

Social Capital and Performance of Manufacturing MSMEs in Kenya

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Received June 9, 2022; Revised August 30, 2022; Accepted September 19, 2022

Cite This Paper in the following Citation Styles

(a): [1] Kaberia Salome Kanini, Hannah O. Bula, Stephen M. A. Muathe, "Social Capital and Performance of Manufacturing MSMEs in Kenya," *Advances in Economics and Business*, Vol. 10, No. 4, pp. 59 - 71, 2022. DOI: 10.13189/aeb.2022.100401.

(b): Kaberia Salome Kanini, Hannah O. Bula, Stephen M. A. Muathe (2022). *Social Capital and Performance of Manufacturing MSMEs in Kenya*. *Advances in Economics and Business*, 10(4), 59 - 71. DOI: 10.13189/aeb.2022.100401.

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Abstract Sustained growth and development of economies is mainly attributed to the manufacturing sector, and is often the differentiator between developed and developing countries. In Kenya, the sector has played a crucial role, with a contribution of 10% to gross domestic product for the duration from 2008 to 2014. Statistics show that in 2017, 2018 and 2019, the contribution deteriorated to 8.4%, 7.7% and 7.54% respectively, which implies possible deindustrialization. The government's goal of achieving a robust manufacturing sector through Big Four Agenda may not be fruitful if this trend continues. Informed by these trends, the study sought to establish the connection between social capital and firm performance among the micro, small and medium manufacturing enterprises. Keys among the existing theories applied in the study are social capital theory and behavioral theory of the firm. The sample size was 384 licensed manufacturing businesses operating within Nairobi City County, derived from a population of 61,931. The study applied descriptive and explanatory research designs. Primary data was collected, and analysis was done using descriptive and inferential statistics. The outcomes showed that relational and cognitive social capital had a positive and significant effect on performance of micro, small and medium manufacturing ventures, whereas structural social capital was noted to have a significant effect. This study recommends that the firms' management taps into additional and diverse networks to drive innovation, and subsequently create a competitive edge for their firms.

Keywords Social Capital, Firm Performance, MSME, Manufacturing

1. Introduction

The acknowledgement of Micro, Small and Medium Enterprises (MSMEs) by both government and stakeholders as development and growth engines, makes MSMEs a key strategy to fight poverty and unemployment. The development of MSMEs is directly related to the economic growth of an economy, as denoted by the Organization for Economic Co-operation and Development [1]. According to Ayyagari, Demirgüç-Kunt and Maksimovic [2], more than 95% of the businesses globally are MSMEs. For major economies such as the United States of America (USA), India, China, Malaysia and Taiwan among others, MSMEs account for 60-70% of employment creation opportunities, and a notable contribution above 50% to the GDP [1].

MSMEs account for up to 45% of employment opportunities among developing nations, with a critical 33% input to the countries' GDP [1]. The contribution to the GDP of Ghana and Nigeria's MSMEs is about 49% and 48% respectively [3, 4]. Boit and Maru [5] observe that MSMEs offer employment to 6.4 million Kenyans, forming 84% of the country's total workforce, and contributing 34% to her GDP. The Micro and Small Enterprise Authority (MSEA) concurs that MSMEs

account for 85% of the Kenyan workforce [6]. Performance of the MSME sector is therefore critical to economic expansion, for both the developed and developing economies [7, 1].

However, despite their critical role, MSMEs have continued to encounter varied challenges as evidenced by a report stating that a sum of 2.21 million MSMEs had wound up in the period from 2011 to 2016 [8]. In Africa and other continents, MSMEs have been recording dismal performance. In Congo, the highest number of MSMEs became bankrupt as a result of the looting in 1993 and 1996. In Equatorial Guinea, Chad and Gabon, the supremacy of oil slackened the start-up and performance of non-oil businesses. Performance indicators used in this study were adopted from Bula [9] who operationalized performance of MSEs as a change in sales volume, number of employees, profits generated, and asset growth.

On ease of starting and running a business, Kenya is ranked position 56 with a score of 73.2 [10]; this increases the chances of failures at all stages of the venture development. Social capital enhances the ability to seize the moment and mobilize resources for enterprises, which leads to the competitive advantage of the MSMEs. The competitive edge becomes an asset for the firm towards improving performance [11]. Social capital enhances the cross-networking of organizations which is distinct from the traditional organizational links. Members with social capital are able to have collective goals aimed at providing business benefits as opposed to traditionally operated businesses that follow predetermined sets of rules [9].

