
9. ฉันให้ความรักและการใส่ใจลูกน้อง					
บริหารงานแบบเผด็จการ					
10. ลูกน้องทุกคนต้องฟังฉันเพียงคนเดียวเท่านั้น					
11. ฉันรวมอำนาจการตัดสินใจไว้ที่ตนเองคนเดียว					
12. ฉันมักจะตัดสินใจอะไรคนเดียวโดยไม่ต้องถามความเห็นใคร					

ตอนที่ 3 คำถามในส่วนนี้เกี่ยวกับ ข้อมูลส่วนบุคคลของผู้บริหาร และ ข้อมูลพื้นฐานของวิสาหกิจขนาดเล็และขนาดกลาง (SMEs)

- 1) เพศ ชาย หญิง
- 2) อายุ: _____ ปี
- 3) การศึกษา
 ต่ำกว่าปริญญาตรี ปริญญาตรี ปริญญาโท ปริญญาเอก
- 4) ท่านเป็นผู้ก่อตั้งบริษัทเอง หรือเป็นรุ่นบุตรผู้สืบทอดกิจการ
 ผู้ก่อตั้งเอง เป็นรุ่นบุตรผู้สืบทอดกิจการ
- 5) จำนวนพนักงานประจำ (Full-time): _____ คน
- 6) จำนวนพนักงานรายวัน (Part-time): _____ คน
- 7) บริษัทของท่านก่อตั้งมาแล้วกี่ปี: _____ ปี
- 8) บริษัทของท่านอยู่ในภาคธุรกิจใด:
 การผลิต (Manufacturing) การบริการ (Service) อื่นๆ
- 9) ที่ตั้ง ณ จังหวัด: _____
- 10) ท่านเคยทำงานที่อื่นมาก่อนหรือไม่:
 เคยทำงานในองค์กรอื่นๆ มาก่อน โปรดระบุประเภทงานที่ทำ _____
 ไม่เคยทำงานที่อื่นมาก่อนเลย (เรียนจบมาก็ทำงานที่บริษัทนี้เลย)

****ผู้วิจัยขอขอบพระคุณเป็นอย่างสูงความเห็นของท่านเป็นประโยชน์อย่างยิ่งในการทำวิจัยครั้งนี้****

Appendix B
Employees' Survey Questionnaire

Appendix B

Employees' Survey

Code _____

แบบสอบถาม Employee Survey

ระบบบริหารงานที่มีประสิทธิภาพสูงและบทบาทลักษณะของผู้นำกับผลการดำเนินงานของ
วิสาหกิจขนาดเล็กลงและขนาดกลาง (SMEs) ในภาคใต้

เรียน ผู้ตอบแบบสอบถามที่เคารพ

ข้าพเจ้าใคร่ขอความอนุเคราะห์ท่านในการกรอกแบบสอบถามสำหรับใช้ในการศึกษาเกี่ยวกับระบบ
บริหารงานที่มีประสิทธิภาพสูงและบทบาทลักษณะของผู้นำกับผลการดำเนินงานของวิสาหกิจขนาดเล็กลง
และขนาดกลาง โดยข้อมูลที่ได้รับจากท่านนับเป็นประโยชน์ทางวิชาการอย่างยิ่งอันจะนำไปสู่
การพัฒนาการบริหารทรัพยากรมนุษย์ที่จะส่งผลต่อการดำเนินงานของวิสาหกิจขนาดเล็กลงและ
ขนาดกลางในภาคใต้ แบบสอบถามนี้จะใช้เวลาประมาณ 10-15 นาที โดยแบบสอบถามแบ่งออก
เป็น 5 ตอน จำนวน 4 หน้า

ในการตอบแบบสอบถามนี้ขอให้ท่านผู้ตอบแบบสอบถามมั่นใจว่าคำตอบของท่านจะถูกเก็บไว้
เป็นความลับจะไม่ถูกเปิดเผยให้ผู้อื่นรับทราบโดยเด็ดขาดและไม่มีการให้ข้อมูลดังกล่าวกับ
บุคคลภายนอกโดยไม่ได้รับอนุญาตจากท่านทั้งนี้ผู้วิจัยจะนำข้อมูลที่ได้นำมาวิเคราะห์ในภาพรวมด้วย
โปรแกรมสถิติเท่านั้น

