IMPACT OF HIGH-PERFORMANCE WORK SYSTEMS ON EXPORT-ORIENTED SMEs PERFORMANCE: THE MEDIATING ROLE OF HUMAN CAPITAL DEVELOPMENT

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Small and medium enterprises (SMEs) contribute substantially to the economic development, income generation, poverty reduction, and particularly job creation for both developed and developing economies. However, compared with large firms, SMEs face several challenges related to their performance and competitiveness. The role of human capital (HC) and human resource practices (HR Practices) in enhancing SMEs competitiveness and performance is vital but understudied areas. Therefore, the purpose of this study was to investigate the role of HC development between the relationship of high-performance work systems (HPWS) and export-oriented SMEs performance. Quantitative strategy and cross-sectional survey method was used to collect data from 205 managerial staff through a self-administered structured questionnaire. HPWS had a significant positive impact on export-oriented SMEs performance. The findings of the study provide evidence that HC development plays a mediating role between HPWS and enterprises performance.

Keywords: High-performance work systems, HR practices, human capital development, export-oriented SMEs

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During the recent past, due to significant contribution in the economic development process of both developing and developed economies, small and medium enterprises have got global attention. According to von Weltzien Hoivik and Melé (2009), 50 to 60% employment opportunities in different sectors are facilitated and provided by SMEs. Small and medium enterprises are estimated to be 90% of the world’s business (von Weltzien Hoivik and Melé, 2009) that help to reduce poverty level, create employment opportunities and enhance exports (Demirbag et al., 2006). Small and medium enterprises sector, like in many other economies is the backbone of the Pakistan’s economy. According to SMEDA (2007), small and medium enterprises constitute over 90% of total privately run enterprises in industrial sector of Pakistan that contribute 25% in export earnings, 35% in manufacturing value added production and specifically contribute around 35% in gross domestic product (GDP).

However, due to the free markets structure and emergence of globalization, export-oriented SMEs worldwide in general (Singh et al., 2009), and particularly in Pakistan are exposed to competitive challenges and ever-increasing growth (Bari and Cheema, 2005). Exporting is usually the gateway among ‘SMEs’ towards globalization/ internationalization, which is an important factor for national productivity, economic growth and employment creation (Piercy et al., 1998). In this regard, Government of Pakistan has taken serious steps to achieve employment generation, economic revival, and poverty alleviation through export-oriented SMEs. Moreover, Government has set-up a special ‘SME Task Force’ and formulated a comprehensive SME policy, specifically with an aim to increase; their contribution in value added up to 40%, share of manufacturing enterprises from 5.5% to 7% and ownership of women up to ‘6%’ (SMEDA, 2007). This situation has created the need among SMEs to achieve competitive advantage, and growth by introducing innovative products both in domestic as well as in international markets. However, as per ‘United Nation’s’ Human Development Index, the export-oriented SMEs in Pakistan lack ‘educational’ and training infrastructure, due to which their human resources capacity to add value, innovate, upgrade technologies, improve/introduce new products, and to enter into international markets is limited (SMEDA, 2007). Extant evidences show that government support alone cannot adequately provide these enterprises with sufficient HR capabilities, technology, and marketing support; instead these enterprises need to adopt those...
management practices that will develop their human resources capacity to compete in international markets through innovative technologies and products.

Following Chen and Huang (2009), SMEs performance especially in innovation domain depends heavily on the quality of knowledge, skills and abilities (KSAs) of human resources which they possess. Human resources play a vital role for exports-oriented SMEs in identifying emerging opportunities in international market as well as assembling of resources for new ventures (Ruzzier et al., 2007). Based on human capital theory dating back to Becker (1964), which provides theoretical foundation for the critical role of employee’s KSAs in the context of productivity, profitability and performance of export-oriented SMEs. This theory speculates that superior organizational productivity and performance can be achieved through the development and accumulation of strategic or firm specific HC (Hsu and Wang, 2012, Becker, 1964).

At micro level human capital i.e. knowledge, skills and abilities are positively linked with individual’s productivity whereas at macro level it can be leveraged to build and sustain competitive advantage (SCA) for the firm (Barney, 1991). Previous research has shown a significant positive impact of HC development on manufacturing SMEs performance. However, despite widespread recognition of HC development for SMEs competitiveness and performance, there exists little research delineating the process of HC development especially for export-oriented SMEs.

