The Mediating Role of Blended Learning Infrastructures in the Relationship between Good Governance, Social Capital and General Attitude toward Business Environment

Khalil Safari1, PhD; Ali Mohammad Ahmadi Gharacheh2*, PhD; Habibollah Danai2, PhD

1Department of Business Administration, Faculty of Management, Economics and Accounting, Payam Noor University, Tehran, Iran
2Department of Educational Sciences and Psychology, Payame Noor University, Tehran, Iran

ABSTRACT

Background: Personality traits and the perception of chief background factors, are largely influenced by educational systems. Therefore, the present study believes that a collective understanding of a particular context leads to the creation of a culture that forms the basis of entrepreneurial activities.

Objectives: Examining the mediating role of blended learning infrastructures in the relationships between social capital, good governance and the general perception of business environment among the owners of small and medium sized enterprises in Fars province, Iran.

Methods: This is an applied research, and in terms of data collection it is a descriptive-correlation analysis of variance based on path analysis. For data gathering, stratified sampling was applied to select 366 samples among 3887 active small and medium-sized enterprises in Fars province.

Results: Good governance has a direct effect (P=0.736, sig.<0.001) as well as an indirect effect (P=0.059, sig.<0.001) on the perceived business environment through the blended learning infrastructures. Also, the direct effect of social capital on the perceived business environment (P=0.041, sig.=0.315) was not confirmed, but its indirect effect through blended learning infrastructures was confirmed (P=0.305, sig.=0.03).

Conclusions: Before reinforcing the blended learning infrastructures, one needs to initially strengthen the macro political and economic factors, followed by social, cultural and educational factors, in order to improve the perceived business environment and create a positive attitude towards this atmosphere. This is due to the fact that governmental infrastructures are not yet as developed as much as the educational infrastructures for developing entrepreneurship.

Keywords: Social capital, Good governance, Perceived business environment, blended learning infrastructures

*Corresponding author: Ali Mohammad Ahmadi Gharacheh, PhD; Department of Educational Sciences and Psychology, Payame Noor University, P.O. Box: 19395-3697 Tehran, Iran


Received: 31-08-2019
Revised: 23-12-2019
Accepted: 25-12-2019
Introduction

Entrepreneurship is an acquirable skill (1) that can be acquired in educational, business and also social environments. These environments heavily affect entrepreneurial activities and people’s perceptions of economic opportunities (2), since exploring entrepreneurial opportunities depends on the context in which people live and work (3,4). Individuals and organizations follow the economic opportunities that exist in a society, based on perceptions derived from their perceived mental environment. So, the knowledge used by economic agents, is the result of an internal structuring process, which is itself based on interaction with the environment (5,6). In this regard, recent research studies have clearly addressed the impact of culture and society as well as educational, economic and political systems on entrepreneurship and the establishment of new businesses (7). Therefore, it is expected that with the creation of a suitable context in society, existing economic opportunities will expand alongside the developing individual capabilities, and as a result, the perception and attitude of individuals, and especially entrepreneurs, will improve (8). Hence, different communities adapt to changing environments and developing trends while improving their competitive advantages and simultaneously transforming teaching and learning methods by moving towards the concept of blended learning. In this path, it is imperative to note that the purpose of blended learning is not only about integrating electronic and online tools into traditional and face-to-face courses, but it is deemed as a fundamental encounter with the educational system.

Many studies have to some extent neglected cultural and institutional aspects, and instead they have focused on mechanical tactics of urban development, such as industrial employment, tax incentives, and fewer legal barriers to overcome regional deficiencies and encourage economic growth. These studies, usually focus on studying and documenting the components of entrepreneurial ecosystem, without considering the gradual evolutionary nature of these components (9). In this regard, the present research seeks to examine how the vital elements of an entrepreneurial system interact. This is an important perspective, since as the ecosystem evolves, the importance and relative strength of the components also change, and of course, different policies will be needed over time to maintain these systems. Therefore, at the same time it explores the mediating role of blended learning infrastructures in the relationships between key variables that influence people’s perception of business environment.

In this regard, this study applies a path analysis method within a causal framework to investigate the relationships between Good Governance (GG), Social Capital (SC) and Perceived Business Environment (PBE) in the light of the mediating role of blended learning infrastructures (BLI).