หากท่านยินดีตอบแบบสอบถาม กรุณาทำเครื่องหมาย ✓

ยินดีตอบแบบสอบถาม

ขอขอบพระคุณอย่างสูงในความร่วมมือมา ณ โอกาสนี้

นางสาวโอริสา ชุมพงษ์

นักศึกษาระดับปริญญาเอก หลักสูตรปรัชญาดุษฎีบัณฑิต

สาขาวิชาการจัดการ มหาวิทยาลัยสงขลานครินทร์ วิทยาเขตหาดใหญ่

o.chumphong@gmail.com

089-655-5573

ตอนที่ 1 คำถามในส่วนนี้เกี่ยวกับ การรับรู้ของพนักงานเกี่ยวกับระบบบริหารงานที่มีประสิทธิภาพ โปรดทำเครื่องหมาย ✓ ลงในช่องที่ตรงกับความเป็นจริงมากที่สุด

คุณเห็นด้วย เกี่ยวกับข้อความต่อไปนี้ อย่างน้อยเพียงใด	ไม่ เห็นด้วย อย่างยิ่ง (1)	ไม่ เห็น ด้วย (2)	เฉยๆ (3)	เห็น ด้วย (4)	เห็น ด้วย อย่าง ยิ่ง (5)
การสรรหาและคัดเลือกพนักงาน					
1. องค์กรของฉันมีกระบวนการคัดเลือกพนักงานใหม่ที่เข้มงวด					
2. องค์กรของฉันมีการสัมภาษณ์ และ ทดสอบความสามารถในกระบวนการคัดเลือกพนักงาน					
3. องค์กรของฉันมีการกำหนดเกณฑ์ในการคัดเลือกพนักงานที่ชัดเจน					
การฝึกอบรมและพัฒนา					
4. โดยรวมฉันรู้สึกพึงพอใจกับโอกาสในการได้รับการฝึกอบรมพัฒนา					
5. ฉันรู้สึกว่าองค์กรจัดการฝึกอบรมให้กับฉันอย่างต่อเนื่องซึ่งทำให้ฉัน ทำงานได้ง่ายขึ้น					
6. ฉันมีโอกาสได้พัฒนาความรู้และทักษะของตนเองตลอดเวลา					
ความมีส่วนร่วมการตัดสินใจ					
7. ฉันมีส่วนร่วมในการตัดสินใจที่มีความสำคัญเกี่ยวกับอนาคตขององค์กร					
8. งานของฉันเปิดโอกาสให้มีการตัดสินใจในเรื่องต่างๆ ได้เอง					
9. งานของฉันให้อิสระในการตัดสินใจอย่างมาก					
การได้รับข้อมูลข่าวสาร					
10. ฉันได้รับข้อมูลต่างๆ เกี่ยวกับเป้าหมายและผลงานขององค์กรเป็นประจำ					
11. ฉันมีข้อมูลในการปฏิบัติงานอย่างเพียงพอ					
12. ฉันรับทราบข้อมูลความเป็นไปต่างๆ ทางธุรกิจและผลการดำเนินงานขององค์กร					

