

# Social Capital, Human Capital and Performance of Traditional Clusters of MSEs: A Case Study of Herat City, Afghanistan

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## I. Introduction

More than three decades of conflict destroyed much of Afghanistan's infrastructure, as well as the knowledge base necessary for its economic performance, hampering reconstruction policy and sustainable economic growth in the country. Even after 2001, the United States, its NATO allies, and its partners in Afghanistan are still struggling to build a foundation for the country's long-term stability, but there is potential for positive change within an area often neglected in the public discourse and this is the private sector (Cusack and Malmstrom 2011). In particular, one area within the private sector which is often excluded from policy concerns is the role of traditional economic clusters of micro and small-scale enterprises (MSEs). These enterprises include those engaged in selling dried fruits and nuts, tailors, carpenters, shoemakers and ironmongers, as well as those engaged in tinwork.

There are two conflicting views about the contribution of MSEs to economic development. One view, maintained by Biggs, Grindle, and Snodgrass (1988) in a study from a sample of different countries found that the contribution of small firms to the economy in these countries is not significant. Other scholars such as Pyke and Sengenberger (1992) have emphasized that MSEs are in fact capable of playing an important role in the development process.

The micro, small, and medium enterprises are prevalent in both developed and developing countries. For instance, the percentage of small and medium enterprises in the number of enterprises in developed countries such as Japan and Germany is more than 99 % and their contribution to the total employment and to the value added in 2007 accounted for over 60 % and 53 % respectively

(EIU 2010). On the other hand, the contribution of small and medium enterprises to the employment in developing countries varies from less than 5 % in countries such as Azerbaijan, Belarus and Ukraine to 80 % in Chile, Greece, and Thailand (Meghana, Thorsten, and Asli 2003). In the case of Afghanistan, for a variety of reasons and despite facing continuous economic and political instability, some of these traditional clusters of MSEs have survived, provided livelihoods and thereby contributed to the country's economy. For instance, some of these enterprises reported that they have been operating continuously for more than 100 to 300 years.<sup>1</sup>

Despite the important role of traditional clusters of MSEs that provide livelihood and other economic benefits in developed and developing countries, it seems that the public sector in these countries needs to intervene through policy initiatives in order to create a supportive environment for the development of these clustered MSEs. However, according to the author's interviews with policy-makers in Kabul, traditional clusters of MSEs in Afghanistan have often been neglected in the policy and decision-making process. Therefore, studies suggest that creating and supporting clusters to increase their access to skills, training, and information on markets, networks, and infrastructures would help small enterprises in overcoming production and marketing obstacles, as well as allowing them to compete with other enterprises and in a more sophisticated and competitive market (Puppim De Oliveira 2008).

### 1.1. Objectives

The aim of this article is to assess the impact of human and social capital on the performance of MSEs in traditional clusters in Herat City, Afghanistan. In this article, the MSEs' performance is conceptualized in terms of firms' sales revenues. Therefore, in order to examine and to address the above issues of MSEs performance in traditional clusters in Herat City, we set the following specific objectives:

- To identify significant associations between MSEs' human capital and social capital
- To determine the impact of human and social capital on MSEs' performance within the traditional clusters

- To explain the characteristic of entrepreneurial practices in traditional clusters of MSEs in Herat City

In addition, the article seeks to provide the policy-makers with recommendations to enhance the performance of traditional clusters of MSEs in Herat City and eventually in other regions in Afghanistan.

## **1.2. Literature Review**

In the scholarly literature, the concept of cluster is defined as economic and geographic concentrations of interconnected people or firms to create collaboration and competition (Porter 2000). In a narrower definition with the emphasis on growth processes of small firms, Schmitz (1995) describes a cluster as a sectoral and geographical concentration of small firms. He argues that such clustering provides efficiency gains which individual small firms can rarely attain. Clustered firms benefit from proximity and geographic concentration through collective efficiency, defined as the competitive advantage derived from external economies and joint action. In addition, clusters are thought to affect competition in at least three ways: first, by increasing the productivity of firms within a cluster; second, by providing an environment for innovation and future productivity growth; and third, by stimulating the formation of new firms in the cluster itself (Porter 1998).

Parto (2008) argues that co-locating the firms in proximity with other suppliers and supporting institutions in a cluster often leads to a higher level of coordination and increases the trust among firms. Therefore, he argues that a successful firm can be found where it makes economic sense given the available knowledge about its products or services, the labor pool, and other input materials in the market. On the other hand, such coordination and collaboration among the firms is informal and depends on the quality of interaction among stakeholders as a means of information exchange among personnel from different enterprises. Arndt and Sternberg (2000) argue that, despite numerous network relationships on the national and international levels, small businesses are most likely to cooperate with others in their vicinity.

In the business network literature, social bonds have been identified as a dimension of buyer-seller relationships, but few studies have actually focused on this issue. In the context of traditional clusters of firms, this interaction and exchange of information can be vital for enhancing a firm's performances

and increasing the level of their competitiveness. The characteristics of such interactions can vary from one cluster to another. Stam, Arzlanian, and Elfring (2014) argue that the social capital-performance link depends on the age of small firms, the industry, and institutional contexts in which they operate, and on the specific network or performance measures that are in use. In addition, the importance and the role of proximate interactions among the firms in clusters and industrial districts have been studied by numerous scholars such as Saxenian (1996) and Pyke, Becattini, and Sengenberger (1990), as well as in the case study of furniture makers in Mississippi and apparel makers in Northern Italy by Rosenfeld (Rosenfeld 1997).