Human resource practices are considered as the primary source by which export-oriented SMEs can develop and shape KSAs of employees to achieve innovative performance and competitiveness (Combs et al., 2006). Previous studies have identified a bundle of HR practices; called high-performance work systems which, if used in harmonious way, can help enterprises achieve superior performance (Chen and Huang, 2009, Evans and Davis, 2005, Gittell et al., 2010). High-performance work systems consist of a ‘group of separate but interconnected’ HR-practices that are designed to improve employee’s commitment and skills required specifically for SCA (Pfeffer, 1998, Whitener, 2001, Youndt et al., 1996). Following Pfeffer (1994), in a globalized knowledge-based economy where talented individuals are required to compete with rivals, effective HR management plays an important role in developing and retaining competitive HC in the organizations. The conception of HC development through HR practices is consistent with the much adopted theory of resource-based view (RBV) which states that HR practices are the primary means by which organizations can develop KSA and behaviour of employees to achieve organizational goals (Barney, 1991, Collins and Clark, 2003). Following RBV, many researchers have concluded that HC is among the most strategic and contributory assets for SMEs to enhance competitiveness and performance (Hatch and Dyer, 2004, Rauch et al., 2005, Wright and McMahan, 2011). However, despite wide recognition of HPWS’s contribution in SMEs’ success, human capital needs, and development challenges, there is a dearth of research who has studied the role of HPWS in enhancing export-oriented SMEs performance through HC development.
Pakistan being an active partner of the global world and highly keen about the competitiveness of its exports-oriented SMEs, has also been overlooked in the same vein.

Export-oriented SMEs, in order to successfully meet globalization, competitiveness, and innovation challenges need to effectively manage their HC like larger organizations (Hatch and Dyer, 2004). There is an intense need to identify those HR practices that would help exports-oriented SMEs develop and retain superior HC. Therefore, consistent with HC theory and RBV the main objective of this paper is to empirically establish a HPWS-SMEs’ Performance link by identifying the intervening mechanism of HC development within the context of exports-oriented SMEs. As such, this paper concentrates on the questions like: To what extent exports-oriented SMEs have adopted HPWS? Does greater use of HPWS enhance overall performance of exports-oriented SMEs”? And does HC development mediate the relationship between HPWS and export-oriented SMEs’ performance? There are some empirical studies who have separately investigated HPWS and HC development in SMEs, however no study has been found to date that has explored HC development as a mechanism through which HPWS effect performance of export-oriented SMEs of Pakistan.

This study and its findings are considered important because it provide insight of HPWS and HC development in export-oriented SMEs that help to achieve higher business performance. This study intends to fill the gap in the body of knowledge and existing literature that has been identified above by establishing a HPWS-SMEs’ performance link and by identifying HC development as a mediating mechanism through which these practices affect enterprise’s performance. The practical significance of this study in terms of entrepreneurs, HR managers and HR practitioners can focus on HPWS in export-oriented SMEs that will help them to develop HC and ultimately achieve competitiveness. Therefore, the implications of this study are far reaching and will help both academicians and practitioners. The next section presents research background and hypothesis development. Following is the research methodology used for collection of data that helped to meet set objectives. Then, it presents results and discussion. Finally, limitations and future research directions are discussed.

**RESEARCH BACKGROUND AND HYPOTHESES**

**Small and medium enterprises**

The existing evidences highlight the importance and contribution of SMEs for sustained economic growth of Pakistan. However, the government policies initially were not focused on SMEs as during 1958 to 1970, 65% out of total distributed loans went to larger organizations (Haque, 2007). In 70s, the nationalization of larger organizations did not make any change and till early 80s government support was mainly focused on the larger organizations of private sector. From early 90s, government started realizing the importance of SMEs in the growth and sustainability of national economy and in 2001-02 SME sector was declared as a wheel of growth.
(Rohra et al., 2009). Since then, SMEs development has been an inherent part of the essential documents such as: Micro Finance Sector Development Program; Education Sector Reforms 2001-05, Tax Administration Reforms, Financial Sector Reforms, Poverty Reduction Strategy Papers, and so on (Chemin, 2010). Ministry of Industries and Production (MoIP) Pakistan took a special initiative in October 1998 to establish a dedicated organization called Small and Medium Enterprises Development Authority (SMEDA) to facilitate the growth and development of SMEs in the country. Small and Medium Enterprises Development Authority has defined SMEs as: the enterprises with maximum 250 employees, maximum paid up capital 25 million, and maximum sales not exceeding to 250 million annually.

The total number of SMEs in Pakistan are approximately 3.2 million that contribute to the earnings of export 25% and value added in manufacturing 35% (Rohra et al., 2009) and development of SMEs is directly linked with exports. Country Assistance Strategy ‘2003-2005’ of Pakistan, published by World Bank, found that contribution of Pakistan in exports is equivalent to the middle and low income countries, which increased during the 80s by 7%, and between 1992 and 1999 earnings from export fell down by 2% every year. The primary reason reported was the allocation of resources to the ‘market oriented’ and ‘capital intensive’ industries instead of export-oriented and labour intensive SMEs (Chemin, 2010).

