

# **THE ROLE OF PSYCHOLOGICAL EMPOWERMENT AND INNOVATION ON FIRM PERFORMANCE: AN EMPIRICAL STUDY OF SMEs IN SAUDI ARABIA**

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## **Abstract**

*This study provides an analysis of the role of psychological empowerment and innovation, and the factors impacts that enable the initial development in performance of SMEs. The study also addresses the deficits in the literature by examining the mediating role of innovation on the links between psychological empowerment and firm performance. Using survey data of 202 employees in SMEs at Saudi Arabia; empirical findings showed psychological empowerment can enhance, directly and indirectly, firm performance. Innovation also sequentially mediates the relationships between psychological empowerment and firm performance. An examination of psychological empowerment helps identify a critical psychological process and understanding how empowerment affects firm performance. Furthermore, an organization's ability to change its capacity and innovation is associated with the observable characteristics of SMEs and the environmental requirements. Contributions to both research and practice are considered, as well as the study's limitations and followed by the study's conclusions.*

*Keywords: Psychological empowerment, SMEs, Innovation, Firm performance, Environmental dynamism, Environmental munificence, Business models*

## **INTRODUCTION**

The economies of developed countries are, to a large extent, built on the activities of micro, small and medium-sized enterprises (SMEs). SMEs in the evolution of economic, reduction in poverty, increase in employment, output, innovation in technology and lifting up in social position (Eniola & Entebang, 2015). SMEs are, therefore, one of the most powerful things a

country can do to create a strong foundation for growth. SMEs also help innovation through the creation of new technologies, products and services (Camison & Lopez, 2010). SME firms make a significant contribution to the gross domestic product in the countries, SMEs act as vital agents of change by developing new products and services, implementing more efficient production methods, and creating new business models and industries. They generate jobs, support local communities and build prosperous societies (Ngek & Smit, 2013).

However, it is important that management understands the need to implement empowering (*Following Kirkman, Rosen, Tesluk, & Gibson (2004), whatever I use psychological empowerment, team empowerment or empowerment will denote the same meaning.*) practices in a holistic and integrated manner, where practices are successful in promoting employee autonomy, a holistic implementation of practices to empower employees should result in a higher level of performance and service quality and hence customer loyalty (Geralis & Terziowski, 2003).

Furthermore, the organization has to emphasize the empowerment of employees and the strengthening of individual and team work in order to achieve increased awareness of responsibility among the workforce. Lawler (1992) notes that organizations should be structured so that individual at lowest levels the organization not only perform work but also are responsible for improving work methods and procedures solving problems on the job and coordinating work with that of others. Research into the workplace context has also shown the power distribution of team members in the proximal work environment and, consequently, its effect on various outcomes (Smith, Houghton, Hood, & Ryman, 2006).

Additionally, given the increasing attention now being directed towards trade liberalization, as well as the increasing competitive pressures in the global marketplace, innovation acts as vital agents of change by developing new products and services, implementing more efficient production methods, and creating new business models and industries.

Further, as competition in the 1990s intensified and markets became global, so did the challenges associated with getting a product and service to the right place at the right time at the lowest cost. Early and fast enterprises introduction of innovation can bring the highest returns, because they are first to introduce new goods or service in the market (Hitt, Ireland, Camp, & Sexton, 2001). For the original manufacturers, the innovation process is as important as the manufacturing and logistics ones (Grando and Belvedere, 2006).

This study seeks to enhance understanding on ways that psychological empowerment and types of innovation might be oriented towards promoting SME`s competitiveness, income generation and sustainable development. As a result, SMEs generally make a valuable

economic and social contribution because of their innovative capacities. So, for rapid-growth economies like Saudi Arabia, SMEs are particularly important as they stimulate innovation and are the vehicles for the ideas of budding as well as successful entrepreneurs.

The study contributes to the strategic literature by examining the relationship between psychological empowerment and outcomes of SMEs. The study also provides an analysis of the role of psychological empowerment and innovation on firm performance and the factors impacts that enable the initial development in performance of SMEs sector. An examination of psychological empowerment helps identify a critical psychological process (Lin & Rababah, 2014) and understanding how empowerment affects firm performance. Furthermore, the main benefits when the company's investment in empowerment culture, clarity of objectives, involved, motivated and innovative staff, more effective management response culture, and empowerment breeds effective teams and the evolution of a high quality perform.

Further, this study also examines how the psychological empowerment affects firm performance through the mediation mechanisms of innovation, which has been proposed as an important factor in determining individual and team abilities (Simsek, Heavey, & Veiga, 2010). Using a structural equation modeling (SEM), this study analyzes a large-scale sample of over 202 employees in 45 SMEs in Jazan City - Saudi Arabia.

Lastly, the characteristics of high power distance and tolerance for hierarchical inequity in Arab countries like Saudi Arabia make the examinations of empowerment and innovation issues valuable, because it can offer insights that complement studies that have focused on firms in Western societies (Lin & Rababah, 2014).

## LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

### Small and Medium Enterprises SMEs

Small and medium enterprises are considered the most efficient and capable instrument to accelerate the pace of economic and social development. SMEs are characterized by many features including, simplicity of their establishment due to the low value of the capital needed for their foundation and operation, because of the simplicity of their administrative structure (Terziovski, 2010). Moreover, SMEs are featured by the independent management by their owners who seek as much success as possible. Their other features are: low administrative and marketing cost, and labor wages, simple routine procedures, highly efficient communications and readily available information needed for work therein. SMEs account for 95% of the total number of enterprises in most of the countries; in South Korea and the United Kingdom SMEs account for 99.9% of the total number of enterprises. Also, in the United States SMEs account

for 90%, while in South Africa account for 80% of the total number of enterprises (Ngek & Smit, 2013).

SMEs are also targeted since they constitute over 95 per cent of firms in the Economic and Social Commission for Western Asia region (ESCWA). This is due to the fact that industrial policies in the ESCWA region have largely sought to encourage the development of large-scale industrial complexes in the region, to attract foreign direct investment in real estate development and the services industrial sectors, and to achieve national security objectives (ESCWA, 2007).

SMEs are therefore the main drivers for growth and economic diversification. SMEs promote and create wealth in countries by contributing in a significant amount to the Gross Domestic Product (GDP). In Germany SMEs are 75% of GDP and 39% in US GDP; while in South Africa is 57% of GDP (Ngek & Smit, 2013). Furthermore, the SMEs contribution to GDP in Middle East and North Africa MENA region is low compared to developed countries: SMEs account for 70% of GDP in the United Arab Emirates (UAE), Jordan and Egypt; 51% of GDP in Tunisia; and 38% of GDP in Morocco. In Saudi Arabia, SMEs contribute around 33 percent to GDP and comprise nearly 25 percent of the labor force. The greater part of the SME labor force in Saudi Arabia consists of migrant laborers (Alotaibi, 2015).

Further, SMEs are the backbone of any successful and sustainable economy (Klonowski, 2012). They are the blood cells behind successfully diversified economies and large corporations. SMEs have local roots and provide local jobs, but can also exploit the opportunities from globalization. SMEs have shown to provide jobs in large numbers and 50% of jobs created in countries are due to SMEs; SMEs provide job creation of 53% in US, 78% in Germany, 87.7% in South Korea and 60% in South Africa of the total jobs created (Ngek & Smit, 2013).

Conversely, it is very difficult to define SMEs properly. There is no common definition of SMEs in the world. However, the general practice in every country or region is to depend on a number of criteria, including manpower numbers, capital, volume of annual sales and total financial position at the end of the period. According to a directive of the European Union (96/C 213/04) any plant with less than 250 employees has been considered a small-to-medium-sized one (Grando and Belvedere, 2006). European Union region, small enterprises are defined as those having 50 workers and an activity volume of 10 million Euros, while medium ones are those with 250 workers and an annual activity volume of 50 million Euros. Furthermore, number of employees (Es) and capital in Japan: Manufacturing less than 300 (Es), SR 9 million; Wholesales less than 100 (Es), SR 3 million; Retail less than 50 (Es), SR 1.5 million; Services less than 100 (Es), SR 1.5 million. Some authors used these categories (Morga, Colebourne, & Thomas, 2006): Micro, i.e. those employing between 1 and 10 people; Small, i.e. those

employing between 11 and 50 people; Medium, i.e. those employing between 51 and 250, and Large, employing over 250.

In the kingdom of Saudi Arabia, the Saudi Industrial Development Fund adopts the criterion of the annual sales for defining small and medium enterprises whose annual sales do not exceed RIs 20 million for financing purposes according to “Kafallah” program. Total capitals and registered capitals also are not always same because of various reasons, including Zakat saving. Research has also shown that the Saudi government wants to get economic benefits from SMEs, and it has created a number of programs to narrow the SMEs financing gap: Centennial Funds, Bab RizqJameel Center, Saudi Credit and Saving Bank, Riyadh, and Saudi Industrial Development Fund -Kafalah program ( World Bank Group, 2014).

### **Psychological Empowerment**

The term empowerment is largely interrelated with many other broader practices; hence definitions of the concept will vary to some extent according to the situation in which it is described. There are two main approaches to the concept of empowerment in organizational setting (Lin & Rababah, 2014): *psychological* and *relational* perspectives refer to these (Conger and Kanungo, 1988; Spreitzer, 1995). The *relational perspective* on empowerment focuses on how the sharing of power within an organization is affected by the structures and culture of the organization. An empowered person or a team has a better control over his/her surroundings and more specifically the work area (Sharma and Kaur, 2008). Management’s job from this perspective is to create a culture of participation by providing a compelling mission, a structure that emphasizes flexibility and autonomy, rewards for participation and a lack of punishment for risk taking.

The *Psychological perspectives* on empowerment: Empowerment in organizational setting focuses on the individual employee’s, this approach emphasis on attempting to define the self-perceptions of an employee who that he or she empowered (Conger and kanungo, 1988; Spreitzer, 1995). Employees are empowered if they perceive themselves to be empowered.