The present mainstream scholarship of cluster studies emerged since the 1990s, and major works have focused more on the understanding of cluster dynamics for the development of industrial policies in both developed and developing countries. To some extent, a number of those studies provide insight into the significant role of clustered firms and their contribution to increasing industries' competitiveness (Porter 1990). Other studies provide us with intensive critical examinations of cluster development initiatives as a capable means for poverty alleviation (Nadvi and Barrientos 2004).

Clusters tend to evolve based on geographical concentrations of economic and interrelated sectors along the value chain. Developing over time, they boost competition and collaboration, resulting in innovation and potentially enabling firms to create greater economic success through higher productivity, better knowledge exchange and management, and entrepreneurial opportunities. Clusters seem to have the tendency to generate both higher incomes and higher rates of employment growth (Chuluunbaatar et al. 2014, Campbell-Kelly et al. 2010). However, clusters in developing countries provide livelihood and job opportunities, while policy intervention for enhancement of their performance may result in an exit of other vulnerable enterprises from the market. To minimize or avoid this, a better understanding of the dynamic of the linkage among clustered firms and relations with external linkages is required.

Nadvi and Barrientos (2004) argue that for effective studies of cluster initiatives, a number of features and processes need to be considered. The features are the geographical location of the cluster; the type of industry in the cluster; and the type of the employment that cluster generates; the processes that are affected by the nature of links to external economies (skills, markets,

knowledge, and information); joint or collective capabilities; and social capital.

Parrilli (2007) indicates that major challenges facing those small and medium enterprises in developing economies are related to difficulties they face in accessing production input, technology, finance, human and social capital, and lack of supportive policies. These challenges have emerged rapidly because of globalization and market liberalization, jeopardizing the present and future of vulnerable enterprises in developing countries. However, Parrilli argues that, to some extent, policy intervention based on an analysis of clusters and their capacity for survival, together with careful consideration of the different dimensions of economic, governance-related, and social linkages, could provide the clusters with opportunities to persist and to survive in challenging environments.

### 1.3. The Dynamics of Human Capital, Social Capital, and MSE's Performance

*“We of the West have all the rudiments of civilization, all the dividends of a mounting standard of living. But the Afghans—one thousand years behind us in many respects—have a warmth of human relations that is often missing all the way from New York City to San Francisco” (Douglas, 1952).*

The research examining the connection between social capital and the outcome of public programs goes back to the works of established scholars such as the influential writings of Pierre Bourdieu (Bourdieu 1986) and those of James S. Coleman who affirmed that social capital could serve to meet certain public policy goals such as the improvement of performance in the educational sector (Coleman 1988). On the other hand, studies in developed countries also suggest that a strong positive association exists between educational outcomes and social capital measures (Putnam 2000). Coleman (1988) introduced the concept of social capital as a parallel to the concepts of other forms of capital such as physical capital, financial capital, and human capital. In his study, Coleman provided evidence of the effect of social capital on the formation of human capital in the family and the community.

From the perspective of the effect of social and human capital on a firm's performance, some research has examined the components of social capital with regard to educational outcomes, and suggests that trust and voluntary

action at the individual level improve the students' performance, while it has a diverse effect on parental networks depending on income levels (John 2005). Wang and Chang (2005) has found that the components of intellectual capital directly affect the quality of business performance, with the exception of human capital elements. However, this study argues that human capital has an indirect effect through the other types of capital, namely customer capital and innovation capital.

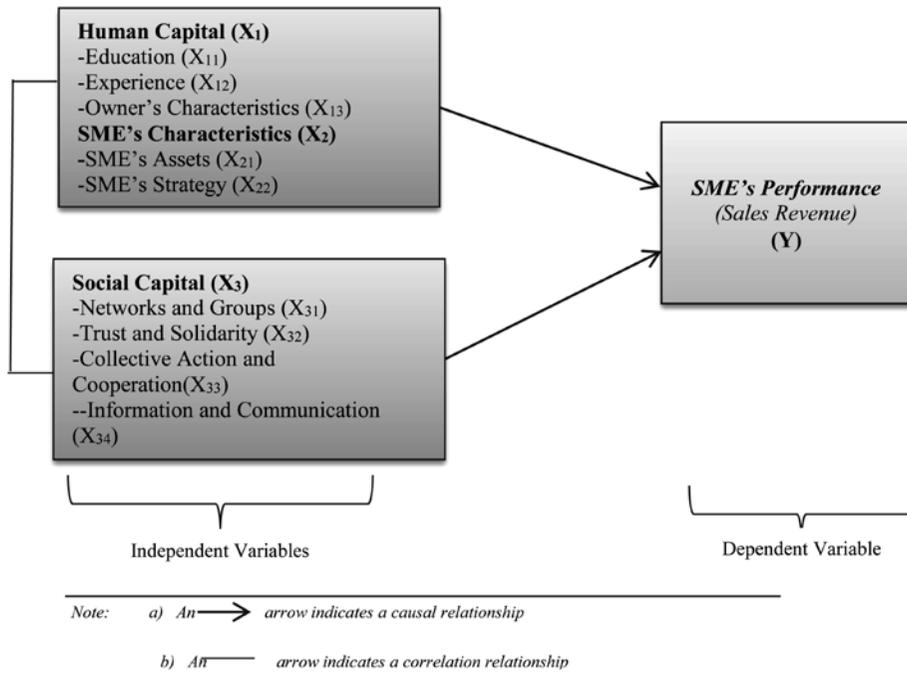
Even though some studies have found that the causal relationship between social capital and human capital, as well as the relationship between social and human capital and firms' performance, is a positive one, some other studies claim that the nature of this relationship could be negative. The work of Batjargal (2007) on internet ventures in China found that social capital elements and the experience of an entrepreneur living abroad has a positive effect on the survival of the firms, whereas the interaction among those social and human capital components has a negative effect on firms' performance.