1.1. Characteristics of the Manufacturing MSMEs in Nairobi City County, Kenya

The manufacturing sector in Kenya is credited for providing economic activity opportunities for the poor [12]. Mutuku [13] opines that MSMEs have greatly supported Kenya's economy; they supply over 90% of Kenya's labor force, significantly helping to reduce poverty and grow the economy. Swezey and McConaghy [14] opine that manufacturing MSMEs catalyze economic growth through invention and creativeness, and impact on job creation as well as generations of income. MSMEs in Kenya maybe be owner-managed or run by hired managers, but are broadly classified into three; micro, small and medium ventures. The micro enterprise comprises a venture with 10 or fewer employees, and the small enterprises comprise firms with between 10 and 49 employees. Medium enterprises comprise firms with between 50 and 99 workers (MSEA).

Nairobi City County is one among 47 counties in Kenya, and is also the Capital city of Kenya. The third smallest yet most populous of the 47 counties, Nairobi has the highest concentration of businesses among the counties [8]. These range from very small ventures, sole proprietorships and partnerships, to formal SMEs. For this study, the focus is on the manufacturing micro, small and medium ventures within Nairobi City County. They fall into various

categories of manufacturing as classified by Kenya Association of Manufactures; namely Agro-processing, Food and Beverage, ICT, Iron and Steel, Construction materials, Leather, Oil and Mining, and Textile and Apparel [15]. Of the registered MSMEs in Nairobi, 23.1% operate in the manufacturing sector. Therefore, there are approximately 61,931 registered manufacturing MSMEs in Nairobi City County.

2. Review of Literature

2.1. Theoretical Review

Theoretical backing helps to enhance the relevance of research and provides important insights [16].

2.1.1. Social Capital Theory

The social capital theory as proposed by Nahapiet and Ghoshal [17], advances that relationship networks comprise valuable resources for the propagation of economic and social affairs, availing to the members a valuable collectively owned capital. A key perspective of this theory is that ties within a network facilitate access to resources, knowledge and information [18]. The social capital theory is based on embeddedness [19]; MSMEs evolve from steady relationship structures and collaboration among players. However, as the ventures flourish, a significant change in their information needs compels enhancement of the associational networks [18, 20]. The Social Capital theory thus informs the independent variable of this study.

2.1.2. Behavioral Theory of the Firm

Cyert and March [21] first proposed this theory. The model helps to define the growth path of small firms and to demonstrate how each firm reinforces the other [22]. The theory further posits that ventures are made up of many individuals with somewhat conflicting goals [23]. The goals of the venture can thus only be accomplished through the process of negotiation; to a point where members of the coalition agree on some specific goals for the good of the firm [21]. The theory aptly demonstrates the requisite foundation for the growth and success of small ventures, which is the current study's dependent variable.

2.2. Empirical Review

Related studies conducted earlier have focused on various combinations of variables, theoretical foundations and research designs among other variations. Studies that focused on social capital and firm performance include [18] who studied Social Capital among small and medium enterprises within the manufacturing top 100 firms, and [24, 25] who investigated the influence social networks had on the expansion of enterprises among women-owned firms.

Clopton [26] analyzed social capital and team

performance among undergraduate athletes across 23 universities within the USA while Kiprotich [27] studied the effect of social capital on the performance of firms in Kenya. Obiero, Njeru and Muriithi [25] studied social network diversity among associates while [28, 29] all explored the association between social capital and performance of micro-enterprises by focusing on cognitive, structural, and relational social capital.

2.2.1. Relational Social Capital and Enterprise Performance

Among the researchers who investigated the association between relational social capital and performance of ventures include [30-33]. Their findings broadly affirmed that relational social capital impacted firm performance. These conclusions concurred with those of Tan, Sutanto and Tan [34] and [30], both of whose outcomes displayed a substantial impact of relational social capital on enterprise performance.

Chen, Fu, Wang, Tsai and Su [35] and Bratkovic and Antoncic [36] applied secondary data for similar research. However, not all study findings concurred; findings of a study [37] showed that social capital had no positive effect on entrepreneurial performance. Findings from another study [38] indicated that relational social capital had a significant effect on sustainable firm performance.

Informed by earlier research, therefore, this study formulated the following hypothesis:

H_{01} : Relational social capital has no noteworthy effect on the performance of manufacturing MSMEs in Nairobi City County in Kenya.