Thomas and Velthouse, (1990) in the cognitive model of empowerment, four task assessments are seen as having additive motivational effects, these four dimensions of assessment are included as cognitive components of intrinsic motivation: impact, competence, meaningfulness, and choice. They claim that an employee is psychologically empowered when he or she (Conger and Kanungo, 1988; Thomas and Velthouse, 1990; Spreitzer, 1995): *Meaning*, his or her role involvement in relation to an individual’s own ideas or standards; *Competence*, or feels efficacious with respect to his or her ability and capacity to perform

activities with skill; *Choice*, has as sense of determination with regard to specific means to achieve a desired outcome within his or her role and *Impact*, the individual has control over desired outcome, that he or she can have an impact on the larger environment the degree to which an individual can influence strategic administration or operating outcomes at work (Lin & Rababah, 2014).

This study considered psychological perspectives on empowerment. Also, it is important that management understands the need to implement empowering in a holistic and integrated manner, where practices are successful in promoting employee autonomy, a holistic implementation of practices to empower employees should result in a higher level of performance and service quality and hence customer loyalty.

## **Innovation**

Efforts to improve the explanatory reach of innovation research have led to increasing interest in the process through which new ideas, objects and practices are created and developed or reinvented (Slappendel, 1996). Such efforts reveal how ongoing debates in sociology, organizational studies and ideas of innovation in relation to the role of agency and structure in processes of social change and reproduction (Clark, 2000).

However, to date, little has been said about the multi-level dimensions and often paradoxical links between agency and structure in studies of innovation in SMEs (Edwards, Delbridge, & Munday, 2005). Despite increasing attention being given to the role of SMEs and innovation there is a hiatus between what is understood by way of the general innovation literature and the extant literature on innovation in SMEs.

SMEs generally make a valuable economic and social contribution because of their innovative capacities. Scholars have noted that SMEs are often more fertile than larger firms in terms of innovation (Afuah, 1998). Their comparative advantages over large firms in innovation are their flexibility and speed of response. Further, the characteristics of a successful innovation system, strong industry-science linkages to facilitate the commercialization of scientific advance, a solid science base in institutions of higher education and research, entrepreneurship supported by an institutional environment encouraging risk-taking, to encourage innovation and diffusion.

Based on the literature review, organizational innovation is, traditionally divided into product and process innovation (Martinez-Costa & Martinez-Lorente, 2008). This study considers the nature of innovation, in the same time, considered as the types of innovation, which was categorized into technological, marketing, administrative, and strategic innovations (Lin, & Chen, 2007).

## **Firm Performance**

Performance is a recurrent theme in most branches of management, including strategic management, and it is of interest to both academic scholars and practicing managers. Several authors have argued the importance of organizational or business performance along three dimensions namely, theoretical; empirical and managerial. The concept firm performance includes internal and external dimensions of efficiency, effectiveness and fairness. Firm performance refers to how well an organization achieves its market-oriented goals as well as its financial goals.

Furthermore, many researchers are trying to construct their own framework for measuring business performance. The financial performance measured from financial point of view, include profitability and return on invest (ROI), return on assets (ROA) and so on (Garg, Walters, & Priem, 2003). The operational performance measurements include market share, productivity, and quality of product. Some studies using both financial and market criteria. Kara, Spillan & Deshield (2005) suggested a model about performance including profit goal achievement, sales goal achievement and ROI achievement.

According to previous studies on firm performance, this study adapted approach would be to examine such indicators as sales growth, profitability, new product success, sales share new products, market share and ROI.

## **The Determinants of Innovation**

Empowerment relates to the concept of self-help and is considered both a democratizing process and an outcome. Also, the empowerment is aimed at eliminating sources of powerlessness (Styhre, 2004), which in turn furthers the making and motivate of innovation. However, innovation is a strategic option for improving the organization and making it more competitive (Montes, Moreno, & Morales, 2005). So, Employees are provided with greater opportunities to participate in decisions - empowering - investment in training and information sharing that affects them, and increase innovative behavior (Wood & de Menezes, 1998), and nontraditional paradigm of motivation (Thomas & velthouse, 1990).

Conversely, TMT members will have less creativity and be less motivated to involve in decisions if they feel less empowered in strategic decision-making processes (Mintzberg, 1994). Unequal power distribution also can create a stifling environment, which in turn may deter the implementation multi-dimensional of innovation and strategic innovation.

Psychological empowerment also can promote members' risk-taking and experimentation and entrepreneurship orientation (Ling, Simsek, Lubatkin, & Veiga, 2008), which enhances the likelihood of making nonroutined decisions and introducing incremental

innovations. Furthermore, the main benefits when the company's investment in empowerment culture (Long, 1996) clarity of objectives, involved, motivated and innovative staff. Therefore, empowerment essentially involves learning how to take the initiative and respond creatively to the challenges of the job, the more feel employees need to account for a firm's administrative and strategic innovation. Based on this idea, the following hypothesis is proposed.