According to Kureshi et al. (2009), SMEs have a huge share in the Pakistan’s employment generation as in the manufacturing it employs approximately three million people, while in the industry employment share of SMEs is accounted approximately 78%. Human capital in export-oriented SMEs helps to identify new opportunities in national as well as international markets and resources allocation for new enterprises. The attributes of HC include: knowledge, skills and abilities, have been contended by a number of studies (Chen and Huang, 2009, Harris et al., 2012, Takeuchi et al., 2007) and considered to be equally important in SMEs that can be utilized to create wealth and facilitate enterprises to perform better (Chandler and Hanks, 1998). These attributes of HC are considered to be generic that can be applied to every enterprise regardless of its size and type (Lepak and Snell, 1999).

In Pakistan, the overall unemployment rate is approximately 6%, total labour force is 60 million and the two third of Pakistan’s population is less than 30 years and almost one third is youth “between 15-24 years” (Mirza et al., 2014). However, SMEs in general and export-oriented SMEs particularly lack HC as they do not have formal infrastructure and strategies to develop HC, which has resulted in shortage of knowledgeable and skilled workforce which makes it impossible to compete with larger firms and in international markets. According to International Labour Organization, job applicants; particularly youngsters lack basic KSA that are required to acquire a job (ILO, 2012). Also, the skills mismatch is a reason of lower SMEs performance (Mirza et al., 2014). Despite the fact that SMEs differ with larger firms in terms of management capabilities and employed resources (Cohen and Kaimenakis, 2007), no studies have been found in the export-oriented
SMEs in Pakistan that focus on HC development. In SMEs, HPWS assist entrepreneurs and managers to acquire, utilize, and accumulate superior human capital to operate effectively. Thus exports-oriented SMEs need to make policies and adopt best practices that can develop HC.

**High-performance work systems in export-oriented SMEs**

Small and medium enterprises in Pakistan focus on informal planning in terms of HR and business strategies that is a non-strategic approach to HRM. These enterprises are facing challenges due to lack of formal HR practices as study of Afaqı et al. (2009) observed that only 32% SMEs in Pakistan are reported to have formal HR representative or departments. It is due to non-availability of qualified individuals for SMEs because of non-attractive remuneration and even to outsource this function is very costly. Small and medium enterprises usually deploy an accountant or administration manager to perform people related activities, which off course is not a professional approach. However, in Pakistan where SMEs have a huge share in the employment generation, professional HR practices can play a significant role to attract, manage, and retain talented individuals.

High-performance work systems can address the issues faced by SMEs in Pakistan by acquiring, utilizing, developing, and retaining superior human resources especially for innovative export-oriented enterprises (Baron, 2003). The common practices of HRM found in SMEs are usually focused on operational needs such as: staffing (recruitment and selection); record keeping, and rarely emphasize the motivational and retention activities of employees (Barrett and Mayson, 2007, Hornsby and Kuratko, 2003). High-performance work systems are set of HR practices that operate synergistically to provide exceptional performance outcomes to SMEs operating in dynamic environments. These practices are illustrated differently in the existing literature such as: ‘cohesive’, ‘congruent’, ‘internally consistent’ and ‘coherent’ (Appelbaum, 2000, Whitfield and Poole, 1997). High-performance work systems have gained significant attention both from researchers and professionals due to its relationship with business performance (Appelbaum, 2000, Hartog and Verburg, 2004). High-performance work systems provide organizations an opportunity to develop internal capacity to compete in the dynamic environments by employing group of interconnected HR practices such as: staffing, training, performance appraisals and competitive compensation in line with business strategy and needs (Barrett and Mayson, 2007, Lengnick-Hall and Lengnick-Hall, 1988, Wright et al., 2001).

In a similar vein Sung and Ashton (2005), have suggested that HPWS contribute to business performance through: 1) high involvement of employees through sharing of information, quality circles, and self-directed teams; 2) highly developed recruitment process, performance appraisals, and ‘mentoring’; and 3) adopting practices for commitment and rewards, ‘family friendly’ policies, flexible working hours, job rotations, and financial rewards for employees. Hornsby and Kuratko (2003), in their study also highlighted the strong relevance of HPWS for SMEs and
suggested to study these practices in SMEs context. Since SMEs are not only contributing for economic growth but also generating employment in Pakistan, it is important to undertake research in this area especially when little researches are focused on this area. Therefore, this study adopts four dimensions of HRM practices i.e. staffing, training and development, performance appraisals, and competitive compensation to investigate their contribution in export-oriented SMEs performance through HC development.