A more recent study argues that social capital benefits some groups more than others and that it often interacts with the management to improve performance (Meier, Favero, and Compton 2014). Another study has found that both human capital and social accumulation affect the equilibrium growth rate (Dinda 2008). In addition, some scholars argue that social capital is embedded in human capital and education fosters its accumulation (Becker 2009). To connect these arguments, it must be emphasized there is evidence indicating that human capital affects social capital and that experience and cognitive ability influence personal relations. On the other hand, numerous studies confirm significant association and causal relationships between human capital and social capital concerning organizational performance (Augusto Felicio, Couto, and Caiado 2014).

## II. Hypothesis and Research Methodology

As stated earlier, the aims of this study are to examine the association between social capital and human capital and to assess their impact on MSEs' performance in the traditional cluster in Herat City. Therefore, based on the literature review in the previous section, a number of hypotheses have been formulated and Figure 1 shows the conceptual framework of this study.

Figure 1. Conceptual / Hypothetical Framework



## 2.1. Hypothesis

H<sub>01</sub> There is a significant association between human capital and social capital

H<sub>01</sub>:  $\beta = 0$ , and H<sub>a1</sub>:  $\beta \neq 0$ , for X=1, 2, 3..... (i)

H<sub>02</sub>: Human capital and social capital are more likely to have a significant impact on MSE's performance.

H<sub>02</sub>:  $\beta = 0$ , and H<sub>a2</sub>:  $\beta \neq 0$ , for X=1, 2, 3..... (ii)

$$Y_{Performance} = \beta_1 Human\ Capital(X_1) + \beta_2 SMEs\ Characteristics(X_2) + \beta_3 Social\ Capital(X_3) + \varepsilon_i \dots\dots\dots (iii)$$

## 2.2. Research Methodology

This section explains the research setting and methodological approaches including the operationalization of variables, sampling, data collection, and analytical methods used in this study.

### 2.2.1. Operationalization of Variables

As shown in the above conceptual framework, in this article the determinant

factors are identified in three dimensions: human capital ( $X_1$ ); MSE's characteristics ( $X_2$ ); and social capital ( $X_3$ ), as independent variables; and the MSE's performance (sale revenues) as the dependent variable ( $Y$ ).

Human capital ( $X_1$ ): The most straightforward approach to measuring human capital in MSEs is to identify the age, sex, education, and experience level of the MSE's personnel. The level of education is often recognized as one of the most important indicators in terms of human resources, as this is expected to enable the MSEs to adjust and to allocate its human resources through enhancing the efficiency of the employees within a firm and to increase its productivity and sales volumes. Thus, the quality as well as the quantity of the human resources in the MSEs can serve as a good measurement of human capital in this study.

MSE's characteristics ( $X_2$ ): Characteristics of the MSEs are specified in this study as the MSEs' assets, strategy, and location and the level of optimism for operating the MSEs according to the market conditions.

Social capital ( $X_3$ ): The social capital factor has been studied in a variety of research on MSEs as one of the important sources for networking, trust, and cooperation, as well as for sharing and transferring the knowledge and innovative ideas within and between individuals or communities. In this study, we measure social capital in terms of trust, participation in networks and groups, as well as cooperation and cohesion within the traditional clustered MSEs. The quantity and the quality of these connections can serve as a good measure of the social capital factor for MSEs in this study.

MSE's performance ( $Y$ ): There are various approaches to measuring a firm's performances such as the MSE's size, profits, sales, and market shares. Some studies have identified the sales revenue as an indicator of the MSE's performance within the cluster (Augusto Felicio, Couto, and Caiado 2014).

### **2.2.2. Sampling and Data Collection**

For this research, I used the World Bank definition for identifying the size of MSEs, in which enterprises that employ less than 5 employees are considered as micro enterprises; 5 to 19 employees as small enterprises; 20 to 99 employees as medium enterprises; and 100 or more employees as large enterprises.

Since the targeted clusters of MSEs for this study vary by industry, I used the stratified random sampling methods to divide the survey population into smaller groups in order to select proportional representatives of MSEs from each of those six clusters. The survey was conducted in Herat City in August

and September of 2015. A structured questionnaire was developed in English and translated to the local language of Dari (Persian), and then elaborated in advance through a preliminary test with some of the concerned MSEs. Then, the author interviewed 209 MSEs with the structured questionnaire, and except for 4 MSEs with which the interviews were uncompleted, the results of interviews with 205 MSEs were included in this study. The breakdown is shown in Table 1.