*H1: Psychological empowerment is positively related with types of innovation.*

### **The Determinants of Firm Performance**

Researchers and practitioners are seeking to investigate how innovations can be disseminated among different adopting units, why some organizations are more innovative than others (Hashem & Tann, 2007). The innovation gap call a proactive strategy implies the constant search for and introducing of new ideas, products, services, systems, policies, programs and processes before other firms in the environment (Montes et al. 2005). In a competitive environment, product and service innovation is necessary to surpass competitors in the degree to which the needs of customers are satisfied (Martinez-Costa & Martinez-Lorente, 2008). Since companies are facing a turbulent and rapidly changing environment, innovation has become a strategic tool for management. Therefore, innovation is a strategic option for responding to the new challenges of an environment subjected to change and uncertainty.

A review of past research on organizational innovation also indicates that the most frequently used innovation results are organizational profitability and productivity rates, sales or return on assets (ROA) and return on equity (Damanpour & Gopalakrishnan, 2001). Conversely, incremental technological innovations help improve company competitiveness with the ultimate aim of increasing company value. Product innovation is one of the important sources of competitive advantage to the firm (Camison & Lopez, 2010). When organizations operate in a highly competitive, dynamic and uncertain environment, with changing customer preferences, the firm cannot focus solely on stable processes, but must continuously innovated. It is thus necessary to creating environment for innovation which could be used to set up devices for high performance of SMEs

*H2: Types of innovation is positively related with firm performance (SMEs).*

### **Psychological Empowerment with Firm Performance**

The empowerment means an organization ensures that employees receive information about organization performance, employees have the knowledge and skills to contribute to achieving the organization goals, employees have the power to make substantive decisions and employees are rewarded based on the organizations' performance (Chen & Chen, 2008).



An employee empowerment, by providing workers with opportunities to influence decisions, promotes worker motivation and reduces worker resistance toward organizational changes (Kappelman, and Richards, 1996). Also, as empowerment is used to denote the sharing of decision-making, broader work descriptions and work assignments, and less tight managerial control, the empowered worker is expected to operate as an entrepreneur. All of these will help a firm to create nontraditional and nonroutine ideas (Miller & Chen, 1994) and prepare the firm for taking new competitive initiatives, reducing the probability of becoming inertial in the marketplace.

Additional, empirical support has begun to accumulate regarding the relationship of employee empowerment to important work-related outcomes (Spreitzer, 1995). The models employee empowerment is as a significant component of organizational change strategies and to yield more effective & competitive organizations (Logan & Ganster, 2007). Further, the goal of empowerment is to assure success-success for individuals and success for organizations. The employees and team members who feel that their tasks are meaningful and that by completing their job responsibilities (Lin & Rababah, 2014), and they have an impact on others and organization.

*H3: Psychological empowerment is positively related with firm performance (SMEs).*

### **The Mediating Role of Innovation**

Psychological empowerment will be related to innovation. However, innovation is important to outcomes only insofar as they influence firm performance. Previous studies show that empowerment is the most consistent and critical predictor of team effectiveness (Lin & Rababah, 2014), entrepreneurship orientation (Ling et al., 2008), making nonroutined decisions and introducing incremental innovations, which in turn furthers the making of effective strategic innovation for the firm.

Any organization that wishes to empower its employees has to proceed in a systematic, structured manner, which will facilitate empowerment efforts and sustain those in the long run. Empowerment is also a psychological state and hence it needs to be measured periodically to assess the outcomes of empowering efforts, in which will lead a firm's directions and determine its strategic and ultimate firm performance. Therefore, early and fast enterprises introduction of innovation can bring the highest returns, because they are first to introduce new goods or service (Hitt et al., 2001), which can extend in technological and marketing innovations in the market.

Further, an empowered employee is often characterized by interpersonal trust and respect, which can increase their enthusiasm and active participation in decision improvement

efforts (Nembhard & Edmondson, 2006), which can advance strategic innovations, which in turn furthers the making of high performance and outcome of firm. Thus, the more empowerment employees perceives, will encouraging to be creative and non-traditional in solving problems and a sense of impact on performing work (Bass, 1999). As a result, this study expects that innovation plays a mediating role between psychological empowerment and firm performance. Based on this, the following hypothesis proposed

*H4: Types of innovation will mediate the relationship between psychological empowerment and firm performance (SMEs).*

## RESEARCH METHODOLOGY

### The Sample of Study

The governments have begun in most countries of the world now, legislation policies and regulations which support and develop SMEs. The empirical research was conducted at Saudi Arabia. Our target firms for investigation are SMEs. The study focuses on SME specifically in Jazan City (South Saudi Arabia). The sample of the study was limited to the industrial sector. We are chosen SMEs which characterized by the freedom to enter and exit the market. SMEs play an important role in Saudi Arabia, because of their flexibility, ability to innovate, and their capacity to generate income; SMEs provide also a fertile environment for training workers and developing their skills. SMEs are also flexible to move and spread geographically.

Despite the policies and procedures followed by the Saudi government; the SME sector contribution to Saudi Arabia economy is very limited, the contribution to GDP is 33% and to employment is 40% with no contribution to exports. According to the World Bank Group (2014), Saudi Arabia stands in a favorable position of SME enablers, stable political stability, medium economic conditions, low corruption, high infrastructure, and strong regulatory environment.