**High-performance work systems and export-oriented SMEs performance**

The extensive body of research has verified that HPWS positively influence business performance (Drummond and Stone, 2007, Hartog and Verburg, 2004). Most HRM researchers argue that HPWS improves the performance mainly by motivating employees and improving their work orientations, which in turn increases their work flexibility and reduces turnover. In the same vein, it is understandable that HPWS is an ‘attractive system’ to improve productivity and growth of export-oriented SMEs. High-performance work systems may influence and change the employee’s behaviours in SMEs that will help to achieve competitiveness in the industry. The practices of HPWS that are under discussion in this study can be used as means to motivate and enhance the commitment of employees that will bring creativity in the work and enhance performance (Chen and Huang, 2009). Organizations always seek employees who can take risks, bring innovations, and are flexible. This is possible when organizations can put more focus on their staffing activities as recruitment and selection to select highly competent workers (Brockbank, 1999). The second practice: training and development would be helpful in enhancing knowledge, skills and abilities of employees (Jaw and Liu, 2003), that will develop new KSAs necessary to outperform in the markets (Mumford, 2000). To measure unique KSAs and behaviours of the employee’s organizations should also focus on performance appraisal activities. Organizations can create a positive pressure on employee’s to enhance achievement level as this process works to motivate employee’s (Jaw and Liu, 2003). In addition, organizations can acknowledge the accomplishments of individuals and teams by providing them rewards and incentives as it is considered to be an essential source of employee’s motivation at workplace (Mumford, 2000).

The above arguments advocate that export-oriented SMEs, if adopt HPWS, can enhance their HC and resultantly business performance will improve. By bringing improvement and innovation in the process and products export-oriented SMEs can gain sustain competitive advantage in emerging globalized economy.

**Hypothesis 1**: High-performance work systems relate positively to export-oriented SMEs performance.

**High-performance work systems and human capital development**

According to (Danford et al. (2004), Drummond and Stone, 2007), HPWS help organizations to develop HC and the effective utilization of HC lead towards sustained competitive advantage in SMEs. For instance, influencing and managing the
expertise and knowledge embedded in employees (Scarborough, 2003) and promote knowledge sharing among them; however, due to several reasons employees are reluctant to share experience with peers, such as lack of trust and lack of interest among them (Currie and Kerrin, 2003, Hayes and Walasham, 2000). Therefore it is important for innovative export-oriented SMEs to motivate employees’ participation and involvement through HPWS.

High-performance work systems are considered to be the principle method through which organizations can evoke the expertise and knowledge of individuals that is required for organizational success (Collins and Clark, 2003). For instance, staffing, training and development, performance appraisals, and competitive compensation (financial rewards) are the salient practices that motivate employees, enhance their passion and willingness for work, and improve their overall productivity, which eventually lead toward higher SMEs performance (Drummond and Stone, 2007). Hence, this study argues that HPWS are key element for export-oriented SMEs to enhance their capability to develop and utilize HC that holds organizational knowledge. Moreover, Ramsay et al. (2000), noted that the HPWS is distinguishing because of the interdependency of group of HRM practices. It has a logical consequence that HC development mediates between HPWS and OP (Drummond and Stone, 2007). Therefore, study focuses on four practices of HRM: 1) staffing; 2) training and development; 3) performance appraisals; and 4) competitive compensation that influence newly as well as existing employees and help to develop HC in export-oriented SMEs.

Staffing refers to recruitment and selection processes. Recruitment is a process that attracts pool of competent candidates (French and Rumbles, 2010), while selection is a process to choose the most appropriate candidate that fit for the job from pool of candidates (Evans and Davis, 2005, Gittell et al., 2010). It is essential for innovative export-oriented SMEs to acquire individuals with specific expertise and knowledge. Since newly selected employees will be sharing knowledge if they hold an appropriate attitude (Currie and Kerrin, 2003) and skills (Scarborough, 2003). Trainings in export-oriented SMEs focus on the development of newly hired as well as existing employees. It is a pragmatic practice that influence and enhance knowledge, skills and abilities of employees (Lepak and Snell, 1999, Yang and Lin, 2009) and helps in development of HC that is hard to imitate by rivals and due to its uniqueness it contribute for competitiveness of export-oriented SMEs and uplift the performance. Formal trainings in this context help export-oriented SMEs to shape the behaviours of employees, nurture new expertise and knowledge and equip employees with new skills (Nonaka and Takeuchi, 1995) that are required to confront and compete in the international markets.