Researches have shown that focusing on mere inputs does not guarantee the desired results. It is necessary to further concentrate on the sociological and behavioral aspects of social and human capital and also cultural. In this respect, the concept of SC represents, the rules, relationships, attitudes and values that shape the interactions among people and contribute to economic and social development(10). This kind of capital leads to the social and cultural cohesion within the community and includes the norms and values that govern the interactions between people, government and institutions. It also helps to disseminate information and communication between individuals, reduces opportunistic behavior and facilitates collective decision making (11). So, it is obvious that there is a significant relationship between SC and knowledge transfer (12–15), since establishing trust and sense of cooperation and participation among people leads to faster knowledge creation, while facilitating and encouraging the sharing of knowledge. The concept of SC emphasizes interaction and communication among individuals, insofar as it is one of the important assets of any society that can help in the management of knowledge and create a sustainable
competitive advantage for organizations and communities (16).

Also, government, as a social institute, determines many of the existing interactions in society and plays an important role in creating efficient institutions and favorable conditions for cultural, educational and economic development. Due to the dissatisfaction with previous approaches to state and community administration, the GG approach was coined in the mid-1990s (17). This approach can contribute to the wealth of nations through the development of concepts such as the adoption of explicit policies; transparent bureaucracy; accountability of executive agencies; people’s active participation in social and political affairs, and equity and justice. We know that the formal institutional frameworks for entrepreneurial activities (18, 19) can provide the infrastructures for economic development (20, 21). It also has been recognized that GG characteristics in one country can rectify market failures and lead to economic development (22). Obviously, a conducive business environment, can reduce business costs, release economic potential, and attract investment (22). In this regard, governments around the world have made great efforts to develop their regulatory environment to strengthen economic performance (23). Since, the government is an important factor in creating the people’s perceptions.

Perception is organizing, identifying, and interpreting sensory information to understand and describe the surroundings. In Hayek’s view, the mental patterns that shape the people’s worldviews represent a kind of environment in which the organism existed in the past, and it contains classifications and interpretations that have been given to the stimuli of the past. These mental patterns also have a collective capacity, meaning that a person’s mentality does not only include his personal experiences, but also the unwanted experiences gained within a group or an environment. Each individual’s conduct, when repeated daily, consolidates the collective habits, and when it is innovative, it contributes to the evolution of the collective framework (5). So, we can conclude that the business context is a set of factors that influence the formation, performance, and survival of a firm, and it is either too costly or impossible to make them change for business executives. So, this environment is the place for the exchange and supply of data and resources, and thus play a decisive role in the survival of SMEs work in an environment that is influenced by existing policies, socio-economic, and cultural relations, whose effects not only in the context of society, which are rooted in the individuals’ mind, and they also reproduce political, economic, social, and cultural relations, everyday (24). In this research, to operationalize the PBE and measuring how people perceive business environment, we investigate it in four sections: Economic environment, Institutional environment, regulatory and legal environment, and cultural and social norms.

One of the other important factors in creating a special attitude toward business environment is the educational system. Educational environments are very effective in forming people’s attitudes and desires for entrepreneurship and also economic development. This is due to the fact that education policies are both important for developing basic skills and training professionals who engage in scientific, economic and political activities (25). Therefore, in tandem with developments in science and human knowledge, the need to transform learning systems and their mechanisms will grow in importance. Since individuals’ mentalities are largely influenced by a variety of opportunities that they had for thinking, it can be argued that the curriculum and learning methods in universities are very important factors. On the other hand, the introduction of new technologies, and the subsequent changes in various dimensions of educational system (26), have created a different definition of education and learning. In this regard, blended learning (a combination of face-to-face and online learning) is considered as the most appropriate and efficient approach for
fulfilment of objectives in education systems. This approach is considered as a fundamental encounter with the education system since it facilitates the achievement of the goals of the education system.

In this regard, while providing refined information and knowledge at any time and place, BLI is capable of providing communication and constructive interactions for audiences. Instituting knowledge management, along with reinforcing educational infrastructure, leads to the creation of an environment that, while creating and disseminating knowledge, helps talents flourish and allows people to link discrete and scattered information and create new knowledge to solve problems. It is now evident that the countries that are wealthy in terms of knowledge assets and intellectual capital are also better at achieving high levels of growth (27). Accordingly, we argue that if there are factors such as good governance and social capital, the education and learning infrastructures will also be strengthened. In this context, implementing BLI can increase productivity and secure a more proper business environment, while enhancing transparency. In this regard, the following hypotheses are presented. These hypotheses can be seen in Figure 1 along with the theoretical model of research.