2.2.2. Structural Social Capital and Performance

There have been earlier studies that investigated the association between structural social capital and performance of firms [39-40]. Their common findings indicate an association between structural social capital and performance of enterprises. The study outcomes aligned with [42]; results exhibited that structural social capital was the highest positive factor affecting performance of hotels, compared to weaker and mostly not important associations. Similar findings were derived from a study by Wairimu [43] who observed that structural social capital positively affected performance of communal ventures.

Based on the theoretical proposition and literature review, this study adopted the following hypothesis:

H_{02} : Structural social capital has no substantial effect on the performance of manufacturing MSMEs in Kenya.

Structural social capital, cognitive social capital, and relational social capital all form the aggregate social capital, which is the independent variable adopted for this study. The measures of each of these dimensions were adopted based on earlier research. To measure structural social capital, the study adopted the entrepreneur's network structural characteristics, their business networks ties and the institutional links. The measures of relational social

capital adopted include interpersonal trust, number of the Entrepreneur's networks and the number of social connections the entrepreneur or firm has. Shared goals and values, as well as the entrepreneurship orientation, were adopted as measures of cognitive social capital [42, 44, 45]. The study thus sought to investigate to what extent these affected the firm performance.

2.2.3. Cognitive Social Capital and Enterprise Performance

Findings indicated that cognitive social capital was significant in forecasting innovation performance [44]. Analia, Syaikat, Fauzi and Rustiadi [51] found cognitive social capital to have a substantial effect on firm performance, while Dahiyat, Khasawneh, Bontis and Al-Dahiyat [47] posited that social capital positively correlated with knowledge transfer. [48] exhibited cognitive social capital as having a noteworthy impact on health.

Of all three dimensions of social capital namely relational, structural and cognitive social capital, only cognitive social capital positively related to firm operational performance directly [49]. This implies that if ventures facilitated shared goals, vision and values, they would positively impact their firm's operational performance. These findings partly aligned with [57], whose findings indicated that social capital (hedonic, cognitive and social uses) had a positive effect on performance of ventures (market and financial performance), while social capital had partial mediation on the relationship between social media usage and enterprise performance.

This study, informed by existing literature, adopted the following hypothesis:

H_{03} : Cognitive social capital has no substantial effect on performance of manufacturing MSMEs in Nairobi City County in Kenya.

2.2.4. Social Capital and Enterprise Performance

The performance of MSME has generally been considered as poor by financiers, based on the fact that most manufacturing MSMEs have been experiencing a decline in profits, coupled with the high mortality rate of MSMEs [18]. The findings enumerated a positive correlation between social capital and firm performance, with the mediation of knowledge transfer and innovation.

Mosonik *et al.*, [5] sampled 384 manufacturing MSMEs in Nairobi County and investigated the intervening role of firm strategic competencies on the link between entrepreneurial orientation and growth of ventures in the manufacturing segment. Findings revealed that managers/owners who are intentionally proactive, innovative and willing to take business risks attained faster growth for their firms; their individual strategic competencies notwithstanding. Wambugu, Gichira, Wanjau and Mungatu [51] found that pro-activeness significantly projected enterprise performance among agro-processing MSMEs, aligning with [52], who opined

that pro-active firms often set the pace in introduction of new ideas, products and services.

Kithusi [53], in a related study, investigated the role of a firm's resources on its performance, among a sample of 140 licensed MSMEs in the Furniture segment of manufacturing across the 8 sub-counties of Nairobi County. Entrepreneurial strategy and external environment were incorporated as the mediating and moderating variables respectively. Findings depict a direct connection between social capital and the venture performance; resources possessed by an enterprise have a substantial effect on the firm's performance. However, the same study established that, though dissimilar to the individual effects, when considered conjointly, the study variables indicated a substantial effect on the performance of enterprises

Further, [54] revealed that the main stimulators for developing invention nets were dependent on mediators and social capital systematic dynamics. Another study, [55] found that internal social capital had a noteworthy effect on the venture's performance, while external social capital was found to have no noteworthy effect on enterprise performance. Nonetheless, not all study findings have found social capital to play a role on firm performance.