Furthermore, in Saudi Arabia, the regulatory framework for SMEs has not been yet determined. There is no specific entity responsible for organizing affairs, support and development, but the government of Saudi Arabia has adopted several measures and initiatives to support and develop the SMEs including founding the Saudi General Investment Authority (SAGIA) (Alotaibi, 2015), the Saudi Industrial Development Fund (SIDF) sponsors SMEs, and Saudi commercial Banks provide loans to SME's.

Saudi Arabia has followed more than one definition of SME. In this study, SMEs in Saudi Arabian is defined according to the definition of the General Investment Authority, which has in the past classified small enterprises as having less than 49 employees, while Medium-size companies as have between 50-200 employees. However, according to other bodies, Small

companies are those with less than 5 million Saudi Riyals (1.3 million \$) of capital, while Medium-size ones have capital between 5 and 20 million SR (5.3 million \$) (Hertog, 2010).

For more illustrate, 65% of KSA SMEs employ between 10 to 49 individuals, 22% employ 6 to 9 individuals, while 14% are considered medium-sized enterprises employing 50 to 150 employees; from these employees, 73.3% are foreigners while 26.7% are Saudi nationals, and most of the employees are male with only 1% to 10% SMEs' employees might be women (Nasr, & Pearce, 2012). In terms of ownership, 98% of SMEs are wholly owned by men while only a 2% owned by women.

## Measurement of Variables

### *Independent Variables*

**Psychological Empowerment:** Conger and Kanungo (1988) and Spreitzer (1995) 12-item, 5-point Likert-type (1= strongly disagree; 5= strongly agree) scale was adapted to measure empowerment. The 12 items reflect four dimensions of psychological empowerment: meaning ( $\alpha = .91$ ), impact ( $\alpha = .85$ ), potency/self-efficacy ( $\alpha = .89$ ), and autonomy ( $\alpha = .86$ ). Cronbach's  $\alpha$  for the overall scale was (.93). CFA results showed acceptable model fit indices ( $\chi^2 = 3.25$ ,  $df = 2$ ; NNFI= .98, CFI= .99, RMSEA= .05).

**Innovation:** There are different perspectives on what is and what is not an innovation activity and how innovation can be measured (Avermaete, Viaene, Morgan, & Crawford, 2003). The 12 items reflect four dimensions of type of innovation. *Technological innovation* ( $\alpha = .80$ ) encompasses product, service and process innovations. *Marketing innovation* ( $\alpha = .84$ ) includes new brands and extension of new markets. *Administrative innovation* ( $\alpha = .81$ ) changes or improvements of organizational structures and administrative processes pertain to the areas of administrative innovation. *Strategic innovation* ( $\alpha = .86$ ) is concerned with organizational strategies which exert continuous competitive advantages for companies. Cronbach's  $\alpha$  for the overall scale of innovation was (.90). CFA results showed acceptable model fit indices ( $\chi^2 = 4.33$ ,  $df = 2$ ; NNFI= .96, CFI= .95, RMSEA= .05).

### *Dependent Variable*

**Firm performance:** This variable represents a firm's relative performance of SEMs, as compared with its direct rivals, over the last three years (2013-2015). The five 5-point (1= far low than competitors; 5= far high than competitors) items used in this study are adapted from (Garg et al., 2003). These include such indicators as profitability, sales growth rate, market share growth rate, return on investment, and overall firm performance. The CFA results also

showed good psychometric property of the variable and the fit indices were all higher than the acceptable thresholds ( $\chi^2 = 29.28$ ,  $df = 5$ , NNFI = .94, CFI = .95, RMSEA = .6).

### **Control Variables**

The study controlled for variables that may affect innovation and firm performance, including respondents-level information (i.e. gender, age, experience, and education heterogeneity), industry-level variables (i.e. environmental dynamism and munificence), and firm-level characteristics (i.e. size) (Papadakis & Barwise, 2002).

### **Characteristics of Respondents (People & Organizations)**

This section shows the characteristics of respondents including (gender, marriage, age, education, and experience), and firms information such as total employees and industry sector. However, 45 firms (SEMs) were deemed useful for further analysis, which means (202) respondents were used in analysis for this study. The average capital of the sample firm is \$3.5 million (s.d.= 43.34), the average employee number of 7 persons (small) and 55 (medium) with an average firm age of 13.4 years. About 34.6% are in the industrial sector, 10.9% in the banking and financial, 50.5% in the services sector and 3.4% in the insurance sector. The average experience in employee firm's industry is 4.14 (S.D. 2.20) and the sample averages 30.30 years of age (S.D. 6.06). Further, 87% of the sample was male and 90.9% are married.

### **Data Analysis Approach**

Structural equation modeling (SEM) can closely examine the relationships between observed indicators and latent variables while simultaneously controlling for measurement errors. It can also test the mediating processes among latent variables. A two-step structural equation modeling approach (Anderson & Gerbing, 1988) implemented in AMOS 16.0 is performed to evaluate the models and test the hypotheses. The first step is to fit a confirmatory factor analysis (CFA) to check for convergent and discriminate validity, to confirm the full measurement model, and then test a series of structural models to test the hypotheses. Nested models are applied to assess alternative models by testing the sequential chi-square difference  $\Delta\chi^2$  and thereby producing the final model, a better-fitting structural model (Lin, & Rababah, 2014).