Further performance appraisals help SMEs to identify the performance level of individual as well as team members. As Yang and Lin (2009) observed; progressive performance appraisals are considered to be an investment for developing HC by providing in time feedback. This process can also be used by export-oriented SMEs
to enhance the motivational level of employees by putting positive pressure such as an improvement in the work and meet deadlines. Competitive compensation can also play an important role in evoking desired behaviours of employees. For instance, the employees are reluctant to share knowledge with peers, but if SMEs link the performance of employees with their participation in knowledge sharing activities and provide them incentives it would motivate individuals as well as teams to create a culture of knowledge sharing in the enterprises. Also, financial rewards should be paid to employees for their risk taking attitude, creativity, innovativeness, and problem solving ability that will promote knowledge sharing (Argote et al., 2003). Following Pfeffer (1998), HPWS’s companies pay above-market compensation to employees against their competencies and performance. Thus, competitive compensation not only helps to gain highly competent workforce for innovative export-oriented SMEs but also motivate employee’s behaviours. The study of Barrett and Mayson (2007) argue that enterprises can motivate and attract HC by offering competitive compensation that result growth in enterprises performance. In addition, recognition, pay raise are generally used as reward systems in SMEs (McEvoy, 1984).

The above reasoning that includes: staffing, training and development, performance appraisals, and competitive compensation develop HC that is strategic asset an organization holds. These practices motivate employees to share knowledge with peers, and build trust. Hence, it is expected that HPWS positively influence HC development.

**Hypothesis 2:** High-performance work systems relate positively to human capital development.

**Human capital development and export-oriented SMEs performance**

Organizations are focusing on providing new services and developing new products to compete with rivals and to gain SCA in the industry (Damanpour, 1991). Small and medium enterprises in general and export-oriented SMEs in particular, can bring innovativeness in its processes by effectively utilizing HC. Human capital that holds firm specific expertise and knowledge can create value and enhance SMEs performance (Scarborough, 2003). According to RBV of the firms, the differences in the performance of the export-oriented SMEs are due to the distinction in the enterprises HC capabilities. A large body of research in the area of HRM has documented that HC is valuable, rare, inimitable and non-substitutable that contribute for competitiveness of the organizations (Chen and Huang, 2009, Gittell et al., 2010, Harris et al., 2012, Hsu and Wang, 2012). Human capital is the most sensitive asset because it holds knowledge through SMEs can excel in local and particularly export-oriented SMEs in global markets. It is far most difficult to retain HC that hold unique KSAs until unless they are treated in a well manner. Hence, HPWS not only develop firm specific competencies but also build trust that leads to overall higher business performance. Thus, firm specific HC plays a vital role to foster innovativeness in export-oriented SMEs.

Small and medium enterprises can acquire HC from outside of marketplace
this provides an opportunity to combine the current as well as new knowledge that incumbents hold and help to create new knowledge. The newly obtained HC increases the organizational HC stock (Nonaka and Takeuchi, 1995) and adds value for export-oriented SMEs in terms of innovativeness and creativity. Consequently, this study argues that HC have a positive link with export-oriented SMEs performance. Since, KSAs that HC hold is a source of SCA through SMEs differ themselves in terms of new services or new product development. By offering innovative new services or products to clients, export-oriented SMEs can get better results and enhance performance in the dynamic international markets.

**Hypothesis 3:** Human capital development relates positively to export-oriented SMEs performance.

**Mediating role of human capital development**

The preceding hypotheses link the relationships amongst HPWS, HC and export-oriented SMEs performance. The above discussion suggests that HPWS positively affect export-oriented SMEs performance through HC development. That is to say, export-oriented SMEs can use HPWS to develop HC assets that will in turn bring innovativeness and enhance their performance. Therefore, this study argues that HC plays an intervening role in the relationship between independent variable HPWS and dependent variable, export-oriented SMEs performance. The argument that HPWS develops HC and thence enhances export-oriented SMEs performance is entirely untested (Drummond and Stone, 2007). Moreover, Becker and Gerhart (1996) and Wright and Gardner (2003) discussed that method through HPWS influence the outcomes of the organizations is not well defined neither been examined. Following this reasoning, this study proposes the following hypothesis.

**Hypothesis 4:** Human capital development mediates the relationship between high-performance work systems and export-oriented SMEs performance.