Zhang, Zhang and Song [38] demonstrated that social capital could weaken the sustainable performance of organizations owing to huge costs of maintaining the network ties. The findings indicated that structural social capital positively influenced the sustainable performance of ventures. Cognitive social capital was found to positively correlate with sustainable organizational performance and had an effect on innovation, while relational social capital had no noteworthy effect on sustainable venture performance, but instead was negatively correlated with innovation speed, which in turn affects performance. Findings also indicated that there exists an inverse link between social capital and sustainable performance of ventures [56].

Based on the literature review as well as the theoretical backing of the research, this study adopted the below hypothesis:

H₀₄: There is no significant mediating effect of innovation on social capital and performance of manufacturing MSMEs in Nairobi City County, Kenya.

Firm performance has a multidimensional approach; ranging from traditional financial measures such as profitability, sales and market share, to expansive measures that include non-financial measures; indicators of performance that are not directly measurable in financial terms. Business practitioners and scholars alike, concur that non-financial indicators of venture performance are equally important in measuring performance of the firm, hence they must not be downplayed [57].

However, for MSMEs, challenges have often emerged in the measurement of both the monetary and non-monetary indicators; largely owing to limited and no data. This is because some ventures hardly maintain non-financial records, making it challenging to extract these measures

[53]. Informed by this and given the target population of manufacturing firms some of whom are singly managed, the current study adopted the traditional financial measures of firm performance. This is supported by [58] who measured performance of MSMEs using the amount of profits made, ROE and ROA. The study thus measures performance of MSMEs based on their profitability, improvement in capital investment and growth in sales volume.

3. Research Methodology

3.1. Research Philosophy

The research philosophy assists a researcher in the selection of an appropriate research design. The philosophies fall under positivism or phenomenological. In business-related studies there are four main probe philosophies namely positivism, interpretivism, pragmatism and realism. In positivism, investigators opine that the real thing can be perceived and observed in an independent way. This kind of studies often derive typically evident and measurable findings, which are then computed to arrive at logical conclusions [59].

Positivism places emphasis on quantifiable observations which can be applied in data analysis [59]. A research philosophy helps the researcher to derive an appropriate study hypothesis to be tested by the study, in alignment with the study objectives [60]. This study adopted a positivism approach so as to establish an insight into the quantitative aspects. Consequently, the resultant findings of the study could be generalized to a broader populace of manufacturing MSMEs; so long as the populace has similar characteristics as those of Nairobi City County.

3.2. Research Design

Researchers [60] concur that no solitary research design is self-sufficient or outshines the rest; the diversity of research designs helps deliver optimal outcomes from the research. The study adopted a combination of two designs, namely descriptive and explanatory research designs. Descriptive measurements are instrumental in simplifying voluminous data in a manner that is sensible. A similar design was used in previous research work, e.g. [61].

The descriptive design is not without its demerits; it presents a weakness in confidentiality [27] because respondents may not always be truthful and may only report to the researcher what they want to hear. Kothari [62] posits that this could distort the findings drawn from the research. This is why a combined approach helps to optimize the study. Explanatory research design helps in determining cause and effect associations between study variables, hence these were found to be appropriate complementary designs for the study; to validate the strength as well as the direction of the correlation between

social capital and enterprise performance among MSMEs.

3.3. Empirical Model

An empirical model involving a simple and multiple regression model was deemed appropriate for this study. To determine the mediation and moderating effects in the study, stepwise and hierarchical regression was then used.

The multiple regression model used includes;

$$P = \beta_0 + \beta_1 RSC_1 + \beta_2 SSC_2 + \beta_3 CSC_3 + e \quad (1)$$

P = Enterprise Performance

{ β_i ; $i=1, 2, 3$ } = The coefficients for the social capital measures

X_i for;

RSC₁ = Relational social capital

SSC₂ = Structural social capital

CSC₃ = Cognitive social capital

In order to determine the joint effect, weighted average of social capital was calculated using the equation below;

$$\text{Social capital composite (SCC)} = \frac{\sum (W_1 X_1 + W_2 X_2 + W_3 X_3)}{3} \quad (2)$$

4. Findings and Discussion

This section summarizes the characteristics of the respondents, the descriptive analysis, as well as the research findings in relation to the study hypotheses.