คุณเห็นด้วย เกี่ยวกับข้อความต่อไปนี้ มากน้อยเพียงใด	ไม่ เห็นด้วย อย่างยิ่ง (1)	ไม่ เห็น ด้วย (2)	เฉยๆ (3)	เห็น ด้วย (4)	เห็น ด้วย อย่าง ยิ่ง (5)
เงินรางวัลตามผลงาน					
13. การปรับขึ้นเงินเดือนและการเลื่อนตำแหน่งอยู่ บนพื้นฐานของผลการทำงานของคุณจริงๆ					
14. ฉันรู้สึกว่าการให้รางวัลใจต่างๆ อยู่บนพื้นฐาน ของผลการทำงานของคุณจริงๆ					
15. มีความเชื่อมโยงระหว่างผลการปฏิบัติงานของ ฉันกับการปรับเงินเดือนประจำปี (คือมี ความยุติธรรม)					
การประเมินผลการทำงาน					
16. ฉันมีโอกาสกำหนดเป้าหมายการทำงานของ ฉันร่วมกับหัวหน้างาน					
17. ฉันได้รับข้อมูลป้อนกลับจากหัวหน้างานเสมอ (เช่น ฉันทำงานได้ดีเพียงใด หรือ ควร ปรับปรุง อะไร)					
18. การประเมินผลการทำงานอยู่บนพื้นฐานของ ของผลการทำงานของคุณจริงๆ (เช่น ปราศจาก ความลำเอียง)					
ทีมบริหารตนเอง					
19. องค์กรของคุณส่งเสริมการทำงานเป็นทีมอย่างมาก					
20. ฉันสัมผัสได้ถึงบรรยากาศการทำงานเป็นทีม ในองค์กรนี้					
21. ฉันรู้สึกว่าการทำงานเป็นทีมเป็นส่วนสำคัญใน การทำงานในองค์กรนี้					
ความก้าวหน้าในอาชีพและการเลื่อนตำแหน่ง Career					
22. ฉันมีโอกาสเติบโตก้าวหน้าในองค์กรนี้					
23. ฉันได้รับการเลื่อนตำแหน่งอย่างเหมาะสมเมื่อ ฉันมีคุณสมบัติพร้อม					
24. องค์กรนี้พิจารณาเลื่อนตำแหน่งงานโดยเปิด โอกาสให้แก่พนักงานภายในองค์กรก่อนเสมอ					

ตอนที่ 2. แบบสอบถามเกี่ยวกับทัศนคติของพนักงานที่มีต่อองค์กร (Employees' Attitudes) 4 ด้าน ดังนี้
 2.1 คำถามในส่วนนี้เกี่ยวกับ การได้รับการสนับสนุนจากองค์กร โปรดทำเครื่องหมาย ✓ ลงในช่องที่ตรงกับความเป็นจริง

คุณเห็นด้วย เกี่ยวกับข้อความต่อไปนี้ มากน้อยเพียงใด	ไม่เห็น ด้วย อย่างยิ่ง (1)	ไม่เห็น ด้วย (2)	ไม่เห็น ด้วย เล็กน้อย (3)	เฉยๆ (4)	เห็น ด้วย เล็กน้อย (5)	เห็น ด้วย (6)	เห็น ด้วย มากที่สุด (7)
1. องค์กรของฉันภาคภูมิใจในความสำเร็จ ของฉัน							
2. องค์กรของฉันเอาใจใส่ในสารทุกข์สุก ดิบของฉัน							
3. องค์กรของฉันให้คุณค่าในผลงานของ ฉัน							
4. องค์กรของฉันให้ความสำคัญกับเป้า หมายและสิ่งต่างๆที่ฉันให้ความสำคัญ							
5. องค์กรของฉัน ให้ความสำคัญกับฉัน							
6. องค์กรของฉันยินดีที่จะช่วยเหลือฉันถ้า หากฉันต้องการความช่วยเหลือเป็น พิเศษ							

ตอนที่ 2.2 คำถามในส่วนนี้เกี่ยวกับ การมอบอำนาจให้พนักงานมีอำนาจในงานที่ทำ โปรดทำเครื่องหมาย ✓ ลง
ใน ช่องที่ตรงกับความเป็นจริง

คุณเห็นด้วย เกี่ยวกับข้อความต่อไปนี้ มากน้อยเพียงใด	น้อย ที่สุด (1)	น้อย (2)	กลางๆ (3)	มาก (4)	มาก ที่สุด (5)
ความมีความหมายของงาน					
1. งานที่ฉันทำมีความสำคัญต่อฉันอย่างมาก					
2. งานมีความหมายต่อฉันเหลือเกิน					
3. งานที่ฉันทำมีความหมายต่อฉันเป็นอย่างยิ่ง					
ความสามารถในการทำงาน					
4. ฉันรู้สึกมั่นใจในความสามารถการทำงานของตัวเอง					
5. ฉันรู้สึกพอใจในความสามารถการทำงานของตัวเอง					