H1: GG has a positive impact on the PBE.
H2: SC has a positive impact on the PBE.
H3: GG has a positive impact on the BLI.
H4: SC has a positive impact on the BLI.
H5: BLI has a positive impact on the PBE.

Materials and Methods
This is an applied research in terms of purpose, and it is a descriptive-correlational one in terms of data collection, which was conducted through analysis of variance by path analysis. In order to analyze the data, the descriptive and inferential statistical methods were used, and the library study method was employed for the literature review. The measuring tool of the research was based on research literature. All items were measured on a scale ranging from 1 (strongly disagree) to 5 (strongly agree). Good Governance (GG) is measured using six scales developed by World Bank. The six dimensions measured voice and accountability (3 items, α=0.75), Political Stability (3 items, α=0.89), Government...
effectiveness (3 items, $\alpha=0.74$), laws and regulations quality (3 items, $\alpha=0.73$), Rule of Law (2 items, $\alpha=0.72$), and Corruption Control (3 items, $\alpha=0.85$). Social Capital (SC) is measured using six scales developed by Grootaert et al. (2004). The six dimensions measured Groups and networks (4 items, $\alpha=0.82$), Trust and solidarity (4 items, $\alpha=0.81$), Collective actions and Cooperation (2 items, $\alpha=0.76$), Information and Communication (3 items, $\alpha=0.79$), Social Cohesion and Inclusion (3 items, $\alpha=0.78$), and Empowerment and Political action (3 items, $\alpha=0.71$). Blended learning Infrastructures (BLI) are measured using four scales developed by Chen and Dahlman (2005). The four dimensions measured Knowledge Supporting Systems (4 items, $\alpha=0.83$), Trained people (3 items, $\alpha=0.79$), Innovation Systems (3 items, $\alpha=0.79$), and ICT Infrastructure (3 items, 0.75). Perceived Business Environment (PBE) is measured using four scales developed by Safari (2015). The four dimensions measured Economic Environment (6 items, $\alpha=0.86$), Institutional Environment (6 items, $\alpha=0.86$), Regulatory and Legal environment (6 items, $\alpha=0.89$), and Cultural and social norms (5 items, $\alpha=0.83$).

It is worth noting that in order to verify the validity and reliability of the research questionnaire, some minor defects were first corrected based on the results of the preliminary distribution of questionnaires among 30 SME owners, and then the main questionnaires were distributed. Using the first order and second order factor analysis, questions with factor loads less than 0.4 were modified or eliminated so that the Average Variance Extracted (AVE) of all variables were 0.50 and more. Based on the corrected correlations from the Confirmatory Factor Analysis (CFA) model, the AVE of each of the latent constructs should be higher than the highest squared correlation with any other latent variable. If that is the case, discriminant validity is established on the construct level.

As shown in Table 1, the convergent and Discriminant validity of the variables are acceptable.

The statistical population of this study was comprised of the SME owners located in Fars province, Iran, in 2015-2016. The Organization of Industry, Mining and Trade classifies businesses, based on the number of employees, into three groups: small businesses (1 to 49 individuals), medium (50 to 99), and large (100 or more). According to the statistics revealed by the organization, the total number of SMEs in Fars province was 3887 units at the time of this research. A two-floor stratified sampling was applied, and based on the Morgan table and the Cochran formula, 350 samples were selected from Shiraz district and other regions of the province, as shown in Table 2. Then, due to the possibility of not participating in the survey, 400 questionnaires were distributed by email, online link, and printed forms, and 366 filled questionnaires were collected at the end.

**Results**

The present study confirmed the mediating role of BLI in the relationships among GG, SC and PBE. As the results show, GG has a direct effect ($P=0.736, \text{sig.}<0.001$) as well as an indirect effect ($P=0.059, \text{sig.}<0.001$) on the PBE through the BLI. Also, the direct effect of SC on the PBE ($P=0.041, \text{sig.}=0.315$) was not confirmed, but its indirect effect through

<table>
<thead>
<tr>
<th>Variables</th>
<th>Convergent Validity</th>
<th>Discriminant Validity</th>
</tr>
</thead>
<tbody>
<tr>
<td>GG</td>
<td>0.853</td>
<td>0.866</td>
</tr>
<tr>
<td>PBE</td>
<td>0.864</td>
<td>0.875</td>
</tr>
<tr>
<td>BLI</td>
<td>0.816</td>
<td>0.822</td>
</tr>
<tr>
<td>SC</td>
<td>0.809</td>
<td>0.814</td>
</tr>
</tbody>
</table>

GG=Good Governance, PBE=Perceived Business Environment, BLI=Blended Learning Infrastructures, SC=Social Capital
BLI was confirmed (P=0.305, sig.=0.03). We employed SPSS-19 and Smart-PLS-3.0 softwares, to conduct the descriptive and inferential analysis of the data. Table 3 shows some of the demographic characteristics of the sample.