*Table 1. Frequency distribution of sample of clustered MSEs*

No.	Type of Cluster	MSEs	No.	Type of Cluster	MSEs
1	Dried fruit and nuts	21	4	Shoemaker	34
2	Tailor	43	5	Iron monger	26
3	Carpenter	49	6	Tinwork	32

*Sub-total: 205 MSEs*

### **2.2.3. Analysis methods**

This study focuses on the analysis of MSE's performances and its determinant factors as developed in the hypothesized framework. Therefore, in this article the MSEs are considered as the units of analysis. In addition, in order to achieve the objectives of this study, during the process of data analysis, I applied different statistical methods such as descriptive statistics, correlation matrix with Pearson product moment correlation coefficient, and multiple regression analysis.

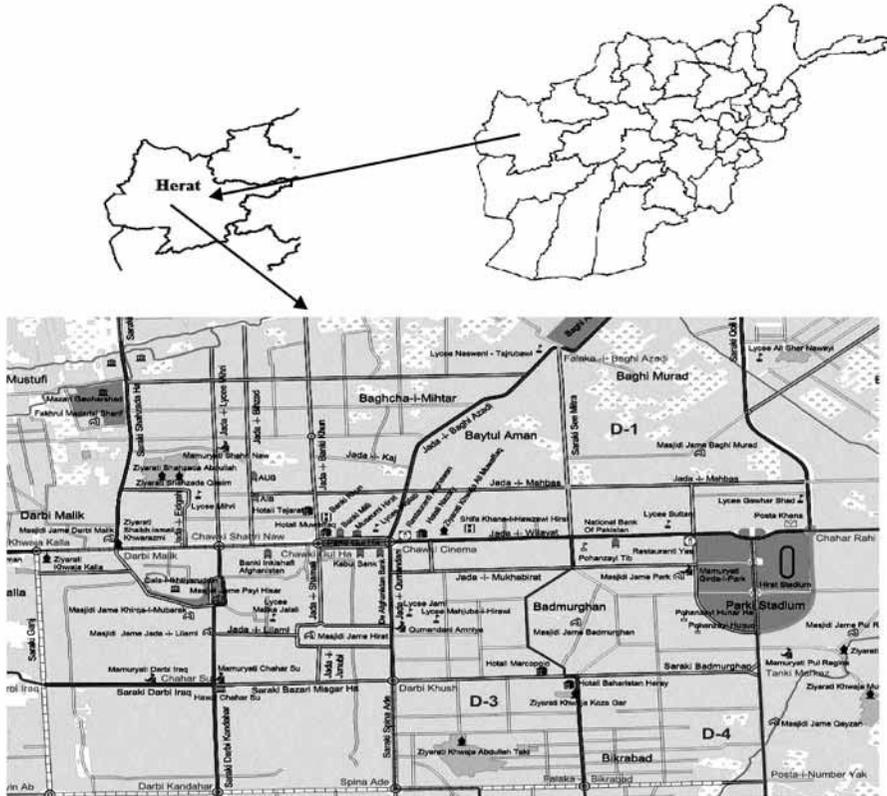
### **2.2.4. An Overview of Herat Province**

Herat province is located in the Western Region of Afghanistan. Herat is bordered by three provinces, namely: Badgis, Ghor and Farah, and also borders with Iran to the west and Turkmenistan to the north. It covers a land area of 55,869 km<sup>2</sup> and represents 8.6 percent of the total Afghan territory. It is the second largest province in the country after Helmand. The province is divided into 16 districts; the provincial center is called Herat City. Given that Herat province is home to 7.8 percent (1,762,157 inhabitants) of the total population of Afghanistan, it is the second most populous province in the country after Kabul.

Herat is routinely portrayed as an economic powerhouse but has seen a significant slowdown of economic activities, along with other provinces, in the wake of the political impasse that followed the presidential election in 2014 and reduced international investment that had been made either through assistance

programs and by foreign military forces. Herat province's annual output in 2011 was estimated at \$1.2 billion, \$325 million in agriculture, \$465 million in the service sector, and \$425 million in industrial enterprises including mining (Leslie 2015).

Figure 2. Map of Sample Area in Herat City, Afghanistan



Source: AIMS office in Herat City

### III. Results and Findings

#### 3.1. Descriptive Results of Clustered MSEs' Characteristics

As part of the MSEs' characteristics, Table 2 shows the age distribution of MSEs' owners across all 6 clusters. As one of the indicators of human capital, the age of the owners ranges from minimum 18 to maximum 70 years. In this survey, all entrepreneurs are male.

This study has found that 18 % of visited enterprises have been established in the past 3 years, while it shows that more than 50 % have carried on business for more than 10 years, and some of the enterprises have been operating for up to 100 to 300 years in Herat City as mentioned above.

The ownership of the enterprises varies by the cluster of an industry and more than 81 % of clustered enterprises are owned privately, while 19 % of them are owned in partnership. Regarding the size of interviewed enterprises, 75 % are micro enterprises, 23 % are small enterprises and 2 % are medium-sized enterprises based on the definition explained earlier.

