

How Human, Social And Financial Capital Shape The Exploitation Of Opportunities Among Tunisian Micro-Entrepreneurs

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Abstract

Exploiting entrepreneurial opportunities is crucial for business success, yet most research focuses on opportunity identification rather than opportunity exploitation, particularly in emerging economies. This study addresses this gap by investigating how human, social, and financial capital influence Tunisian micro-entrepreneurs' ability to exploit identified opportunities. Human capital includes education, entrepreneurship training, sector-specific experience, and creativity. Social capital is measured through network size and the nature of ties, while financial capital considers initial start-up funds. Data were collected from 105 micro-entrepreneurs via structured questionnaires and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). Results show that managerial experience, strong social ties, and financial resources have a positive effect on opportunity exploitation, while sector-specific experience has a significant negative effect. In contrast, education, entrepreneurship training, creativity, and network size do not significantly influence opportunity exploitation. These findings highlight the importance of managerial expertise, close relational networks, and financial capacity in the exploitation process, while underscoring the contextual factors that may limit the value of education, formal training, and broader networks in emerging economies.

Keywords: Human capital, Social capital, Financial capital, Opportunity exploitation, Entrepreneurship, Tunisian micro-entrepreneurs

I. INTRODUCTION

Entrepreneurship is a complex process involving several cognitive and behavioral stages, among which the exploitation of entrepreneurial opportunities constitutes a decisive step for the emergence and survival of new ventures. While extensive research has examined how entrepreneurs identify opportunities ([8], [22]), far fewer studies have focused on the subsequent and equally critical phase: the exploitation of opportunities, that is, the transformation of an entrepreneurial idea into concrete action [16].

Opportunity exploitation has been defined as the set of decisions and actions aimed at mobilizing and coordinating the necessary resources to convert an idea into a viable economic activity [12]. Effective exploitation is therefore closely linked to the entrepreneur's ability to mobilize human, social, and financial capital, three fundamental forms of capital that condition the capacity to assemble resources, reduce uncertainty, and facilitate market entry.

Human capital has long been recognized as a key determinant of economic performance. Early works by [24], [5], [7] conceptualized education, training, and experience as investments that enhance individuals' productivity and decision-making. More recent analyses confirm that knowledge, prior experience, and managerial competencies shape entrepreneurs' capacity to act effectively on opportunities ([1], [25]).

Similarly, social capital provides access to information, legitimacy, and resources essential for moving from recognition to action. Empirical evidence shows that social networks strongly influence innovation, resource

mobilization, and entrepreneurial orientation ([14]), suggesting that social ties may help entrepreneurs overcome structural constraints typical of emerging contexts.

Financial capital also plays a fundamental role, as access to initial funding conditions the entrepreneur's capacity to invest in production, marketing, and operational resources. Recent studies confirm that financial and social capital jointly strengthen entrepreneurial initiative, especially among small and micro-enterprises [20].

Despite these advances, empirical research on the determinants of opportunity exploitation remains limited, fragmented, and often centered on developed economies. The present study aims to address this gap by examining the extent to which these three forms of capital affect opportunity exploitation among Tunisian micro-entrepreneurs.

I. Literature Review and Hypothesis Development

Exploiting entrepreneurial opportunities is a crucial step in the entrepreneurial process, allowing entrepreneurs to transform ideas into viable business actions [16]. This stage depends heavily on the entrepreneur's capacity to mobilize key resources, particularly human, social, and financial capital. These forms of capital provide the knowledge, networks, and financial means necessary to reduce uncertainty and facilitate the successful implementation of opportunities.