To assess model fit, the chi-square  $\chi^2$  test was used. Chi-square values are reported as the index of absolute fit, for which the covariance estimated in the model match the covariance in the measured variables. Additionally, the four fit indices of (CFI), (NNFI), and (RMSEA) are

applied, following Hu and Bentler (1998). The full measurement model was evaluated by incorporating the control variables into the model.

## EMPIRICAL RESULTS

### Validity Assessment and Measurement Model

Convergent validity among constructs was confirmed, given that each indicator had a statistically and substantively significant factor loading on its respective construct ( $p < .001$ , all  $t$ 's  $> 7.50$ ). Discriminant validity was confirmed by two criteria. First, bivariate correlations between any one pair of variables were all below the recommended level of .65 (Lin & Rababah, 2014), see Table (1).

Furthermore, VIF was calculated for each independent variable. Statistical results showed that the VIF value ranged between 1.33 and 2.40 for our individual predictors and were all less than 10, suggesting no serious problems of multicollinearity (Simsek et al., 2010). These results confirmed that the main constructs were valid and distinct measures, albeit the potential inflation effects of common method variance still cannot be completely ruled out.

Finally, I evaluated the full measurement model by incorporating control variables in the model. For the respondents-level information, industry-level and firm-level characteristics, the residuals and lambda coefficients were respectively fixed at zero and one. For environmental dynamism and munificence, their residuals and lambda coefficients were fixed by the procedure identical to that of firm performance. The results showed the model fitted the data well ( $\chi^2 = 234.45$ ,  $df = 170$ ;  $NNFI = .95$ ,  $CFI = .95$ ,  $RMSEA = .04$ ), lending support to the psychometric properties of the full measurement model.

### Nested Structural Models, Hypotheses Testing and Results

Table (1) presents the means, standard deviations and intercorrelations for the variables examined in the study. As shown in Table (1) psychological empowerment was significantly correlated with innovation, and innovation was significantly correlated with firm performance. The findings present preliminary evidence for further analyses.

Nested modes assess alternative models by testing the sequential chi-square difference  $\Delta\chi^2$  and thereby produce the final model, a better-fitting structural model. This process involved comparing the chi-square difference between nested models, I which relationships between constructs were sequentially added to original model (Lin & Rababah, 2014).

Table (2) presents the value of fit indices for the nested models. The significant difference ( $\Delta\chi^2 = 1260.31$ ,  $\Delta df = 37$ ,  $p < .001$ ) between the hypothesized model (Model 2) and null structural model (Model 1) provided the basis for further examination of various nested models.

Significant differences between Model 2 and Model 3 ( $\Delta\chi^2 = 3.74$ ,  $\Delta df = 1$ ,  $p < .001$ ) suggested that adding psychological empowerment-performance relationships into the hypothesized model indeed improved model fit. The results showed that the psychological empowerment-innovation relationship; the psychological empowerment-performance relationship, and the innovation-performance relationship exhibited a significantly incremental contribution to Model 2. Taken together, I obtained Model 3 as the final model ( $\chi^2 = 236.37$ ,  $df = 172$ ,  $p < .001$ ; CFI=.95, NNFI=.95, and RMSEA =.04).

Figure (1) presents the completely standardized path estimates for the examined relationships. Consistent with expectations, psychological empowerment ( $\beta = .26$ ,  $p < .001$ ), was positively related to innovation ( $p$ 's  $< .01$ ), supporting H1. Hypothesis 2 and Hypothesis 3 were also confirmed as types of innovation was significantly and positively associated with firm performance ( $\beta = .31$ ,  $p < .001$ ), and psychological empowerment was positively associated with firm performance ( $\beta = .23$ ,  $p < .001$ ) respectively.

Sobel tests suggested the indirect effects found in the study model were all significantly different from zero for psychological empowerment,  $t > 3.76$ ,  $p < .05$  (Sobel, 1982), a finding that supports hypothesis 4. Thus, the results show that innovation plays a partially mediating role in linking psychological empowerment and firm performance. Psychological empowerment was direct related to firm performance ( $\beta = .46$ ,  $p < .000$ ). Further, psychological empowerment was indirect related to firm performance ( $\beta = .01$ ,  $p < .000$ ).

Moreover, the standardized total effect of psychological empowerment on firm performance through the mediations of innovation was ( $\beta = .01$ ). Values was significantly different from zero for psychological empowerment,  $t > 1.77$ ,  $p < .10$ , showing partial support for Hypothesis 4.