The highest level of education achieved by an entrepreneur was as follows:

<i>Order</i>	<i>Level of Education</i>
1	<i>Have no education</i>
2	<i>Religious school</i>
3	<i>Primary</i>
4	<i>Secondary</i>
5	<i>High school</i>
6	<i>University</i>

As shown in Table 2, nearly 16 % of entrepreneurs have obtained no type of education, followed by 2 % that have studied up to a religious level of education. Then, 25, 24 and 23 % have finished primary, secondary, and high school education respectively. Only 10 percent of entrepreneurs reported to have university level education. Other details and the results of the descriptive analysis for MSEs' characteristics are provided in the same table.

Table 2. Descriptive results of MSEs' Characteristic

	N	Min	Max	Mean (M)	Std. Deviation
Age (Year)	205	18	70	34.95	12.26
Sex (Male/Female)	205	1	1	1.00	0.00
Owner Status (Yes/No)	205	0	1	0.35	0.48
Manager Status (Yes/No)	205	0	1	0.21	0.41
Experience in same field (Year)	205	1	66	19.78	12.99
Establishment (Year)	205	1	300	16.10	24.16
Type of Ownership (Private=1)	205	0	1	0.81	0.39
Size of MSEs (Micro-Small)	205	1	2	1.26	0.46
Education (Highest Level)	205	1	6	3.67	1.51
Vocational Training (Yes/No)	205	0	1	0.54	0.50
Family Member in same field (Yes/No)	205	0	1	0.53	0.50
Total Assets (Afghanis)	205	3,800	40,000,000	521,477.51	2,935,024.54
Established Assets (Afghanis)	205	2,500	3,000,000	160,744.02	315,815.09
Sub-Total	205				

### 3.2. The Structural Relationship between Human Capital and Social Capital

The aim of this section is to explore the structural relationship between human capital and social capital in clustered MSEs in Herat City. In addition, this section tries to determine the nature of this relationship according to the conceptual framework and the objectives of this article. I used the correlation matrix method to explain the relationship between human capital and social capital that is expected to enable us to pick up important variables that have significant associations with other variables.

The human capital dimension ( $X_1$ ) consists of 6 variables in this analysis: age of the entrepreneur, experience in the same field, managerial status, the number of employees, education level, and vocational training of the entrepreneurs in MSEs. The social capital dimension ( $X_3$ ) in this study consists of 8 variables: the number of close friends and membership in groups, trust in clusters' representatives and national government, number of friends asked to serve as assistant, number of times participated in any event or party with friends from the same cluster, and membership in social media as well as participation in elections.

Table 3 shows that within the human capital dimension, the age ( $X_{132}$ ) of entrepreneurs has a very strong positive association with the experience of entrepreneurs ( $X_{12}$ ). As expected, this indicates that the higher the age of the

entrepreneurs, the more working experience they tend to have in the same industry. There is a strong association between the age and education level of entrepreneurs ( $X_{11}$ ). This indicates that the higher age of the entrepreneurs associated with the lower level of their education has a negative impact on their experiences in the traditional clusters.

Table 3. Associations between Human Capital and Social Capital

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Age (1)	1													
Experience (2)	.806**	1												
Manager (3)	-.157*	-.202**	1											
No. Employees (4)	-.093	-.097	-.035	1										
Education Level (5)	-.374**	-.424**	.138*	.167*	1									
Vocational Training (6)	.012	-.036	-.084	.085	-.029	1								
No. Close Friends (7)	-.026	-.040	-.007	.098	.162*	.033	1							
Member of Sport Group (8)	-.245**	-.216**	.070	.011	.182**	.025	.158*	1						
Trust in Cluster Manger (9)	.201**	.208**	-.030	.012	-.161*	-.055	.072	-.056	1					
Trust in National Gov. (10)	.267**	.251**	.037	.105	-.170*	-.036	-.097	-.143	.234**	1				
No. Friend Ask for Help (11)	-.068	-.127	-.061	.085	.143*	.150*	.181**	.086	.040	-.084	1			
No. Participation Events (12)	-.159*	-.151*	-.004	.145*	.199**	.124	.437**	.150*	.098	-.070	.217**	1		
Have Facebook Account (13)	-.323**	-.329**	.004	.143*	.247**	.175*	.084	.186**	-.053	-.057	.109	.171*	1	
Vote in Last Election (14)	.215**	.192**	.111	-.157*	-.101	.033	.007	-.126	.026	.144*	.011	-.026	-.042	1

\*. Correlation is significant at the 0.05 level (2-tailed). \*\*. Correlation is significant at the 0.01 level (2-tailed).

The results indicate that, regarding the association between human capital and social capital, the level of entrepreneurs' education has a positive association with the number of close friends ( $r=.162$ ,  $p<0.05$ ) and membership in sports groups ( $r=.182$ ,  $p<0.01$ ) that an entrepreneur has in a clustered MSEs. The entrepreneur's educational level also correlates with his membership of social media platforms such as Facebook ( $r=.247$ ,  $p<0.01$ ), and low but significant correlation with participation in social events such as parties and picnics with friends from the same cluster of MSEs ( $r=.199$ ,  $p<0.01$ ). In addition, a low but significant correlation is found between entrepreneurs' education and the cooperation and support for friends and coworkers in clustered MSEs ( $r=.114$ ,  $p<0.05$ ).