4.1. Descriptive Statistical Analysis

Table 1. Demographic Characteristics of the Respondents

	Category	Frequency	Percent
Gender	Female	127	34.1
	Male	245	65.9
	Total	372	100
Level of education	Below Class 8	6	1.6
	Class 8	14	3.8
	Form 4	30	8.1
	Diploma	142	38.2
	A-level	58	15.6
	Degree	94	25.3
	Masters	28	7.5
Total	372	100	
Entrepreneur's age	Below 25	49	13.2
	25-30	60	16.1
	31-40	173	46.5
	Over 40	90	24.2
	Total	372	100
Marital Status	Single	63	16.9
	Married	251	67.5
	Separated	25	6.7
	Divorced	20	5.4
	Widowed	13	3.5
	Total	372	100
Age of the business	Below 1 year	121	32.5
	2-5 years	127	34.1
	6-10 years	66	17.7
	11-20 years	37	9.9
	Over 20 years	21	5.6
	Total	372	100
Branches	No	257	69.1
	Yes	115	30.9
	Total	372	100

Source: Survey Data (2021)

Table 2 below presents the descriptive statistics which show the mean of the statement used in the questionnaires and aggregate score for each construct, and aggregate for the variable. The standard deviation is also included to show variation of the response from the mean.

Table 2. Descriptive Results for Relational Social Capital

Descriptive Statistics	N	Minimum	Maximum	Mean	Std. Dev
Amongst internal parties					
There are close relationships between employees and management of the firm	372	1	5	3.96	0.836
The close relationships amongst employees results in high profit margins	372	1	5	4.15	1.022
Aggregate score for amongst internal parties				4.055	0.929
Between internal and external parties					
There are close relationships between the firm and the suppliers	372	1	5	4.01	1.013
There is a high level of trust in the firm by the customers	372	1	5	4.47	1.013
I learn a lot from the social groups I belong to	372	1	5	4.34	1.053
Aggregate score for internal and External parties				4.27	1.03
Entrepreneur's networks and support					
The number of social groups one belongs to help to improve the performance of the firm	372	1	5	4.37	0.925
Young people could start their own business and be independent	372	1	5	4.41	1.124
We get good support from the local and national government when we are starting a business	372	1	5	3.82	0.85
Aggregate score for Entrepreneur's networks and support				4.2	0.966
Aggregate score for Relational Social Capital				4.19	0.979

Source: Survey Data (2021)

Structural capital was measured through institutional links and network diversity. The results of descriptive statistics as applied in the study are presented in Table 3 below.

Table 3. Descriptive Results for Structural Social Capital

	N	Minimum	Maximum	Mean	Std. Dev
Network diversity					
Network diversity among customers has increased profitability of the firm	372	1	5	4.03	1.085
Our firm is strongly linked by community organizations	372	1	5	3.47	1.09
Our firm is coordinating and jointly working with other firms	372	1	5	3.79	0.928
Aggregate score for Network diversity				3.76	1.034
Institutional links					
I stay connected to people that do different things from what I do	372	1	5	3.69	0.796
Connecting with firms that do different things from us helps to improve our enterprise's performance	372	1	5	3.98	0.977
I belong to social groups that contain our competitors	372	1	5	3.60	1.235
I belong to groups that contain our suppliers	372	1	5	3.57	0.962
Aggregate score for Institutional links				3.71	0.993
Aggregate for score Structural Social Capital				3.73	1.01

Source: Survey Data (2021)

In exploring cognitive measures, the study sought to determine whether the social culture and norms of the place the MSMEs owners stay were helpful in achieving success through one's own particular struggles. The summary of the descriptives is as below.

Table 4. Descriptive Results for Cognitive Social Aspects

Descriptive Statistics	N	Minimum	Maximum	Mean	Std. Dev
Social Culture					
The social culture and norms of the place I stay are helpful in achieving success through one's own particular struggles	372	1	5	3.71	1.368
The social culture and norms of my community encourage entrepreneurial risk taking	372	1	5	3.81	1.068
Our firm has numerous networks and shares information with other firms	372	1	5	3.94	1.005
Aggregate for Social Culture				3.82	1.147
Shared Goals and Objectives and Values					
I clearly comprehend the firm's goals, values and mission	372	1	5	3.87	0.887
The social culture and norms of my community stress self-sufficiency, autonomy and personal inventiveness	372	1	5	3.92	0.914
Our organization has valuable goals and objectives	372	1	5	3.71	1.38
The firm's goals are reliable and do not conflict with the objectives	372	1	5	4.29	1.122
My firm focuses on realizing its goals, standards and mission	372	1	5	4.32	1.07
The firm shares the same business goals with key suppliers	372	1	5	4.23	0.979
The firm shares the same business values with key suppliers	372	1	5	3.64	0.778
The social culture and norms of my community encourage creativeness and innovation	372	1	5	3.93	0.868
Aggregate for Shared Goals and Objectives and Values				3.99	0.999
Aggregate for Cognitive Social Aspects				3.94	1.039

Source: Survey Data (2021)

The study indicators of performance that were analyzed were profitability, improvement in capital employed and growth in sales volume. The results are presented in Table 5 below.