Human capital refers to the knowledge, skills, experience, and creativity that entrepreneurs acquire through education, training, or practical engagement in business activities ([19]; [23]). Creativity is highlighted as a critical aspect of human capital by reference [23]. Formal education generates explicit knowledge, while training, on-the-job learning, and sector-specific experience develop tacit knowledge that strengthens cognitive abilities, enhances decision-making, and shapes entrepreneurial thinking ([2]; [15]). Prior experience, particularly in managerial positions or within a specific business sector, fosters creativity and the ability to form novel connections, facilitating the effective exploitation of opportunities. Reference ([19]) demonstrate that skills and experience shape entrepreneurial behaviors, including resource mobilization and opportunity development. The human capital literature shows that such knowledge and skills are positively associated with both the discovery and exploitation of entrepreneurial opportunities ([21]). Reference [6] emphasizes that entrepreneurs leverage specialized knowledge to identify and act on opportunities, while reference [17] highlights that high-quality human capital is essential for successful opportunity exploitation.

Based on this literature, we propose the following hypotheses regarding the role of human capital in entrepreneurial opportunity exploitation:

H1: Entrepreneurs' human capital positively affects the exploitation of entrepreneurial opportunities.

H1a: Higher education positively affects the ability to exploit entrepreneurial opportunities.

H1a': Entrepreneurship training positively affects the ability to exploit entrepreneurial opportunities.

H1b: Previous managerial experience positively affects the ability to exploit entrepreneurial opportunities.

H1b': Previous experience in the business sector positively affects the ability to exploit entrepreneurial opportunities.

H1c: Greater creativity positively affects the ability to exploit entrepreneurial opportunities.

Social capital refers to the resources accessible through an entrepreneur's network of relationships, including family, friends, peers, and professional contacts [18]. These networks provide critical information, support, and access to financial and social resources that facilitate opportunity exploitation [4]. Social capital is often measured by the size of the network and the nature of ties. Strong ties, such as family and close friends, offer feedback and support, while weak ties with broader contacts provide access to novel ideas and information that are less likely to be available in close networks [9]. Entrepreneurs with well-developed networks are therefore better positioned to exploit business opportunities, especially in contexts where institutional support is limited.

Based on this evidence, we propose the following hypothesis:

H2: Entrepreneurs' social capital positively affects the exploitation of entrepreneurial opportunities.

H2a: Larger social networks positively affect the ability to exploit entrepreneurial opportunities.

H2b: Strong ties positively affect the ability to exploit entrepreneurial opportunities.

H2b': Weak ties positively affect the ability to exploit entrepreneurial opportunities.

Financial capital is considered, alongside entrepreneurship and infrastructure, as a key ingredient for launching a new business [10]. Financial capital is closely linked to entrepreneurship, particularly to the exploitation of entrepreneurial opportunities. Entrepreneurs with greater financial resources are more likely to act on opportunities than those with limited resources [3]. Despite its critical role in small and medium-sized enterprises, financial capital has often been overlooked in entrepreneurship research, especially regarding its influence on opportunity exploitation. Reference [13] emphasize that financial resources are necessary to start a business, and individuals who are already financially advantaged are more likely to engage in entrepreneurial activities. In our study, the initial start-up capital represents the financial capital of the entrepreneurs.

Based on this reasoning, our third hypothesis (H3) is as follows:

H3: Financial capital, represented by the initial start-up capital, has a positive effect on the ability to exploit entrepreneurial opportunities.

II. DATA AND METHODOLOGIE

A. SAMPLE STUDIED

The sample includes 105 Tunisian micro-enterprises employing between 1 and 9 workers.

B. VARIABLES MEASUREMENT

The dependent variable is opportunity exploitation, measured using four items on a 5-point Likert scale. The independent variables include human capital, social capital, and financial capital. All variables were assessed through a structured questionnaire.

C. STATISTIQUES DESCRIPTIVES

Descriptive statistics for the sampled population are reported in Table 1.