On the other hand, the education level of entrepreneurs has a moderate but significant negative correlation with his trust in cluster's representatives ( $r=-.161$ ,  $p<0.05$ ) and in the national government ( $r=-.170$ ,  $p<0.05$ ), respectively.

The results of the correlation matrix in table 3 indicate that the human

capital dimension has at least one variable with significant correlation with variable(s) from the social capital dimension. This implies that, based on the results shown in Table 3, the hypothesis (Figure 2) for the correlation between human capital and social capital is accepted. This indicates that human capital ( $X_1$ ) and social capital ( $X_2$ ) have significant correlations.

Table 3. Indicates that there is a significant negative correlation between the number of times entrepreneurs participated in the social events and their age with experience in the same industry while the correlation between their participation in events and the level of their education is generally positive. This means that the higher the education of entrepreneurs, the higher the possibility of participation in social events, while the younger and less experienced the entrepreneurs are, the lower the possibility of participation in such social events is.

### 3.3. The Impact of Human Capital and Social Capital on MSEs Performance

The aim of this section is to examine the impact of human capital ( $X_1$ ), MSEs' characteristics ( $X_2$ ) and social capital ( $X_3$ ) on MSEs' performance ( $Y$ ) in the traditional cluster of enterprises in Herat City. In this article, the variable of the management status of the entrepreneur ( $X_{13}$ ), marketing strategies ( $X_{225}$ ) such as plans for expansion of MSEs ( $X_{226}$ ), location of MSEs ( $X_{222}$ ), and change in sales volume ( $X_{221}$ ) is considered to be the measurement variable for the human capital and MSE's characteristics. In addition, the other three variables, namely, number of close friends ( $X_{31}$ ), the number of those who asked for assistance ( $X_{33}$ ), and trust in family ( $X_{32}$ ) are considered to be social-capital-related variables that have significant impact on MSE's performance, as formulated in the hypothesis and shown in the conceptual framework of this study.

Table 4. Model Summary of Factors with Significant Impact on MSE's Performance

No.	B	t-value	Sig.	F	value	Sig.	R <sup>2</sup>
1	Manager of MSEs (X <sub>13</sub> )	.247****	4.068	.000	7.76	.000	<b>.341</b>
2	No. Close Friends (X <sub>31</sub> )	.110**	1.854	.041			
3	No. Friend Ask for Help (X <sub>33</sub> )	.126**	2.096	.032			
4	Trust in Family (X <sub>32</sub> )	-.145**	-2.413	.015			
5	Change in Sales Volume (X <sub>221</sub> )	.173***	-2.797	.006			
6	Location of MSEs (X <sub>222</sub> )	-.101*	-1.670	.097			
7	Rented Space (X <sub>223</sub> )	-.189**	-2.030	.044			
8	Use Business Card (X <sub>224</sub> )	-.164***	-2.762	.006			
9	Marketing (X <sub>225</sub> )	.143**	2.381	.018			
10	Plan to Expand MSEs (X <sub>226</sub> )	.167***	2.801	.006			
11	Obtain Business License (X <sub>227</sub> )	.147**	2.500	.013			

\* $p < 0.10$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$ , \*\*\*\* $p < 0.001$

Table 4 shows the results of multiple regression analysis for 11 independent variables on the dependent variable, namely, MSE's performance. The 11 independent variables ran in the regression analysis and the results in Table 4 show that all of them have a significant impact on MSE's performance (monthly sales revenue). The results of regression analysis indicate that the managerial status of an entrepreneur (X<sub>13</sub>) with the beta coefficients of ( $\beta = .247$ ) has a positive impact on the MSE's performance (Y) at t-value of ( $p < 0.001$ ) level of significance. This implies that the higher the possibility of an MSE's management leadership being taken up by a manager who is not himself the owner, the higher the performance of MSEs is. The results indicate that the number of close friends (X<sub>31</sub>) and the availability of friends for assistance (X<sub>33</sub>) with the beta coefficients of ( $\beta = .110$ ) and ( $\beta = .126$ ) have a significant positive impact on MSE's performance at t-value of ( $p < 0.041$ ) and ( $p < 0.032$ ) level of significance. In addition, four other independent variables of trust in the family (X<sub>32</sub>), the satisfaction level of the current location (X<sub>222</sub>) of MSEs, rented space (X<sub>223</sub>) and use of business cards (X<sub>224</sub>) bear a significant negative impact on MSE's performance.

Therefore, the results of multiple regression analysis in Table 4 show an F-test value of 7.76 at ( $p < 0.001$ ) level of significance. This indicates that at least one of the independent variables from the human capital dimension and social capital dimension has a significant impact on the dependent variable (MSE's

performance). Thus, based on these statistical results, as is shown in Figures 3 and 5, the second hypothesis of this article can be accepted, indicating that human capital ( $X_1$ ) and social capital ( $X_3$ ) have a significant impact on MSEs' performance in traditional clusters in Herat City. In addition, the regression model resulted in an R-square value of ( $R^2=.341$ ). This means that more than 34% of the variation in the dependent variable monthly sales revenue ( $Y$ ) can be explained statistically by these 11 independent variables that have the significant impact.

