



Social Capital, Organizational Innovation and Performance of Manufacturing MSMEs in Kenya

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ABSTRACT

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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 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 de-industrialization. The government's goal of achieving a robust manufacturing sector through Big Four Agenda may not be fruitful if this trend continues. Informed by the trends, the study sought to establish the mediating role of organizational innovation on the connection between social capital and firm performance among the micro, small and medium manufacturing enterprises. The study is based on existing theories namely social capital theory, behavioral theory of the firm, and Schumpeter theory of innovation. 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 analyzed using descriptive and inferential statistics. The findings indicated that relational and cognitive social capital positively and significantly predicted the performance of micro, small and medium manufacturing enterprises, whereas structural social capital was noted to have a significant effect. The mediating effect of organizational innovation was partial on the relationship between social capital and performance of micro, small and medium manufacturing enterprises. 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, Innovation, MSME, Manufacturing

1.0 INTRODUCTION

The critical role of Micro, Small and Medium Enterprises (MSMEs) as development and growth engines is recognized by Governments and stakeholders alike, which renders them a key strategy to fight poverty and unemployment. According to the Organization for Economic Co-operation and Development (OECD, 2017), the development of MSMEs is directly related to the economic growth and development of the developed as well as developing countries.

According to Ayyagari, Demirgüç-Kunt and Maksimovic (2011), more than 95% of the businesses globally are MSMEs. This is reflected in economies such as the United States of America (USA), India, China, Malaysia and Taiwan among others, where MSMEs account for 60-70% of employment creation opportunities, and a notable contribution above 50% to the GDP (OECD, 2017).

MSMEs account for up to 45% of employment opportunities among developing nations, with a critical 33% input to the countries' GDP (OECD, 2017a). The contribution to the GDP of Ghana and Nigeria's MSMEs is about 49% and 48% respectively (UNIDO, 2018; PriceWaterhouseCoopers, PWC, 2020). Boit and Maru (2013) in Mosenik, Maru and Komen (2021), observed that MSMEs offer employment to 6.4million Kenyans; forming 84% of the country's total workforce, and contributes 34% to her GDP. This concurs with the Micro and Small Enterprise Authority (MSEA), who

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demonstrate that MSMEs account for around 85% of the Kenyan workforce (MSEA, 2018). From these statistics, it is indisputable that the performance of the MSME sector is critical to economic expansion, for both the developed and developing economies (United Nations Development Program (UNDP), 2018; OECD, 2017).

However, despite their critical role, MSMEs have continued to encounter varied challenges as evidenced by a report released in 2016 stating that a sum of 2.21 million MSMEs had wound in the period from 2011 to 2016 (KNBS, 2016). 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 appearance and performance of non-oil businesses. Ghana has since drawn strategies to enhance the performance of MSMEs which form an anchor to her economy (Wega, 2018). In terms of ease of starting and running a business, Kenya is ranked position 56 with a score of 73.2 (Ease of Doing Business 2020). This increases the chances of failures at all stages of the venture development. To mitigate against the risk of failure, MSMEs could exploit social capital to achieve organizational innovation and consequently remain relevant and competitive. Bhagavatula, Elfring, Van Tilburg, and Van De Bunt (2010) proposed the need for MSMEs to leverage on social capital to access resources that would enable them to swiftly adapt quickly and better manage the firm's uncertainties. This is possible because social capital enhances the MSMEs owners' ability to seize the moment and mobilize resources for their enterprises. Consequently, competitive advantage of the MSMEs is achieved through social capital and becomes an asset for the firm, towards improving performance (Bhagavatula *et al.*, 2010).

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 (Afande, 2015). The Kenyan Government realizes the value as well as potential of MSMEs, more so owing to the number of jobs they have created post independence; significantly reducing poverty levels. Mutuku (2016), opines that MSMEs have greatly supported Kenya's economy. MSMEs supply over 90% of Kenya's labor force, significantly helping to reduce poverty and grow the economy. Swezey and McConaghy (2011) opine that manufacturing MSMEs catalyze economic growth through invention and creativeness, and impact on job creation as well as generation of income.