In Figure 1, as can be seen, by using a Confirmatory factor analysis method, all factor loads are in the optimal range of 0.4 to 0.9 (28). In view of the coefficients for determining the variables of the infradtructures of BLI (0.627) and PBE (0.699), one can conclude that GG and SC explain 62% of the variations of BLI, and GG, SC and BLI explain 69% of the variations of the PBE.

Also, the next table (Table 4) shows that, except for the path between SC and PBE, all of the other path coefficients for direct effects are significant at confidence level of 0.95. Also, results show that the total effect of the GG and BLI on PBE (0.795 and 0.104 respectively) are confirmed at the confidence level of 99%. It is also clear that the total effect of SC on PBE is only acceptable with a percentage higher than 5%, and it is not confirmed at a 5% significant level.

According to Table 5, the explanatory power of GG and SC variables in explaining BLI ranges from moderate to high. Also, the explanatory power of GG in explaining PBE is high (0.826), but the explanatory powers of SC and BLI in explaining PBE are low (0.004 and 0.013 respectively).

Table 5, also illustrates that the independent variables of the model can predict the two dependent variables (BLI and PBE). It shows that the predictive power of GG and SC to predict BLI is 0.382 and the predictive power of GG, SC, and BLI to predict PBE is 0.463. The goodness of fit and Standardized Root Mean Square Residual (SRMR) criteria also indicate that the experimental data are consistent with the theoretical model. But
Discussion

The purpose of this study was to investigate the mediating role of Blended Learning Infrastructure in the relationship between Good Governance and Social Capital with the Perceived Business Environment. The findings confirmed that Good Governance has a significant effect on Blended Learning Infrastructure (P=0.569, sig.<0.001) and also on Perceived Business Environment (P=0.795, sig.<0.001). However, as shown, the direct effect of Social Capital on Perceived Business Environment (P=0.041, sig.=0.315) was not confirmed, but the indirect effect of Social Capital on Perceived Business Environment through Blended Learning Infrastructure (P=0.305, sig.=0.03) was confirmed. Given the importance of educational policies (25), and the dependence of these policies on formal institutions, especially the government, it is not unlikely that the Blended Learning Infrastructure of the country will change along with the conditions of governance. These findings are in line with the research of Molhotra (2003), Douglas North (1995), World Bank reports, Chen and Dahlman (2006), Tadros (2015). Also, based on the results of the research, the impact of Social Capital on the Blended Learning Infrastructure was confirmed. This result is in line with the research of RezaiMirghaed et al. (1392), Kazemian and KazemianKani (2010), Aminbidokhti and Nazari (2009) and Molhotra (2003).

The results of this study showed that investing simultaneously on the Blended Learning Infrastructure and establishing rule of law, controlling corruption, as well as building trust and social cohesion as components of Good Governance, could provide a better Perceived Business Environment and, hence, the exploitation of economic opportunities among entrepreneurs and Owners of SMEs.

In addition to governments’ direct influence on education systems, and also entrepreneurs’ Perceived Business Environment, it has been shown that improvements in political and economic institutions and the formation of regulatory bodies will also contribute to the development of the financial sector (17). Therefore, in the long run, this can lead to an increase in the budget of educational institutions and related infrastructures for the development of entrepreneurship and value creation (17,29). Also, given that the rate at which new products and services are introduced is a function of individual and organizational abilities to combine and exchange knowledge (30), greater interactions and trust among individuals lead to more knowledge, and it will ultimately improve the level of knowledge in society and strengthen the knowledge base of the country (31). Thus, as employment and income increase, there will be a greater desire to reach higher levels of education (21), as well as greater access to knowledge and information. Therefore, it is inevitable to use modern systems of education and learning such as BLI, along with the development of cultural, political and other infrastructures. In this regard, it is necessary to consider a paradigm shift in the policies and approaches of planners and decision-makers at the macro-level (26) and to coordinate the components with the