คุณเห็นด้วย เกี่ยวกับข้อความต่อไปนี้ มากน้อยเพียงใด	น้อย ที่สุด (1)	น้อย	กลางๆ	มาก	มาก ที่สุด (5)
6. ฉันมีทักษะต่างๆ ที่จำเป็นในการทำงาน					
การตัดสินใจในการทำงาน					
7. ฉันมีอิสระในการกำหนดวิธีการทำงานของตนเอง					
8. ฉันสามารถตัดสินใจได้เองว่าจะทำงานอย่างไร					
9. ฉันมีอิสระเสรีเกี่ยวกับวิธีการทำงาน					
ผลจากการปฏิบัติงาน					
10. งานของฉันส่งผลต่อหน่วยงานเป็นอย่างมาก					
11. ฉันสามารถควบคุมความเป็นไปในหน่วยงานของฉัน					
12. ฉันมีอิทธิพลต่อความเป็นไปในหน่วยงานของฉัน					

ตอนที่ 5 ข้อมูลส่วนบุคคลของผู้ตอบแบบสอบถาม

- 1) เพศ ชาย หญิง
- 2) อายุ: _____ ปี
- 3) การศึกษา: ต่ำกว่าปริญญาตรี ปริญญาตรี ปริญญาโท ปริญญาเอก
- 4) ระยะเวลาที่ท่านทำงานในองค์กรแห่งนี้: _____ ปี _____ เดือน
- 5) เงินเดือน ณ ปัจจุบัน โดยประมาณ: _____ บาท
- 6) ตำแหน่งงานในปัจจุบัน: พนักงานประจำ พนักงานรายวัน

**** ผู้วิจัยขอขอบพระคุณเป็นอย่างสูงความเห็นของท่านเป็นประโยชน์อย่างยิ่งในการทำวิจัยครั้งนี้****

Appendix C
Content specialist for IOC assessment

Appendix C

Table I

The Results of IOC Values: Employees' Survey

no	items	Specialists					IOC	results
		1 st	2 nd	3 rd	4 rd	5 rd		
การสรรหาและคัดเลือกพนักงาน								
1	องค์กรของฉันมีกระบวนการคัดเลือกพนักงานใหม่ที่เข้มงวด	1	1	1	1	1	1.00	Accept
2	องค์กรของฉันมีการสัมภาษณ์และทดสอบความสามารถในกระบวนการคัดเลือกพนักงาน	0	1	1	1	1	0.80	Accept
3	องค์กรของฉันมีการกำหนดเกณฑ์ในการคัดเลือกพนักงานที่ชัดเจน	1	1	1	1	1	1.00	Accept
การฝึกอบรมและพัฒนา								
4	โดยรวมฉันรู้สึกพึงพอใจกับโอกาสในการได้รับการฝึกอบรมพัฒนา	1	0	1	1	0	0.60	Accept
5	ฉันรู้สึกว่าองค์กรจัดการฝึกอบรมให้กับฉันอย่างต่อเนื่องซึ่งทำให้ฉันทำงานได้ง่ายขึ้น	1	1	1	1	1	1.00	Accept
6	ฉันมีโอกาสดำเนินการพัฒนาความรู้และทักษะของตนเองตลอดเวลา	0	1	1	1	1	0.80	Accept
ความมีส่วนร่วมการตัดสินใจ								
7	ฉันมีส่วนร่วมในการตัดสินใจที่มีความสำคัญเกี่ยวกับอนาคตขององค์กร	0	1	1	1	1	0.80	Accept
8	งานของฉันเปิดโอกาสให้มีการตัดสินใจในเรื่องต่างๆ ได้เอง	0	1	1	1	1	0.80	Accept
9	งานของฉันให้อิสระในการตัดสินใจอย่างมาก	1	1	1	1	1	1.00	Accept
การได้รับข้อมูลข่าวสาร								
10	ฉันได้รับข้อมูลต่างๆ เกี่ยวกับเป้าหมาย และผลงานขององค์กรเป็นประจำ	1	1	1	1	1	1.00	Accept
11	ฉันมีข้อมูลในการปฏิบัติงานอย่างเพียงพอ	1	1	1	1	1	1.00	Accept
12	ฉันรับทราบข้อมูลความเป็นไปต่างๆ ทางธุรกิจ และ ผลการดำเนินงานขององค์กร	0	0	1	1	1	0.60	Accept
เงินรางวัลตามผลงาน								
13	การปรับขึ้นเงินเดือนและการเลื่อนตำแหน่งอยู่บนพื้นฐานของผลการทำงานของฉันจริงๆ	1	1	1	1	1	1.00	Accept