MSMEs in Kenya are broadly classified into three, namely the micro enterprises, small enterprises and medium enterprises. The micro enterprise comprises of a venture with 10 or less employees, and the small enterprises comprise of firms with an employee compliment of between 10 and 49

workers. Medium enterprises comprise of firms with minimum of 50 and maximum of 99 workers. The ventures may be owner-managed or run by hired managers.

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 was renamed in 2013 from the former Nairobi province, upon conversion of Kenya's 8 provinces into 47 counties. Nairobi has the highest concentration of businesses among the counties, with most of these ventures situated within the central business district, and others around the outskirts (Kenya National Bureau of Statistics (KNBS), 2018). These enterprises range from very small ventures, sole proprietorships and partnerships, to formal SMEs. For this study, the focus is on the micro, small and medium ventures within Nairobi City County.

The businesses in the manufacturing sector within Nairobi City County 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 (KAM, 2018). 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.

2.0 REVIEW OF LITERATURE

2.1 Theoretical Review

Theoretical backing helps to enhance the relevance of research and provide important insights (Kawulich, 2009). Different theories are applicable for the various variables, hence the theories considered for this study are based on their applicability to the corresponding study variables. The study is based on Social Capital theory, Behavioral theory of the firm, and the innovation theory by Schumpeter.

2.1.1 Social Capital Theory

The theory, proposed by Nahapiet and Ghoshal (1998), advances that relationship networks comprise of valuable resources for 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 (Liao & Welsch, 2005) in Kua and Namusonge (2015). Social capital theory is based on embeddedness (Granovetter, 1985). 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 (Kua & Namusonge, 2015; Lechner & Dowling, 2003). The Social Capital theory thus informs the independent variable of this study; Social Capital.

2.1.2 Behavioral Theory of the Firm

Cyert and March (1992) first proposed this theory. The model helps to define the growth path of small firms and to demonstrate how each firm reinforces the other (Zahra,

Sapienza & Davidsson, 2006). The theory further posits that ventures are made up of many individuals with somewhat conflicting goals (Dew & Read, Stuart & Sarasvathy, 2009; Saras & Wiltbank, 2008). The goals of the venture can thus only be accomplished through the process of negotiation; to a point where the members of the coalition agree on some specific goals for the good of the firm (Cyert & March, 1992). The theory aptly demonstrates the requisite foundation for the growth and success of small ventures, which is the current study's dependent variable.

2.1.6 Schumpeter Theory of Innovation

Championed by Schumpeter (1939), the hypothesis proposed five categories of innovations namely; fresh products, new supply sources, new market exploitation, new production ways and new organization business methods. These inventions are best adopted by networking with customers, workers, suppliers and other stakeholders of the enterprise. Manufacturing MSMEs seek enhancement of goods and services, among them human resources, in pursuit of creativity and innovativeness, which are also critical to the success of manufacturing (Mkala, Wanjau, & Kyalo, 2018). Organizations can use innovation to gain the market leader status.

The entrepreneurial environment in Kenya thrives on and expounds on the element of innovation (Bula, 2012). Innovation is the mediating variable in the study; hence the theory applies as an avenue for MSMEs to gain a competitive edge which helps them to retain and grow their customer base, and ultimately improve the firm performance.

2.2 Empirical Review

There are many related studies conducted earlier and which have focused on various combinations of variables, theoretical foundations and research designs among other variations. Earlier studies that focused on social capital and firm performance include Kaua and Namusonge (2015) who studied Social Capital among small and medium enterprises within the manufacturing top 100 firms, and Oke (2013) and Obiero, Njeru and Muriithi (2018) who investigated the effect of social networks on the expansion of enterprises among women owned ventures. Clopton (2011) analyzed social capital and team performance among undergraduate athletes across 23 universities within the USA while Kiprotich (2014) studied social capital and performance of firms in Kenya.

Previous studies that investigated social capital and innovation include Doh and Acs (2010), Alguezani and Filieri (2010) and Murphy, Pickernell, Thomas and Fuller (2018). Obiero, Njeru and Muriithi (2018) studied social network diversity among associates while Muniady *et al.* (2015) and Carey *et al.* (2011) explored the relationship between social capital and the performance of micro-enterprises by focused on cognitive, structural, relational social capital.