#### IV. Conclusion

Despite the fact that little attention has been paid to the development of traditional clusters of MSEs in Afghanistan, the existing mechanisms and traditional methods of survival at the individual, firm, or community level have enabled the traditional clusters to gain ground in the market while contributing to the economy. Based on the findings from fieldwork in Herat City, we can conclude that the modality of cooperation and competition in the traditional clusters of MSEs in this city has often provided safety nets and sources of the livelihood for hundreds of households. On the other hand, clustered MSEs in Herat City are facing a wide variety of challenges due to their low productivity profile and lack of access to the proper input materials on the supply side and the market-related challenges on the demand side.

This study has found that human capital and social capital play significant roles in promoting MSEs' performance and cooperation within the clusters. The quality of human resources in all clusters was found to be very low, which could undermine the potential of other capital resources (including social capital) of MSEs that would otherwise facilitate the interactions and the performances of these MSEs within the traditional clusters.

The lack of social and human capital on the MSEs' level seems to affect the market share of clustered MSEs. Therefore, it is important to note that human capital formation could have a positive impact on MSEs' performance by way of consolidation of social capital. On the other hand, the educational level and experience of human resources within a cluster can have various relationships with the social capital and MSE's characteristics, and eventually impact on MSEs' performance. The dynamic associations that exist among those

determinant factors need to be considered in the policy-making process for the development of the traditional cluster of MSEs in Afghanistan.

The components of social capital such as trust and networking seem to play a significant role in sharing and accessing information on products, input materials, price, market share, sales revenue, and collective action. Such cooperation and competition can be achieved by enhancing the quality of factors related to social capital.

Findings from this study indicate the necessity for increasing the MSEs' access to human resource training, marketing facilities, and networking opportunities through policy interventions.

Complex relationships exist among human capital, social capital, and MSEs' performances in these traditional clusters, and only a third of the variations in the MSEs' performances are explained by those eleven variables (see Table 4). However, the findings still indicate that both human capital and social capital are the vital determinants of MSEs performance in Herat City.

## Notes

1. Based on the data collected through author's interviews with some of MSEs' owners during fieldwork from January 5 to February 25, 2014.

## References

- Arndt, Olaf, and Rolf Sternberg. 2000. "Do Manufacturing Firms Profit from Intraregional Innovation Linkages? An Empirical Based Answer." *European Planning Studies* 8 (4):465-485. doi: 10.1080/713666423.
- Augusto Felicio, J., Eduardo Couto, and Jorge Caiado. 2014. "Human Capital, Social Capital and Organizational Performance." *Management Decision* 52 (2):350-364. doi: 10.1108/md-04-2013-0260.
- Batjargal, Bat. 2007. "Internet Entrepreneurship: Social Capital, Human Capital, and Performance of Internet Ventures in China." *Research Policy* 36 (5):605-618. doi: 10.1016/j.respol.2006.09.029.
- Becker, Gary S. 2009. *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*. Chicago: University of Chicago Press.
- Biggs, Tyler, Merilee Grindle, and Donald R Snodgrass. 1988. "The Informal Sector, Policy Reform, and Structural Transformation." In *Beyond the Informal Sector: Including the Excluded in Developing Countries*, edited by Jenkins Jerry, 133-171. San Francisco: ICS Press.
- Bourdieu, Pierre, ed. 1986. *The Forms of Capital*. Edited by J. Richardson, *In Handbook of Theory and Research for the Sociology of Education*. New York: Greenwood Press.
- Campbell-Kelly, Martin, Marina Danilevsky, Daniel D. Garcia-Swartz, and Shane Pederson. 2010. "Clustering in the Creative Industries: Insights from the Origins of Computer Software." *Industry and Innovation* 17 (3):309-329. doi: 10.1080/13662711003790593.
- Chuluunbaatar, Enkhbold, Ottavia, Ding-Bang Luh, and Shiann-Far Kung. 2014. "The Role of Cluster and Social Capital in Cultural and Creative Industries Development." *Procedia - Social and Behavioral Sciences* 109 (0):552-557. doi: 10.1016/j.sbspro.2013.12.506.
- Cohen, Jacob, Patricia Cohen, Stephen G West, and Leona S Aiken. 2003. *Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences*. 3rd ed. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Coleman, James S. 1988. "Social Capital in the Creation of Human Capital." *American Journal of Sociology* 94:S95-S120. doi: 10.2307/2780243.
- Cusack, Jake, and Erik Malmstrom. 2011. "Bactrian Gold: Challenges and Hope for Private-Sector Development in Afghanistan." doi: 10.2139/ssrn.1772762.
- Davis, James Allan. 1971. *Elementary Survey Analysis, Prentice-Hall methods of social science series*. Englewood Cliffs, New Jersey: Prentice-Hall.
- Puppim De Oliveira, Jose Antonio. 2008. Introduction: Social *Upgrading among Small Firms and Clusters*. In *Upgrading Clusters and Small Enterprises in Developing Countries: Environmental, Labor, Innovation and Social Issues*, edited by Jose Antonio Puppim De Oliveira. Farnham, UK: Ashgate.
- Dinda, Soumyananda. 2008. "Social Capital in The Creation of Human Capital and Economic Growth: A Productive Consumption Approach." *The Journal of Socio-Economics* 37 (5):2020-2033. doi: 10.1016/j.socec.2007.06.014.