no	items	Specialists					IOC	results
		1 st	2 nd	3 rd	4 rd	5 rd		
14	ฉัน รู้สึกว่าการให้รางวัลจิตใจต่างๆอยู่บนพื้นฐานของผลการทำงานของฉันจริงๆ	1	1	1	1	1	1.00	Accept
15	มีความเชื่อมโยงระหว่างผลการปฏิบัติงานของฉันกับการปรับเงินเดือนประจำปี	1	1	1	1	1	1.00	Accept
การประเมินผลการทำงาน								
16	ฉัน มีโอกาสกำหนดเป้าหมายการทำงานของฉันร่วมกับหัวหน้างาน	1	0	1	1	0	0.60	Accept
17	ฉัน ได้รับข้อมูลป้อนกลับจากหัวหน้างานเสมอ (เช่น ฉันทำงานได้ดีเพียงใดหรือควรปรับปรุงอะไร)	1	1	1	1	1	1.00	Accept
18	การประเมินผลการทำงานอยู่บนพื้นฐานของผลการทำงานของฉันจริงๆ (เช่น ปราศจากความลำเอียง)	0	1	1	1	1	0.80	Accept
ทีมบริหารตนเอง								
19	องค์กรของฉันส่งเสริมการทำงานเป็นทีมอย่างมาก	1	1	1	1	1	1.00	Accept
20	ฉัน สัมผัสได้ถึงบรรยากาศการทำงานเป็นทีมในองค์กรนี้	1	1	1	1	1	1.00	Accept
21	ฉัน รู้สึกว่าการทำงานเป็นทีมเป็นส่วนสำคัญในการทำงานในองค์กรนี้	1	1	1	1	0	0.80	Accept
ความก้าวหน้าในอาชีพและการเลื่อนตำแหน่ง								
22	ฉัน มีโอกาสเติบโตก้าวหน้าในองค์กรนี้	1	1	1	1	1	1.00	Accept
23	ฉัน ได้รับการเลื่อนตำแหน่งอย่างเหมาะสมเมื่อฉันมีคุณสมบัติพร้อม	0	1	1	1	1	0.80	Accept
24	องค์กรนี้ พิจารณาเลื่อนตำแหน่งงานโดยเปิดโอกาสให้แก่พนักงานภายในองค์กรก่อนเสมอ	1	1	1	1	1	1.00	Accept
การได้รับการสนับสนุนจากองค์กร								
25	องค์กรของฉัน ภาคภูมิใจในความสำเร็จของฉัน	1	1	1	1	1	1.00	Accept
26	องค์กรของฉัน เอาใจใส่ในสารทุกข์สุกดิบ ของฉัน	1	1	1	1	1	1.00	Accept
27	องค์กรของฉัน ให้คุณค่าในผลงานของฉัน	1	1	1	1	1	1.00	Accept
28	องค์กรของฉัน ให้ความสำคัญกับเป้าหมายและสิ่งต่างๆ ที่ฉันให้ความสำคัญ	1	1	1	1	1	1.00	Accept