| Table 5: Explanatory and predictive power of the variables and model's goodness of fit |
|--------------------------|---------------------------------|--------------------------|
| Power                    | Independent Variables           | Blended learning         | Perceived Business     |
|                         |                                 | infrastructures          | Environment            |
| Explanatory             | Good Governance                 | 0.661                    | 0.826                  |
|                         | Social Capital                  | 0.236                    | 0.004                  |
|                         | Blended learning infrastructures | --                       | 0.013                  |
| Predictive              |                                 | 0.382                    | 0.463                  |
| Goodness of fit         |                                 |                          | 0.656                  |
| Standardized Root Mean Square Residual (SRMR) |                     |                          | 0.081                  |

since the SRMR is very close to 0.08, it is expected that making some modifications can improve the overall model.
conditions of entrepreneurship ecosystems.

Regarding the direct effect of Social Capital on Perceived Business Environment, contrary to expectations, the experimental data obtained from the sample did not confirm this relationship (0.041). This conclusion is not consistent with many of the previous research studies. One reason could be the distinction between micro-level (Social Capital) and macro-level (Good Governance) in the Social Capital concept, as well as excessive governmental economic and social structures in Iran. The excessive dependence of economic activities on the government can partly diminish the importance of social protection in the creation and development of SMEs. However, as shown in the research model, the impact of social support on Perceived Business Environment can be fully realized through the Blended Learning Infrastructure variable. On the one hand, this illustrates the importance of learning infrastructure and information support in addition to the complexity of entrepreneurial behavior in society. On the other hand, it highlights the fact that in the current circumstances, the main reason for the lack of interest in SMEs is the lack of proper economic context and the inappropriateness of governmental structures for the growth of such businesses. These results indicate that improved learning infrastructure alone cannot improve business conditions. On the contrary, the advent of new technologies may have made people more accessible to the job markets abroad, and, if the conditions are not met, it may lead to mass migration of human and social capital.

Social, economic, political, and cultural factors are highly interconnected and can therefore largely determine the attitude of individuals, and especially entrepreneurs, toward the business environment. It is clear that with the development of the Blended Learning Infrastructure we will be able to improve more than before. But since the growth and development of educational environments in Iran depend on government policies and decisions, entrepreneurs’ attitudes and perceptions will also be directly and indirectly affected by the way society is governed.

In this regard, alongside the developments in learning methods, governmental infrastructures must also be adapted to motivate and encourage individuals to pursue and develop their businesses, and to create an appropriate environment for entrepreneurship. Therefore, to create and develop entrepreneurship, a government will inevitably have to move towards the establishment of Good Governance and then public governance. Thus, it is suggested that governments create an environment in which SMEs and entrepreneurs feel more secure than their competitors in rival countries and gain a competitive advantage. By creating infrastructure and facilitating entrepreneurship and also international coherence, a dynamic and competitive market will be created, which will enhance entrepreneurial motivation and the desire to develop the skills and competencies required for pursuing business opportunities.

Given the importance of changing people’s attitudes towards economic growth and development, greater emphasis should be placed on proper utilization of education and learning systems. It is suggested that, along with periodical assessment of people’s attitudes toward business environments, related institutions should identify the priorities and possible root causes of dissatisfaction, and also develop appropriate programs for the treatment of related problems. Moreover, developing electronic educational contents that are accessible to everyone, will provide the required insight and transparency in this important sector of economy. In view of the fact that individuals’ perception of new stimuli is strongly influenced by their previous perceptions (7), it is critical to carefully examine the political, educational, social, economic and cultural problems of today’s society before planning any changes in the existing business environment.

For future research, it is suggested that researchers explore and identify effective training courses and electronic content for entrepreneurship, as well as prioritize various
elements in BLI for training entrepreneurs and improving business environment.

**Authors’ Contributions**

Kh.S devised the study concept, designed the study, supervised the intervention, data collection and analysis, participated in the coordination of the study, and critically revised the manuscript. HD and AAG also contributed in all the mentioned steps.

**Ethical Considerations**

Informed consent was obtained from all the participants included in the study.

**Funding/support:** The Authors did not receive any support or funding for this article.

**Conflict of Interests**

The authors declare that they have no conflict of interests.

**References**

2. Safari Kh. Designing a model for improving the perceived business environment in the small and medium industries (Case study: SMEs of Fars Province). Postgraduate Center of Payame Noor University; 2017.