- Douglas, William Orville. 1952. *Beyond the High Himalayas*. Garden City, New York: Doubleday. Quoted in Gritzner, J.A., and J.F. Shroder, *Afghanistan*. 2<sup>nd</sup> ed. (New York: Infobase Publishing, 2007:9).
- EIU. 2010. SMEs in Japan: A New Growth Driver? London, UK: Economist Intelligence Unit.
- Everitt, B. S. 2010. *The Cambridge Dictionary of Statistics*. 4th ed. Cambridge, UK: Cambridge University Press.
- John, Peter. 2005. "The Contribution of Volunteering, Trust, and Networks to Educational Performance." *Policy Studies Journal* 33 (4):635-656. doi: 10.1111/j.1541-0072.2005.00136.x.
- Leslie, Joylon. 2015. Political and Economic Dynamics of Herat. Washington DC: United States Institute of Peace.
- Meghana, Ayyagari, Beck Thorsten, and Demirgüç-Kunt Asli. 2003. Small and Medium Enterprises Across the Globe: A New Database. *Policy Research Working Papers*: 40. doi:10.1596/1813-9450-3127.
- Meier, Kenneth J., Nathan Favero, and Mallory Compton. 2014. "Social Context, Management, and Organizational Performance: When Human Capital and Social Capital Serve as Substitutes." *Public Management Review*:1-20. doi: 10.1080/14719037.2014.984621.
- Nadvi, Khalid, and Stephanie Barrientos. 2004. Industrial Clusters and Poverty Reduction: Towards a Methodology for Poverty and Social Impact Assessment of Cluster Development Initiatives. Vienna: United Nations Industrial Development Organization.
- Parrilli, M.D. 2007. *SME Cluster Development: A Dynamic View of Survival Clusters in Developing Countries*. Basingstoke, UK: Palgrave Macmillan.
- Parto, Saeed. 2008. "Innovation and Economic Activity: An Institutional Analysis of the Role of Clusters in Industrializing Economies." *Journal of Economic Issues* 42 (4):1005-1030.
- Porter, M. E. 1998. "Clusters and the New Economics of Competition." *Harvard Business Review* 76:77.
- Porter, M. E. 2000. "Location, Competition, and Economic Development: Local Clusters in a Global Economy." *Economic Development Quarterly* 14 (1):15-34. doi: 10.1177/089124240001400105.
- Porter, Michael E. 1990. *The Competitive Advantage of Nations*, *Harvard Business Review*. New York: Free Press.
- Putnam, Robert D. 2000. *Bowling Alone: The Collapse and Revival of American Community*. New York, USA: Simon & Schuster.
- Pyke, Frank, Giacomo Becattini, and Werner Sengenberger. 1990. *Industrial Districts and Inter-firm Co-operation in Italy*. Geneva: International Institute for Labour Studies.
- Pyke, Frank, and Werner Sengenberger. 1992. *Industrial Districts and Local Economic Regeneration*. Geneva: International Institute for Labour Studies.
- Rosenfeld, Stuart A. 1997. "Bringing Business Clusters into the Mainstream of Economic Development." *European Planning Studies* 5 (1):3-23. doi: 10.1080/09654319708720381.
- Saxenian, AnnaLee. 1996. *Regional Advantage: Culture and Competition in Silicon Valley and Route 128*. Cambridge, USA: Harvard University Press.
- Schmitz, Hubert. 1995. "Collective Efficiency: Growth Path for Small-scale Industry." *The Journal of Development Studies* 31 (4):529.
- Stam, Wouter, Souren Arzlanian, and Tom Elfring. 2014. "Social Capital of Entrepreneurs and Small Firm Performance: A Meta-analysis of Contextual and Methodological Moderators." *Journal of Business Venturing* 29 (1):152-173. doi: 10.1016/j.jbusvent.2013.01.002.
- Veglio, Valerio, and Antonella Zucchella. 2015. "Entrepreneurial Firms in Traditional Industries: Does Innovation Matter for International Growth?" *Journal of International*

*Entrepreneurship* 13 (2):138-152. doi: 10.1007/s10843-015-0142-z.

Wang, Wen-Ying, and Chingfu Chang. 2005. "Intellectual Capital and Performance in Causal Models: Evidence from the Information Technology Industry in Taiwan." *Journal of Intellectual Capital* 6 (2):222-236. doi: 10.1108/14691930510592816.

**Abstract**

# Social Capital, Human Capital and Performance of Traditional Clusters of MSEs: A Case Study of Herat City, Afghanistan

Parviz Ahmad VALIZADAH

This article aims to examine the association between human capital and social capital as it functions in traditional clusters of micro and small-scale enterprises (MSEs), and to assess their impact on the performance of the MSEs. The primary data for this article were collected from 205 traditional MSEs clustered in Herat City, Afghanistan. The hypotheses derived from human capital and social capital theories are tested in order to examine the association and causal relationship among human capital, social capital, and MSEs performance. The results of this article reveal that human capital is significantly associated with social capital and that both types of capital are important factors in determining the MSE's performance in traditional enterprises in Herat City. Human capital formation seems to have a crucial role in relation to the social capital and the MSE's performance in this study.

Keywords : Traditional Cluster, MSEs, Performance, Social Capital, Human Capital