**RESEARCH METHODOLOGY**

**Data collection and sample**

This study was conducted in three major export-oriented districts namely Gujranwala, Gujrat, and Sialkot. These three districts due to their major contribution in the country’s exports are called “Golden-Triangle of Pakistan” (Mirza et al., 2014). The data for this study was collected from export-oriented SMEs, which had formal HR representative/department and 205 senior managers, and managers participated in this study. This study used convenience sampling method and self-administered survey questionnaire approach was employed to collect data to test the research hypotheses and validity of the model. A cover letter contains the scope of study precisely was attached and handed over to respondents, so they could comprehend the scope of study and responded accordingly. Three concepts of interest include: high-performance work systems, human capital development, and export-oriented SMEs performance. Instrument measuring...
source for HC and business performance (BP) is adopted from (Bontis, 1998) and for HPWS from (Kehoe and Wright, 2013). All independent and dependent variables required five-point Likert-scale responses ranging from (one as strongly disagree and five as strongly agree). SPSS 21 was used to perform the statistical analysis, to test the reliability (or internal consistency) of instrument that is employed for this study, Cronbach’s alpha test was run and for hypotheses 1, 2, and 3 simple linear regression was run and for hypothesis 4 regression analysis was run using the methodology for testing mediation as suggested by (Hayes, 2013).

The statistical method for mediation analysis that is used by researchers tells the indirect effect of mediating variables by answering how X put its effects on Y. The model in this study is defined as two consequent variables \( (M = HC) \) and \( (Y = BP) \) and two \( (X = HPWS) \) and \( (M = HC) \) as antecedent variables (see Table 3), in which \( (X) \) is causally influencing \( (Y) \) and \( (M) \) and \( (M) \) causally influencing \( (Y) \). This is a simple mediation model; since, in this model antecedent variable \( X \) is influencing variable \( Y \) that is an outcome, which is through an intervening variable \( M \). The model of this study includes two pathways one pathway HPWS effects on export-oriented SMEs performance is called direct pathway and the second pathway is HPWS effects on export-oriented SMEs performance through intervening variable HC. Thus, in this model the causal sequence indirect effect is calculated as HPWS influences HC, which in turn influence export-oriented SMEs performance.

Measuring instrument used for this study has already showed high reliability scores such as high-performance work systems showed \( (\alpha = 0.80) \) (Kehoe and Wright, 2013), human capital development and business performance showed greater than \( (\alpha = 0.85) \) (Bontis, 1998). The results of Cronbach alpha show (see Table 1), all the instruments returned the values more than \( (\alpha = 0.70) \). The Cronbach alpha for construct human capital development has established \( (\alpha = 0.85) \) high-performance work systems has established \( (\alpha = 0.93) \) and for construct business performance Cronbach alpha established \( (\alpha = 0.97) \) reliability which indicate that these constructs are highly reliable. The Cronbach alpha scores are higher than \( (\alpha = 0.70) \); therefore the data is considered to be highly internally consistent (Hair et al., 1998) and is considered for further analysis.

**Measures**

**Human capital development**

Human capital development is measured with 20 items scale developed by (Bontis, 1998). The concepts in the literature review assisted to develop the items that included in the survey. The list of 20 developed items that included in the questionnaire for HC measurement are following: 1) competence ideal level; 2) succession training program; 3) planners on schedule; 4) employees corporate in teams; 5) no internal relationships; 6) come up with new ideas; 7) upgrade employees skills; 8) employees are bright; 9) employees are best in industry; 10) employees are satisfied; 11) employees perform their best; 12) recruitment program is comprehensive; 13) big trouble if individuals left; 14) rarely think actions through; 15) do without thinking; 16) individuals learn from others; 17)
employees voice opinions; 18) get the most out of employees; 19) bring down to other’s level; 20) employees give it their all.

**High-performance work systems**

High-performance work systems are measured with 15 items developed by (Kehoe and Wright, 2013) from the previous empirical research literature. The chosen literature to develop the measures and assess the perception of employees of HPWS was based on improving employee’s KSA and opportunity and motivation to perform in the organizations. The 15 items are as follows: 1) the perception regarding selective staffing by asking formal tests for selection (Huselid, 1995, Way, 2002), the use of structured interviews for employment (Huselid, 1995), and the selected job candidates general quality (Combs et al., 2006); 2) the perception regarding employees participation opportunities by asking existence of formal participation process (Sun et al., 2007), changes in implementation based on suggested by employees, fair complaint procedure, and job design modifications by employees autonomy (Huselid, 1995); 3) the perception regarding high-performance compensation practices by asking accessibility to bonuses based on individual and/or group performance (Sun et al., 2007), pay raise based on merits, the level of overall high pay (Way, 2002); other practices that were assessed included; 4) formal performance evaluations for development and increase motivation level (Huselid, 1995); 5) information sharing communications on regular basis to improve the sense of involvement, and importance of employees to contribute for the organizational issues (Combs et al., 2006); 6) opportunity of promotion on based of merits that would enhance the motivation to perform better (Huselid, 1995, Sun et al., 2007); 7) extensive formal trainings that contribute to enhance abilities and skills of employees that express the commitment of organization to its employees (Combs et al., 2006, Huselid, 1995).