TABLE I: DESCRIPTIVE STATISTICS

Variable	Observations	Obs with missing data	Obs. without missing data	Minimum	Maximum	Average	Standard deviation
level of studies	105	0	105	0.000	1.000	0.514	0.500
Training	105	0	105	0.000	1.000	0.400	0.490
Managerial experience	105	0	105	0.000	1.000	0.676	0.468
Sectoral experience	105	0	105	0.000	1.000	0.790	0.407
Creativity 1	105	0	105	1.000	4.000	3.371	0.694
Creativity 2	105	0	105	1.000	4.000	3.276	0.710
Creativity 3	105	0	105	1.000	4.000	3.276	0.724
Creativity 4	105	0	105	1.000	4.000	3.381	0.821
Network size	105	0	105	0.000	7.000	2.752	1.661
Strong ties	105	0	105	0.000	1.000	0.766	0.335
Weak ties	105	0	105	0.000	57.000	1.250	5.496
Gender	105	0	105	0.000	1.000	0.800	0.400
Age	105	0	105	23.000	65.000	39.895	10.909
Financial capital	105	0	105	1.000	5.900	4.066	0.803
Exploitation 1	105	0	105	1.000	5.000	3.876	1.039
Exploitation 2	105	0	105	1.000	5.000	3.819	1.003
Exploitation 3	105	0	105	1.000	5.000	3.848	1.021
Exploitation 4	105	0	105	1.000	5.000	3.924	1.021

C. STRUCTURAL EQUATION METHOD

We used Partial Least Squares Structural Equation Modeling (PLS-SEM) to examine the determinants of entrepreneurial opportunity exploitation. This method is well-suited for small sample sizes and allows the analysis of both qualitative and quantitative latent constructs.

IV. RESULTS AND DISCUSSION

The analysis was performed using XLSTAT 2014, employing the PLSPM (Partial Least Squares Path Modeling) approach. This software was selected because it supports multi-group PLS analyses, allowing the examination of heterogeneity within the sample. The results are presented step by step in the following sections.

A. EVALUATION of MEASUREMENT MODELS

1) The reliability of manifest variables and the unidimensionality of constructs

TABLE II: COMPOSITE RELIABILITY

Latent variable	Cronbach alpha	Rho DG	First VP	Second VP
Creativity	0.845	0.897	2.757	0,679
Exploitation	0.945	0.961	3.436	0.267

As presented in the previous table, Cronbach's alpha and Dillon-Goldstein's rho values are satisfactory for all scales, exceeding the 0.7 threshold and confirming the reliability of the variable blocks. Additionally, the first eigenvalue of each latent variable is greater than 1, while the second is below 1, indicating the unidimensionality of all constructs.

TABLE III: CROSS-LOADING (SINGLE-FACTOR MANIFEST VARIABLES /1)

	EDUC	TRA	M_EXP	S.EXP	CREA	NET.S	S.TIE	W.TIE	Gender	Age	F.CAP	Expl
level of studies	1.000	0.443	0.061	0.015	-0.211	0.085	-0.158	0.103	-0.295	-0.174	0.168	-0.037
Training	0.443	1.000	-0.017	-0.010	-0.136	0.180	-0.101	0.131	-0.175	-0.165	0.094	-0.142
Managerial experience	0.061	-0.017	1.000	0.244	-0.002	0.130	0.180	0.083	0.214	0.116	-0.080	0.240
Sectoral experience	0.015	-0.010	0.244	1.000	-0.069	-0.133	0.090	0.057	0.035	0.081	0.039	-0.086
Creativity 1	-0.276	-0.213	-0.070	-0.129	0.863	-0.094	-0.122	-0.054	0.130	0.103	-0.017	0.099
Creativity 2	-0.185	-0.044	-0.075	-0.030	0.837	0.082	-0.132	-0.043	0.060	0.149	0.086	0.080
Creativity 3	-0.208	-0.177	0.039	-0.030	0.805	0.017	-0.123	-0.165	0.224	0.167	-0.085	0.035
Creativity 4	-0.060	-0.047	0.098	-0.018	0.766	-0.105	-0.176	-0.023	0.203	-0.122	0.061	0.111
Network size	0.085	0.180	0.130	-0.133	-0.052	1.000	0.117	0.234	0.097	-0.101	0.226	-0.003
Strong ties	-0.158	-0.101	0.180	0.090	-0.175	0.117	1.000	0.057	0.013	-0.099	-0.183	0.199
Weak ties	0.103	0.131	0.083	0.057	-0.064	0.234	0.057	1.000	-0.188	-0.056	0.129	-0.071
Gender	-0.295	-0.175	0.214	0.035	0.181	0.097	0.013	-0.188	1.000	0.255	-0.056	-0.057
Age	-0.174	-0.165	0.116	0.081	0.054	-0.101	-0.099	-0.056	0.255	1.000	-0.038	-0.067
Financial capital	0.168	0.094	-0.080	0.039	0.034	0.226	-0.183	0.129	-0.056	-0.038	1.000	0.137
Exploitation1	-0.061	-0.127	0.211	-0.084	0.156	0.004	0.151	-0.177	0.009	-0.036	0.150	0.935
Exploitation2	-0.042	-0.163	0.159	-0.070	0.120	0.036	0.185	0.014	-0.090	-0.146	0.119	0.893
Exploitation3	-0.033	-0.126	0.235	-0.123	0.061	-0.062	0.163	-0.092	-0.075	0.000	0.104	0.940
Exploitation4	0.002	-0.110	0.287	-0.038	0.074	0.011	0.245	0.005	-0.061	-0.068	0.132	0.939