Table 1. Means, Standard Deviations, and Correlations

Variables	M	SD	1	2	3	4	5	6	7	8	9
1. Psychological empowerment	2.83	.87									
2. Innovation types	3.69	.90	.47**								
3. Firm performance	3.38	1.09	.51**	.50**							
4. Environmental munificence	4.27	.91	.29**	.14*	.37**						
5. Environmental dynamism	4.39	1.17	.29**	.23**	.36**	.19**					
6. Employees age	1.31	.33	.05	.10	.04	-.04	.05				
7. Employees experience	1.35	.36	-.34**	-.22**	-.26**	-.12	-.15*	-.01			
8. Employees education heterogeneity	.52	.31	-.00	.08	-.07	-.00	-.09	.01	-.01		
9. Firm size	2.42	.49	.06	.08	-.05	.02	-.10	.08	.01	.15*	

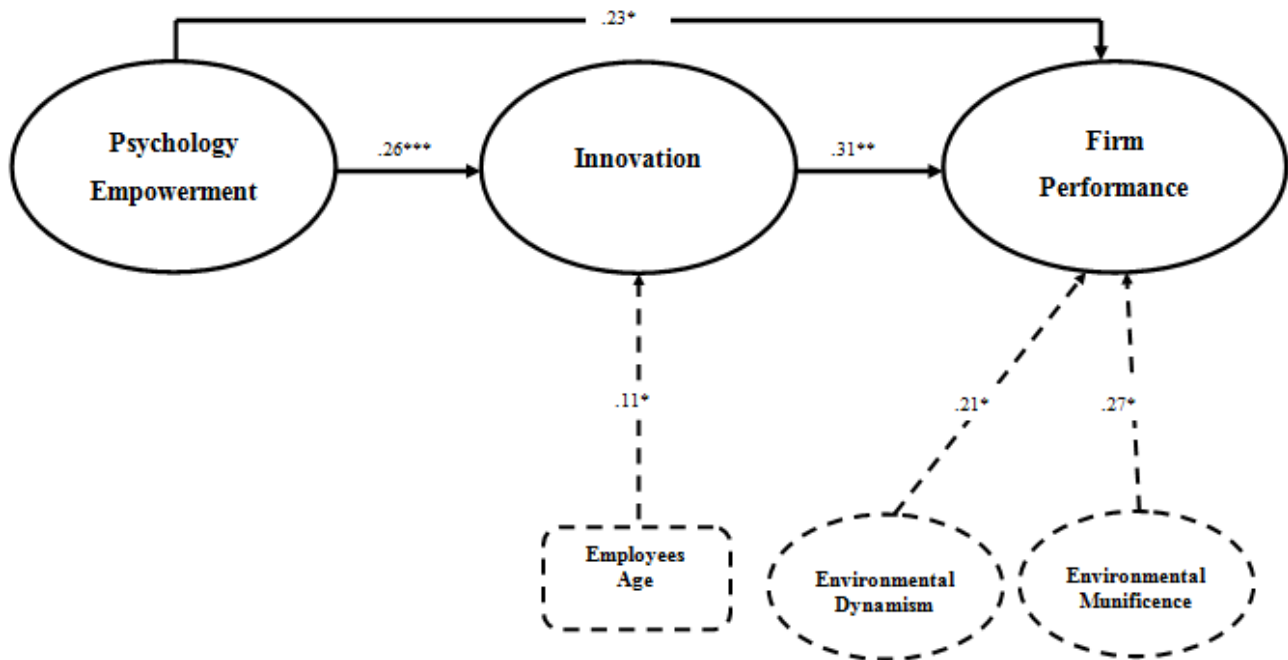
Note: N = 202, \*\*P < .01, \*P < .05. The results are based on AMOS analyses.

Table 2. Comparisons of Nested Structural Models

Models	$\chi^2$	Df	$\Delta\chi^2$	NNFI	CFI	RMSEA
1. Null structural model	1500.42***	210				
2. Hypothesized model	240.11***	173	(2 vs. 1) 1260.31	.94	.94	.04
3. Empowerment → innovation Empowerment → performance	236.37***	172	(3 vs. 2) 3.74	.95	.95	.04

Note: Model 3 is the final model. \*\*\*  $p < .001$

Figure 1. Completely standardized estimates of the final model



Note: 1. This is a simplified version of the examined model. To simplify the figure, the direct links between psychological empowerment and firm performance are omitted.

2. Control variables are depicted by dashed lines.

3. The path coefficients are standardized parameter estimates.  $N = 202$ , \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

## DISCUSSION OF RESULTS

This study examines the relationships among psychological empowerment, types of innovation and firm performance/ SEMs, Results support the theoretically derived causal model and key hypothesized relationships. The findings of this study show that psychological empowerment has a significant and positive correlation with innovation, which in turn can bring a high level of

firm performance, and types of innovation also significant and positive correlation with firm performance.

This study contributes to the SMEs literature. Its investigation the role of SMEs to developed economics of the contraries. It is important to support reforms that would enhance the development of innovative SMEs, creating job opportunities and sustainable economic development. SMEs comprise a significant portion of businesses in Saudi Arabia, which makes their development key to the economy's growth, and transforming SMEs into a main driver of economic growth and job creation.