**Export-oriented SMEs performance**

To measure the business performance 10 questions/items scale is adopted from (Bontis, 1998). The list of 10 developed items that included in the questionnaire for business performance are following: 1) industry leadership; 2) future outlook; 3) profit; 4) profit growth; 5) sales growth; 6) after-tax return on assets; 7) after-tax return on sales; 8) overall response to competition; 9) success rate in new product launch; 10) overall business performance.

**ANALYSIS AND RESULTS**

This study aimed to understand the relationships among HPWS, HC development, and export-oriented SMEs performance. Table 1 presents the values of means, standard deviations, and correlations of three variables. Table 2 displays the results of linear regression analysis concerning the effects of HPWS and HC development on export-oriented SMEs performance and HPWS on HC development. Models 1 and 2 shows the positive direct effect of HPWS on the dependent variables export-oriented SMEs performance and HC development, which is significant at $p < .001$ level ($R^2 = .605$ and .644 respectively). Similarly, Model 3 shows a positive and significant effect
The results show that the development of HC in export-oriented SMEs is significant at p < .001 level (R^2 = .648).

Hence, the findings show that export-oriented SMEs can develop HC by employing well developed high-performance work systems and contribute their KSAs to meet the business goals. Accordingly, the results of this study support Hypotheses 1, 2, and 3, which states that HPWS relate positively to export-oriented SMEs performance; HPWS relate positively to HC development; and HC development relate positively to export-oriented SMEs performance.

Table 3 presents the results of regression analysis run by using the methodology for testing mediation as suggested by (Hayes, 2013) of HC development mediation between the relationship of HPWS and export-oriented SMEs performance. The results show that HPWS significantly predicts HC development mediation at p<.001.
Although, in terms of working out with a mediation the interest of this study is in the indirect effect of \( X \) (HPWS) on \( Y \) (BP). Further, the confidence interval tells us the population value of the indirect effect. In this case the confidence interval doesn’t contain 0, which means basically our effect is significant as the lower value of confidence interval is .398 and the upper value of confidence interval is .765. It means the population value lies somewhere between .398 and .765 in other words HC development significantly mediates the relationship between HPWS and export-oriented SMEs performance.

Table 3 gives us the values \( c' = .515 \) that is the un-standardized coefficient of the direct effect of X on Y. Further it gives us the values of \( a \) and \( b \), where \( a \) quantifies how much two cases by one unit on HPWS are estimated to differ on HC development. And \( b \) is an analogous to \( c' \) except with HC development as an antecedent. Hence, the indirect effect of HPWS on export-oriented SMEs performance through HC development is derived by \( a \) and \( b \). In this case, \( a = .605 \) and \( b = .939 \), so the indirect effect of HPWS on export-oriented SMEs performance through intervening variable HC development is \( ab = .568 \), at \( p<.001 \). The direct effect of HPWS on export-oriented SMEs performance is estimated as \( c' = .515 \), which is HPWS have a positive direct impact on export-oriented SMEs performance, and on average .568, higher in likelihood of the relationship is mediated by HC development. The total effect of HC development mediates the relationship between HPWS and export-oriented SMEs performance can be derived by summing the direct and indirect effect as \( c = c' + ab = .515 + .568 = 1.083 \) that can be computed by simply regressing HPWS on export-oriented SMEs performance and it is the Beta value of un-standardized coefficient in regression (Hayes, 2013). Hence, this study concludes that HC development mediates between the relationship of HPWS and export-oriented SMEs performance.

**DISCUSSION AND CONCLUSION**

The primary objectives of this study were to investigate if HPWS relate positively to export-oriented SMEs performance, determine if HC
development relates positively to export-oriented SMEs performance, and if HC development mediates the relationship between HPWS and business performance of export-oriented SMEs in Pakistan. A survey method was used to carry out this study. The existing literature evident and support the relationship between HPWS and export-oriented SMEs performance and HC development relate positively to export-oriented SMEs business performance. However, little research has been done in the export-oriented SMEs and unfortunately no study has been found in the Pakistani context; specifically, the mediating effect of HC development that create an indirect relationship between the predicting variable, HPWS and outcome variable export-oriented SMEs performance.