Table 5. Descriptive Results for Enterprise Performance

Descriptive Statistics	N	Minimum	Maximum	Mean	Std. Dev
Profitability					
Our total profits have been increasing yearly	372	1	5	3.77	0.779
The salaries of employees are paid on time	372	1	5	4.07	0.856
Our business can comfortably pay for all its expenses	372	1	5	4.08	0.938
Aggregate score for Profitability				3.97	0.858
Capital Employed					
The amount of capital employed in the business has been increasing yearly	372	1	5	3.83	0.697
There has been expansion of the market size of our firm	372	1	5	4.19	0.989
In the last 3 years, the size of our organization has been expanding	372	1	5	4.3	1.06
Aggregate score for Capital employed				4.11	0.915
Growth in Sales Volume					
Our business has increased the number of customers we serve yearly	372	1	5	4.33	1.033
The trends of output of our firm have been on the rise in the past 3 years	372	1	5	3.92	0.91
The sales volume has been increasing every year	372	1	5	3.98	0.842
Aggregate Score for Growth in Sales Volume				4.08	0.928
Aggregate Score for Enterprise Performance				4.05	0.900

Source: Survey Data (2021)

4.2. Hypotheses Testing

The researchers used multivariate regression to assess if social capital (cognitive social capital, structural social capital and relational social capital) could predict MSMEs' success in Nairobi. The regression analysis outcomes are shown in Table 6 below.

Table 6. Regression Results

Coefficients	Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
	β	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
(Constant)	0.417	0.1		4.174	0.000	0.22	0.613
Relational Social Capital	0.573	0.028	0.631	20.153	0.000	0.517	0.629
Structural Social Capital	0.003	0.037	0.003	0.08	0.936	-0.07	0.076
Cognitive Social Capital	0.310	0.028	0.36	11.167	0.000	0.256	0.365

ANOVA		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	111.703	3	37.234	517.884	.000b
	Residual	27.537	368	0.072		
	Total	139.24	371			

Model Summary	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.896a	0.802	0.801	0.26814

a Predictors: (Constant), Cognitive Social Capital, Relational Social Capital, Structural Social Capital

b Dependent Variable: Enterprise Performance

Source: Survey Data (2021)

$$P = 0.417 + 0.573(RSC) + 0.003(SSC) + 0.310(CSC) + e$$

RSC_1 = Relational social capital

SSC_2 = Structural social capital

CSC_3 = Cognitive social capital

The model fitted had an adjusted R-Square = 0.801 implying that social capital, which comprised of structural, cognitive, and relational social capital, jointly explained 80.1% of the variation in firm performance of manufacturing MSMEs within Nairobi; all other factors held constant. These findings posit that social capital had a positive and substantial effect on enterprise performance among manufacturing MSMEs within Nairobi; manufacturing MSMEs with better social capital recorded better performance compared to those with less social capital.

The outcomes of the ANOVA of the model fitted to examine the relevance of the overall multivariate regression model used to relate social capital with enterprise performance are presented in Table 6 above. The f-statistics were 517.884 and the p-value was 0.000, which was less than 0.05. Consequently, the study was unable to reject the null hypothesis given that the model used had a good fit. According to the study findings, the model used to assess if social capital predicted enterprise success was statistically significant, at the 0.05 level of significance.

The study outcomes reinforced [66] who opined that ANOVA test is critical in the assessment of the overall significance of the model, and forms an integral part of the regression modelling. Hau, Kim, Lee and Kim [67] found that social capital measures are good predictor variables of enterprise performance.

H_{01} : Relational social capital has no significant effect on the performance of manufacturing MSMEs in Nairobi City County, Kenya

The study tested the said hypothesis by fitting a multivariate regression analysis to determine whether relational social capital significantly predicted enterprise performance of MSMEs within Nairobi City County in Kenya. The coefficient for relational social capital was = 0.573 with a p-value of 0.000, in accordance with the outcomes of the multivariate regression analysis shown in Table 6.