All factor loadings exceed 0.6, with the highest values observed for the manifest variables corresponding to their respective latent constructs. This creates a clear diagonal pattern in the loading matrix, confirming the expected relationships between manifest and latent variables.

2) Convergent and discriminant validity:

TABLE IV: CONVERGENT AND DISCRIMINANT VALIDITY (AVE > SQUARE CORRELATION)

	EDUC	TRA	M.EXP	S.EX P	CREA	NET.S	S.TIE	W.TI E	Gend er	Age	F.Cap	Expl	Average communal ities (AVE)
EDUC	1	0.197	0.004	0.000	0.045	0.007	0.025	0.011	0.087	0.030	0.028	0.001	
TRA	0.197	1	0.000	0.000	0.018	0.033	0.010	0.017	0.031	0.027	0.009	0.020	
M.EXP	0.004	0.000	1	0.059	0.000	0.017	0.033	0.007	0.046	0.014	0.006	0.058	
S.EXP	0.000	0.000	0.059	1	0.005	0.018	0.008	0.003	0.001	0.007	0.002	0.007	
CREA	0.045	0.018	0.000	0.005	1	0.003	0.031	0.004	0.033	0.003	0.001	0.013	0.670
NET.S	0.007	0.033	0.017	0.018	0.003	1	0.014	0.055	0.010	0.010	0.051	0.000	
S.TIE	0.025	0.010	0.033	0.008	0.031	0.014	1	0.003	0.000	0.010	0.033	0.040	
W.TIE	0.011	0.017	0.007	0.003	0.004	0.055	0.003	1	0.035	0.003	0.017	0.005	
Gender	0.087	0.031	0.046	0.001	0.033	0.010	0.000	0.035	1	0.065	0.003	0.003	
Age	0.030	0.027	0.014	0.007	0.003	0.010	0.010	0.003	0.065	1	0.001	0.004	
F.Cap	0.028	0.009	0.006	0.002	0.001	0.051	0.033	0.017	0.003	0.001	1	0.019	
Expl	0.001	0.020	0.058	0.007	0.013	0.000	0.040	0.005	0.003	0.004	0.019	1	0.859
Average communal ities (AVE)					0.670								0.859 0

The AVE for creativity exceeds 0.5, indicating good convergent validity and a strong correlation among the items composing this construct.

B. EVALUATION of THE STRUCTURAL MODEL

The structural model was evaluated by examining the R^2 values of each latent variable, followed by the path coefficients.