In general, the findings of this study support the predictions: HPWS positively relate to export-oriented SMEs performance, hence if export-oriented SMEs will adopt HPWS they can achieve higher business performance. However, this study further focused whether this simple relationship operates via a third variable or in other words is it the case that HPWS have an effect on export-oriented SMEs performance because it is influenced by some other variables in this case HC development. So, this study had predictor, HPWS that is predicting business performance as an outcome in export-oriented SMEs. The mediation has shown a significant indirect effect so we can quantify that this study have significant mediation. In other words the indirect effect is big enough and the relationship between HPWS and export-oriented SMEs performance has been mediated by HC development.

High-performance work systems leave positive effects on export-oriented SMEs performance through the HC development. Hence, these findings foreground the significant roles of HPWS and HC development in the process of gaining higher business performance in export-oriented SMEs. The practical implications of the study results is that human resource and human capital managers need to focus on successful implementation of formal HR practices that will help them to attract, acquire, manage, and retain their organizational human capital. Since, HC is a source to bring creativity and innovativeness, by utilising their KSAs, enterprises will achieve higher business performance. In the first stance HR managers need to recognize the importance of HC development that will facilitate the link between HPWS and business performance. This facilitation to create a link would help export-oriented SMEs to excel in the market by offering high quality products to its domestic as well as international clients. However, it is not enough to create a link between HPWS and business performance by acquiring highly talented individuals and to increase the asset base; but enterprises should nurture and support the talented individuals to enhance their working performance. This process can be done by providing formal trainings (work related trainings) to employees to enhance their KSAs. Further, the important aspects of implication can be gained through performance appraisals, by measuring the performance of human resources. The ignorance in measuring the performance of employees would cause a severe problem to organization. Finally, the findings of this study point to need of formal HRM systems. The results of this study indicate that HPWS have a
significant relationship with export-oriented SMEs performance and mediating variable HC development.

The results and findings of this study contribute to the theoretical development of a conceptual model that explains the relationship among HPWS, HC development, and export-oriented SMEs performance. The findings of this study emphasise on the most existing HRM research in this vein. Unfortunately, no study has been found that examine these relationships empirically; specifically in the Pakistani context and this deficiency is a serious issue because of the increasing importance of the new trend in human resource management that is human capital. Accordingly, from the resource-based view, this study developed the hypotheses that indicate the mediating role of HC development between HPWS and business performance of export-oriented SMEs. The second contribution of this study in the HRM literature by empirically examining the relationship among HPWS, HC development and export-oriented SMEs performance by using actual cases data. The results of this study showed that use of HPWS including staffing, training and development, performance appraisals, and competitive compensation, positively explains the business performance of export-oriented SMEs. However, human capital development mediates to attenuate these positive relationships. Hence, this study shows that HC development is a mediating variable through which HPWS benefit export-oriented SMEs performance. Academicians in the area of accounting can gain insight how HC development reflect on the performance of the business. This study shows a substantive and significant effect on business performance. Further, for accounting researchers, HC development maybe prove to be an essential item to expose in the future and to examine how organizations treat to their HC (Bontis, 1998). The findings of this study fill the gap by providing an objective mechanism through which HPWS effect export-oriented SMEs performance through HC development.

This study has some limitations. The first limitation is no distinction has been made in the definition of small and medium sized enterprises by SMEDA. Therefore, this study is unable to distinct between small enterprises and medium enterprises. Secondly, this study is delimited to the golden triangle, because of the time constraints and lack of resources to conduct this study in all the divisions of Pakistan. Therefore potential limitations such as: cultural, and industrial may exist and suggesting future empirical research work in export-oriented SMEs in other divisions, and provinces in Pakistan to generalize the concept. Thirdly, this study was forced to use the convenience sampling due to it is delimited to target only those export-oriented SMEs that have a formal HRM representative/department. According to Afaqi et al. (2009), approximate 32% SMEs have formal HRM representative/department. It caused to avoid random sampling technique, as no list of export-oriented SMEs that have formal HRM department exist and enterprises were approached after gathering information regarding formal representative/department existed (Mirza et al., 2014). In addition, only human capital development
was included in this study instead of including all three components of intellectual capital. It was beyond the scope of this study to see all the significant variables other than human capital development that may mediate the relationship between HPWS and export-oriented SMEs performance. Hence, future research may include structural capital development and relational capital development as mediators in addition to human capital development between the relationship of high-performance work systems and export-oriented SMEs performance. Finally, this study uses a cross-sectional research design. Even though results of this study are constant with theoretical reasoning, the hypothesized relationships may not be ruled out by the cross-sectional design. The future research may address this issue by using longitudinal design.

References