no	items	Specialists					IOC	results
		1 st	2 nd	3 rd	4 rd	5 rd		
29	องค์กรของฉันให้ความสำคัญกับฉัน	0	1	1	1	1	0.80	Accept
30	องค์กรของฉันยินดีที่จะช่วยเหลือฉันถ้าหาก ฉัน ต้อง การความช่วยเหลือเป็นพิเศษ	1	1	1	1	1	1.00	Accept
การมอบอำนาจให้พนักงานมีอำนาจในงานที่ทำ								
31	งานที่ฉันทำมีความสำคัญต่อฉันอย่างมาก	1	1	1	1	1	1.00	Accept
32	งานมีความหมายต่อฉันเหลือเกิน	0	1	1	1	1	1.00	Accept
33	งานที่ฉันมีความหมายต่อฉันเป็นอย่างยิ่ง	0	0	1	1	1	1.00	Accept
34	ฉันรู้สึกมั่นใจในความสามารถการทำงานของ ตัวเอง	1	1	1	1	1	1.00	Accept
35	ฉันรู้สึกพอใจในความสามารถการทำงานของ ตัวเอง	0	1	1	1	0	0.60	Accept
36	ฉันมีทักษะต่างๆ ที่จำเป็นในการทำงาน	1	1	1	1	1	1.00	Accept
37	ฉันมีอิสระในการกำหนดวิธีการทำงานของตน เอง	1	1	1	1	1	1.00	Accept
38	ฉันสามารถตัดสินใจได้เองว่าจะทำงานอย่างไร	1	1	1	1	1	1.00	Accept
39	ฉันมีอิสระเกี่ยวกับวิธีการทำงาน	0	1	1	1	1	0.80	Accept
40	งานของฉันส่งผลต่อหน่วยงานเป็นอย่างมาก	1	0	1	1	1	0.80	Accept
41	ฉันสามารถควบคุมความเป็นไปในหน่วยงาน ของฉัน	-1	1	1	1	1	0.60	Accept
42	ฉันมีอิทธิพลต่อความเป็นไปในหน่วยงานของ ฉัน	0	0	1	1	1	0.60	Accept

Table II

The Results of IOC Values: Top Managements' Survey

no	items	Specialists					IOC	results
		1 st	2 nd	3 rd	4 rd	5 rd		
ผลการดำเนินงานขององค์กร								
1	คุณภาพสินค้าและการบริการ	-1	1	1	1	1	0.60	Accept
2	การพัฒนาสินค้าและการบริการ	0	1	1	1	1	0.80	Accept
3	ความสามารถในการดึงดูดคนเก่งมาทำงานด้วย	1	1	1	1	1	1.00	Accept
4	ความสามารถในการเก็บรักษาคนเก่งเอาไว้ในองค์กร	1	1	1	1	1	1.00	Accept
5	ความพึงพอใจของลูกค้า	1	1	1	1	1	1.00	Accept
6	ความสัมพันธ์ระหว่างพนักงานในองค์กร (ความสามัคคี)	1	1	1	1	1	1.00	Accept
7	ความสัมพันธ์อันดีระหว่างฝ่ายบริหารและพนักงาน	1	1	1	1	1	1.00	Accept
เกี่ยวกับภาวะผู้นำองค์กร								
5	ฉันมีทักษะที่ดีในการสร้างความสัมพันธ์กับผู้อื่น	1	1	1	1	1	1.00	Accept
6	ฉันสามารถสื่อสารกับพนักงานได้อย่างดี	1	1	1	1	1	1.00	Accept
7	ฉันสามารถรักษาสมดุลในการมีสัมพันธ์กับผู้อื่น	1	1	1	1	0	0.80	Accept
8	ฉันสามารถเข้ากันได้ดีกับพนักงาน	1	1	1	1	1	1.00	Accept
9	ฉันสามารถช่วยให้พนักงานในองค์กรมีความสัมพันธ์ที่ดีระหว่างกัน	1	1	1	1	1	1.00	Accept
10	ฉันเป็นห่วงเป็นใยครอบครัวของพนักงาน	1	1	1	1	1	1.00	Accept
11	ฉันเป็นห่วงเป็นใยในสารทุกข์สุขดิบของพนักงาน	1	1	1	1	1	1.00	Accept
12	ฉันให้การดูแลพนักงานเสมือนเป็นครอบครัวตนเอง	1	1	1	1	1	1.00	Accept
13	ฉันให้ความรักและการใส่ใจลูกน้อง	1	1	1	1	1	1.00	Accept
14	ลูกน้องทุกคนต้องฟังฉันเพียงคนเดียวเท่านั้น	1	1	1	1	1	1.00	Accept
15	ฉันรวมอำนาจการตัดสินใจไว้ที่ตนเองคนเดียว	1	1	1	1	0	0.80	Accept
16	ฉันมักจะตัดสินใจอะไรคนเดียวโดยไม่ต้องถามความเห็นใคร	1	1	1	1	0	0.80	Accept