TABLE V : STRUCTURAL MODEL

	R^2	F	Pr > F	R^2 (Bootstrap)	Standard deviation	Critical ratio (CR)
opportunity exploitation	0.255	2.454	0.010	0.316	0.080	2.805

TABLE VI: PATHS COEFFICIENTS

Dependent variable	Latent variable	Value	Standard deviation	t	Pr > t
opportunity exploitation	Level of studies (education)	-0.017	0.111	-0.154	0.878
	Training	-0.121	0.104	-1.160	0.249
	Managerial experience	0.324	0.101	3.202	0.002
	Sectoral experience	-0.179	0.097	-1.848	0.068
	Creativity	0.131	0.097	1.353	0.179
	Network size	-0.083	0.103	-0.802	0.425
	Strong ties	0.221	0.100	2.204	0.030
	Weak ties	-0.120	0.097	-1.226	0.223
	Gender	-0.157	0.105	-1.502	0.136
	Age	-0.064	0.097	-0.653	0.516
	Financial capital	0.243	0.098	2.468	0.015

C. INTERPRETATION of RESULT

According to our results, education does not significantly affect the exploitation of entrepreneurial opportunities, leading to the rejection of H1a. This contrasts with previous studies highlighting the role of human capital—particularly education and work experience—in opportunity exploitation, such as [17], [24], [5], [7]. In Tunisia, the mismatch between formal education and market needs, combined with bureaucratic and institutional barriers, discourages entrepreneurial action.

Similarly, entrepreneurial training does not have a significant positive effect on opportunity exploitation, rejecting H1a'. This may be due to the low quality and limited relevance of training programs in Tunisia, which reference [11] notes are poorly coordinated and not fully aligned with market needs [1].

Managerial experience positively affects opportunity exploitation, confirming H1b. This finding is consistent with [13], who show that managerial experience enables entrepreneurs to leverage personal networks to access critical information necessary for starting a business. In contrast, sector-specific experience has a significant negative effect on opportunity exploitation, leading to the rejection of H1b' and contrasting with findings in [17]. In the Tunisian context, individuals with experience in a given sector may prefer the security of their current positions over pursuing uncertain new ventures.

Creativity does not significantly affect opportunity exploitation, leading to the rejection of H1c. In Tunisia, structural constraints such as limited access to resources, bureaucratic hurdles, and market uncertainties reduce the ability of entrepreneurs to turn creative ideas into viable opportunities.

Regarding social capital, network size does not significantly influence opportunity exploitation, leading to the rejection of H2a. By contrast, strong ties positively affect opportunity exploitation, confirming H2b, while weak ties have no significant effect, rejecting H2b'. In Tunisia, strong family and community relationships dominate, allowing entrepreneurs to rely on these close ties to exploit opportunities effectively. This finding aligns with reference [17].

As expected, financial capital—specifically, access to monetary resources necessary to implement entrepreneurial opportunities—positively influences Tunisian entrepreneurs in initiating action and exploiting their entrepreneurial opportunities, confirming H3. This finding is consistent with reference [10]. Regarding the control variables, neither age nor gender significantly affects opportunity exploitation in the Tunisian context.

V. CONCLUSION

This study examined the impact of human, social, and financial capital on the ability of Tunisian micro-entrepreneurs to exploit entrepreneurial opportunities. Data were collected from 105 Tunisian micro-entrepreneurs through structured questionnaires and analyzed using Partial Least Squares (PLS), a structural equation modeling technique for latent variables.

Our results show that education and training do not significantly affect opportunity exploitation, while managerial experience has a positive effect and sector-specific experience a negative one. Creativity did not have a significant effect on opportunity exploitation, likely due to local resource constraints. Strong ties have a positive impact on opportunity exploitation, whereas weak ties and overall network size do not appear to exert a significant effect. Financial capital plays a crucial role, providing the necessary resources to implement entrepreneurial projects. Age and gender, as control variables, were not significant.

These findings highlight the importance of managerial skills, strong social networks, and financial resources for micro-entrepreneurship in Tunisia.

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