The study contributes to the psychological empowerment research. Beyond gaining a greater understanding of the relative role of empowerment processes in capturing the key interrelated and reinforcing elements of innovation-firm performance, the one major intermediate is innovation, which has been related to the firm performance. This consideration, combined with the study's exploration of psychological empowerment, a process concern that is vital for firm success in high power distance cultural contexts such as Saudi Arabia, as well as its impact on ability to empower of employees of SMEs (Lin & Rababah, 2014).

The study also contributes to the innovation literature, especially in its integrated consideration of psychological empowerment facilitating the relationship between employees' perceived empowerment and its resulting outcome, highlights the significance of psychological processes in performance outcome, and both have significant strategic and behavioral implications (Ling et al., 2008), which have effect on the SMEs activates.

## **CONCLUSIONS AND RESEARCH IMPLICATIONS**

This research has numerous implications, including bridging empowerment of SMEs and identifying factors for predicting various firm-level types of innovation and outcomes. It is generally agreed that economic diversification and job creation for Saudi Arabia will not succeed if SMEs do not play a substantial role in the process. Government should be of great benefit to foreign SMEs wanting to do business in Saudi Arabia. International experiences in developing SMEs. So, should be facing and possible solution for lengthy bureaucratic procedures, business environmental and licensing of SMEs. The role of SMEs also in promoting endogenous sources of growth and strengthening the infrastructure for accelerated economic expansion and development has to be recognized. Then, Saudi Arabia government has requirements for developing the SMEs sector.

Furthermore, the study provides an analysis of the role of innovation on firm performance and the factors impacts that enable the initial development SMEs. For the original manufacturers (Grando and Belvedere, 2006) the innovation process is as important as the



manufacturing and logistics ones. Innovation not only stems from being conscious of a problem, but also from any perceived opportunity to improve a certain aspect of organizational performance (Montes et al., 2005).

When a people already exists and is empowering, the directing manager also can utilize types of innovation to explain results that diverge from expectations, and then either advise team members as to which innovation configuration exists within their team and what the effects of their particular combination are effective firm performance.

Further, fast-growing SMEs are essential generators of new employment in developing economies. Empowerment could be one of the key means of generating middle-income level jobs. It is important to support reforms that would enhance the development of innovative at SMEs, creating job opportunities and sustainable economic development. The Government of Saudi Arabia continues to allocate a large pool of funds towards the development of the SME sector along with providing initiatives for the private sector operators to enter the SMEs market in the Kingdom.

Equally, an enabling psychological climate is critical for employees to develop innovation. To further enhance innovation, experience suggests not only a supportive investment climate and business regulations that encourage ease of exit, entry and competition. Training and advisory services are also required for SMEs, whether it be from banks, service firms, or from industry associations. Types of innovative SMEs tend to generate more employment than do others. Size-neutral policies that enhance the environment for competition and innovation are both good for growth and good for SMEs.

Governments also needs to mandate the role of its contracts go to SMEs with incubator programs, and the role of the private sector and large companies in supporting and fostering SMEs growth. Governments can play an important role in enhancing access to finance for SMEs as regulators and enablers, and enhancing the data available, and supporting product diversification is critical. There is also a need to educate prospective SME owners, through a small business administration, on basic accounting, management, marketing and financial planning skills.

However, under conditions of high external risk, the private sector of Saudi Arabia will adopt a differentiated organizational culture suitable for rapid decision making in today's business environment. SMEs suffer more than large firms from many policies and institutional constraints arising from imperfect markets, an important determinant of a cultural shift towards market orientation. Small firms in particular significantly stand out in the degree to which they identify regulatory policy uncertainty, corruption, access to land, taxation, access to finance, and electricity as serious constraints.

## RESEARCH LIMITATIONS AND FUTURE DIRECTIONS

The sample in this study comes from Saudi Arabia. The generalizability is affected by the geographic, industry, and firm dimension scope. Despite the merits of sampling from the population of Saudi Arabia SMEs, the generalizability of research findings can be improved by selecting research samples and by implementing cross-cultural comparisons, such as, to other Arabic communities or countries with a similar cultural background.

This study examines the relationship between psychological empowerment, innovation and firm performance. Future studies may try to capture the new variables to assess and access requirements for developing the SMEs sector. Indeed, the multidimensional and multilevel extension of empowerment is critical for the theoretical and empirical advancement of firm strategy research.

Further, several valuable lessons were gleaned from this research. First, a research plan should always prepare a second data that measures the same outcome phenomenon as the primary dependent variable. For example, future studies should have pre-determined other quantitative measures, and capture a qualitative measure (or multiple measures) for the dependent variables such as either group members' perception of firm performance (Lin & Rababah, 2014).

A second suggestion is to pretest data before launching a full-scale round of data collection. In the case of this study, beginning data collection with a pre-test would have allowed the opportunity for both pretest data collection and statistical analysis of the exploratory findings.

A third suggestion is a new dependent variable (or set of in/dependent variables), free of constraints, can be identified, pretested, and implemented, which can add values for future research. Further, several moderators appear to be simultaneously affecting those relationships, and/or there were few correlations for those relationships (Bell, 2007), the results of the analysis are guide future research.

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