With the p-value being less than 0.05, the findings imply that relational social capital forecasts the success of manufacturing MSMEs' among firms operating within Nairobi City County, Kenya. Additionally, the findings exhibit that strengthening relational social capital by one unit leads to a 0.145 unit rise in manufacturing MSMEs' performance among ventures within Nairobi City County. Supported by these findings, the null hypothesis H_{01} :

Relational social capital has no substantial effect on performance of manufacturing MSMEs in Nairobi City County was rejected. The research thus concluded that relational social capital had a positive and substantial effect on performance of manufacturing MSMEs in Nairobi City County.

The research findings concurred with the proponents of the social capital theory who posited that network ties facilitate access to knowledge and resources, hence facilitating the sharing of information [18]; and that MSMEs evolve and develop under steady relationship structures. Various other studies exhibited that relational social capital had a noteworthy effect on enterprise performance [28-30].

Relational social capital enhances knowledge sharing among the parties [31], which in turn positively improves SMEs performance. A study [32] revealed that social capital and upper social networks mediated the association between intellectual capital and venture performance. The research findings, however, did not concur with [63], who found that owners with many weak relationships outside their circle of friends and family were more likely to seek credit facilities or other external financings than those with tight stronger ties. Networks, therefore, did not always operate as a connection in facilitating loan access; in bank financing, rapid information exchange rather than relationship was required to make the process easier.

H₀₂: Structural social capital has no substantial effect on performance among manufacturing MSMEs in Nairobi City County in Kenya

To assess this hypothesis, the study fitted a multivariate regression analysis to determine whether structural social capital significantly predicted the performance of MSMEs within Nairobi City County. The results of multivariate regression analysis show that the coefficient value for structural social capital was $\beta = 0.003$ with a corresponding p-value = 0.936. Since the p-value was greater than 0.05, then the results imply that structural social capital did not significantly predict performance of manufacturing MSMEs operating within Nairobi City County in Kenya.

However, the influence of structural social capital was found to be positive; hence increasing structural social capital by one unit will lead to an increase of 0.003 units in firm performance of manufacturing MSMEs operating within Nairobi City County. Informed by these findings, therefore, the research failed to reject the null hypothesis H₀₂: Structural social capital has no substantial effect on firm performance among manufacturing MSMEs in Nairobi City County in Kenya. These findings are aligned with [41] who indicated that large firms had higher levels of knowledge as compared to small firms. The findings revealed that the effect of structural social capital on venture performance was more significant in large firms

than in small firms.

The study finding on other hand, failed to concur with [42] which exhibited that structural social capital is the highest positive factor affecting firm performance. The research outcomes further failed to support [40] who found evidence that the personal and institutional links influence economic success and other social capital resources. The relationship between government institutions, financial institutions and MSMEs is very moderate hence it impacts the contribution between structural social capital and MSMEs performance.

H₀₃: Cognitive social capital has no substantial effect on performance among manufacturing MSMEs in Nairobi City County in Kenya

To examine the hypothesis, the study fitted a multivariate regression analysis to determine whether cognitive social capital significantly predicted enterprise performance of MSMEs operating within Nairobi City County. The results of the multivariate regression analysis as presented in Table 2, show that the coefficient for cognitive social capital was $\beta = 0.310$ with a corresponding p-value = 0.000. Given the p-value was less than 0.05, the results denote that cognitive social capital significantly predicted performance of manufacturing MSMEs within Nairobi City County in Kenya.

The results further exhibited that increasing cognitive social capital by one unit would yield an increase of 0.310 units in performance of manufacturing MSMEs within Nairobi City County. Informed by these outcomes the null hypothesis H₀₃: cognitive social capital has no significant effect on performance of manufacturing MSMEs in Nairobi City County was rejected. The study concluded that cognitive social capital had positive and significant effect on performance of manufacturing MSMEs in Nairobi City County.

The findings of this study support the proponents of the behavioral theory of the firm; that the goals of the firm can only be attained through the process of bargaining, where the members of the coalition agree on the specific aims, and also concur with [21] who found that social networks have definite influence on entrepreneurship orientation. Cognitive social capital influenced firm performance [51, 52]. The study findings aligned with [44] who revealed that cognitive social capital was significant in predicting Innovation performance.