Appendix D
Syntax for SEM Model

Appendix D

Syntax for SEM Model

```

TITLE:      Full SEM Model
DATA:
  FILE = 'Merged110.dat';

VARIABLE:
  NAMES      = bRelabBenev Ability Motiva Opportun
              POSnew1 POSnew2 POSnew3 Mean Comp Det Imp
              bPerfn1 bPerfn2 bPerfn3 bPerf3;

USEVARIABLES = bRelabBenev Ability Motiva Opportun
              POSnew1 POSnew2 POSnew3 Mean Comp Det Imp
              bPerfn1 bPerfn2 bPerfn3 bPerf3;

MISSING      =      all (-999);

ANALYSIS:
  TYPE        =      GENERAL;
  ESTIMATOR   =      ML;
  ITERATIONS  =      1000;
  CONVERGENCE =      0.00005;
  BOOTSTRAP   =      10000;

MODEL:
  CEO         By      bRelabBenev;
  HPWS        By      Ability Motiva Opportun;
  POS         By      POSnew1 POSnew2 POSnew3;
  Empow       By      Mean Comp Det Imp;
  bPerfong    By      bPerfn1 bPerfn2 bPerfn3 bPerf3;

!CFA model;
  bPerfong    On      CEO;
  bPerfong    On      HPWS;
  bPerfong    On      POS;
  bPerfong    On      Empow;

  Empow       On      CEO;
  Empow       On      HPWS;
  Empow       On      POS;

  POS         On      CEO;
  POS         On      HPWS;

  HPWS        On      CEO;

!Structural model;

MODEL CONSTRAINT:

NEW (Ind) (Ind) (Ind) (Ind);
Ind1          =      d21*b2;
Ind2          =      d31*b3;
Ind3          =      a1*d21*d32*b3;
Ind4          =      a1*b1;

MODEL INDIRECT:

bPerfong IND CEO;
bPerfong IND HPWS;

OUTPUT: stdyx tech1 tech8 CINTERVAL (bcbootstrap);

!CINTERVAL (BOOTSTRAP) gives bootstrap confidence intervals;

```

VITAE

Name Miss Orisa Chumphong

Student ID 5810530009

Educational Attainment

Degree	Name of Institution	Year of Graduation
Bachelor of Arts (English)	Bangkok University	2006
Master of Business Administration (Business Management)	Thaksin University	2013
Certificated in PhD Academic Research Programme	Massey University New Zealand	2016

Scholarship Awards during Enrolment

2018 Graduate School Dissertation Funding for Thesis from Prince of Songkla University

List of Publication and Proceeding

Chumphong, O., & Potipiroon, W. (2019). High Performance Work Systems and SMEs' Performance: Does CEOs' Leadership Matter??. *The Journal of Behavioral Science*, 14 (2), 48-65.

Chumphong, O., & Potipiroon, W. (2019). The Influence of High Performance Work Systems and Organizational Performance of SMEs in the Southern Region of Thailand: Examining the Role of Perceived Organizational Support, *Veridian E-Journal*, Silpakorn University, 12 (4), July – August 2019.

Chumphong, O., & Potipiroon, W. (2019). High Performance Work Systems and Organizational Performance Among SMEs in the South of Thailand: Examining the Role of CEO Leadership and Mediating Mechanisms". Presented at the 4th NIDA International Business Conference 2019. Thailand: National Institute of Development Administration, March 2, 2019

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ระดับสูงของวิสาหกิจ ขนาดกลาง และขนาดย่อมในภาคใต้: การศึกษาอิทธิพลของภาวะผู้นำ
และบทบาทของตัวแปรคั่นกลาง .การประชุมวิชาการระดับชาติด้านการบริหารจัดการ ครั้งที่ 10.
สงขลา: คณะวิทยาการจัดการ มหาวิทยาลัยสงขลานครินทร์.