However, this study's findings did not align with [56], whose findings revealed that out of the three social capital dimensions i.e. structural, relational and cognitive social capital, only cognitive social capital had positive effect on firm operational performance. These findings partly aligned with [50] who found a partial mediating effect of social capital on the association between social media usage and venture performance.

Table 7. Overall Summary of Test of Hypotheses

Hypothesis	Analysis Results	Remark
H ₀₁ : Relational social capital has no substantial effect on performance of manufacturing MSMEs in Nairobi City County, Kenya	$\beta = 0.573$ (p-value = 0.000)	H ₀₁ was rejected
H ₀₂ : Structural social capital has no substantial effect on performance of manufacturing MSMEs in Nairobi City County, Kenya	$\beta = 0.003$ p-value = 0.936	H ₀₂ was rejected
H ₀₃ : Cognitive social capital has no substantial effect on performance of manufacturing MSMEs in Nairobi City County, Kenya	$\beta = 0.310$ p-value = 0.000	Failed to reject H ₀₃

(Source: Survey Data, 2021)

This study finding concurred with [32] whose finding indicated that environmental uncertainty had a negative moderating effect on the connection between social capital and firm performance of cultural and creative organizations in China. Similarly, the finding agreed with [64] that found that stringent government regulation negatively affected the association between organizational slack and financial performance. The research thus concluded that government regulations are a key component of firm performance.

The study failed to agree with the finding of [65] which established that environmental instability boosted the association between social capital and performance. Outcomes further displayed that on high environmental instability, social capital negatively influenced organizational performance; possibly because negative classified information spreads through the networks as effectively as positive information would.

5. Conclusions

The study findings determined that holding other factors constant, relational social capital played a critical role in enhancing the performance of manufacturing MSMEs operating in Nairobi City County. The study further concluded that manufacturing MSMEs in Nairobi City County invested in maintaining close relationships amongst employees, which resulted in high profit margins. The MSMEs exhibited a great level of trust from the customers, and gathered a lot of information from their social groups. These elements of structural social capital contributed to a rise in performance of manufacturing MSMEs in Nairobi City County.

Cognitive social capital was established to significantly impact the performance of manufacturing MSMEs within Nairobi City County. Subsequently, the study concluded that cognitive social resources were critical in determining the performance of manufacturing MSMEs. MSMEs with numerous networks engage in information sharing, have goals that are reliable, and finally share business goals with suppliers and consequently leverage partners' information and business expertise to enrich the performance of their ventures. This is the basis of cognitive social capital.

6. Policy Recommendation

The study recommends that management of the MSMEs should leverage on relational social capital to positively affect the performance of their ventures. The management and business owners should put in place strategies to ensure sustained close relationships between employees and the management of the venture, between the firm and the suppliers, an elevated level of trust in the firm by the customers and finally high interactions in cross-functional social groups by employees.

The firm's goals, values and mission must be shared by all internal stakeholders. The study recommends that MSMEs managers and owners should champion activities that harness cognitive social capital; create numerous networks and encourage information sharing with other firms, streamline their goals with those of key suppliers, and create norms that encourage innovation.

On policy formulation, directors of the MSMEs and the regulatory bodies should formulate policies that ensure that efforts made by management and employees towards optimizing cognitive social capital are incentivized to them. Some business practices that need improvement among MSMEs in Nairobi include the management practices, and proactive introduction of new services and products. This will enable them to stay ahead of the competition and guarantee high performance.

7. Limitations and Future Research

This study was done among MSMEs in Nairobi City County, a densely populated county that hosts the highest number of MSMEs as compared to other counties in Kenya. For research carried out in a highly mechanized region, the study findings may not be easily generalized to other dissimilar environments [76]. Therefore, this study, having been done among MSMEs in Nairobi City County, makes it difficult to generalize the findings to other dissimilar counties. This presents an opportunity for further research among dissimilar Counties, findings of which would enrich the knowledge, by confirming or refuting the findings of this study.

The study was conducted during the unprecedented

COVID-19 pandemic period, during which physical meetings and interactions were prohibited as a way to contain the pandemic. This significantly altered and limited the data collection process given that business owners would not easily grant face-to-face meetings with strangers. The researcher thus embraced online dispatch and collection of the questionnaires to mitigate this limitation.

The study was limited to the primary data provided by the enterprise owners and/or managers, which could be subjective. Nevertheless, this could not affect the robustness of the results since the researcher deployed more than one questionnaire per enterprise, to authenticate the consistency of the responses provided.

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