2.2.1 Relational Social Capital and Enterprise Performance

Among the studies that investigated the association between relational social capital and venture performance include Zhou (2017), Kim and Shim (2018), Liu (2017), Sani, Mohd-Khan and Noor (2019). Their findings broadly affirmed that relational social capital had an effect on firm performance. These findings concurred with those of Tan, Sutanto and Tan (2015), Jayawarna, Jones, and Macpherson (2011), and Pinho (2013), Chollet, Géraudel and Mothe (2014), Zhou (2017), and Jayawarna, Jones, and Macpherson (2011); all of whose outcomes displayed that relational social capital had a substantial impact on performance of enterprises.

Chen, Fu, Wang, Tsai and Su (2018) and Bratkovic and Antoncic (2016) applied secondary data for similar researches. However, not all study findings concurred; findings of a study by Rowley, Behrens, and Krackhardt (2000) revealed that there was no positive effect of social capital on entrepreneurial performance. Findings from a study by Zhang, Zhang and Song (2019) also indicated there was significant effect of relational social capital on sustainable organizational performance.

Structural social capital, relational social capital and cognitive social capital, all form the aggregate social capital, which is the independent variable of this study. Relational social capital is measured by considering the number of entrepreneur's networks, interpersonal trust, and number of social connections. Informed by earlier research, therefore, this study formulated the following hypothesis:

H₀₁: Relational social capital has no significant effect on the performance of manufacturing MSMEs in Nairobi City County, Kenya.

2.2.2 Structural Social Capital and Performance

There have been studies that sought to investigate the association between structural social capital and venture performance; such as Carrión, Izquierdo and Cillán (2017), Lang and Fink (2019) García-Villaverde, Parra-Requena and Molina-Morales, (2018), Meseguer-Martinez, Ruiz-Ortega, and Parra-Requena (2018) and Ortiz, Donate and Guadamillas (2017). Their common findings indicated a relationship between structural social capital and enterprise performance. The study findings aligned with Sainaghi and Baggio (2014), whose results exhibited that 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 (2019), who observed that structural social capital had a positive effect on communal enterprise performance.

Informed by earlier studies, network structural characteristics, business network ties and Institutional links were adopted as measures of structural social capital. Based on the theoretical proposition and literature review, thus study adopted the following hypothesis:

H₀₂: Structural social capital has no significant effect on the performance of manufacturing MSMEs in Kenya.

2.2.3 Cognitive Social Capital and Enterprise Performance

Findings by Wang, Zhao, Chang-Richards, Zhang, and Li (2021) indicated that cognitive social capital was significant in forecasting innovation performance. Syaukat, Fauzi and Rustiadi (2020) found that cognitive social capital had a significant effect on firm performance, while Dahiyat, Khasawneh, Bontis and Al-Dahiyat (2021) posited that social capital positively correlated with knowledge transfer. Zhang, Xu and Lu (2019) and Andrew (2010) both found that cognitive social capital had significant impact on health. Adedeji, Silva and Bullinger (2019) and Chima and Amodu (2017) found a significant connection between cognitive social capital and performance.

Ha and Wikramaratne, (2021) indicated that out of the three social capital dimensions namely relational, structural and cognitive social capital, only cognitive social capital positively related to firm operational performance directly. This implies that if ventures facilitated shared goals, vision and values, they would positively impact on their firm's operational performance. These findings partly aligned with Saha and Barnerjee (2015) and Kamboj, Kumar and Rahman, (2017) whose findings indicated that social capital (hedonic use, social use and cognitive use) had a positive effect on firm performance (market and financial performance) while social capital had partial mediation on the association between social media usage and enterprise performance.

To measure cognitive social capital, the study applies shared goals, shared values and entrepreneurship orientation. This study, informed by existing literature, therefore, adopted the following hypothesis:

H₀₃: Cognitive social capital has no significant effect on the performance of manufacturing MSMEs in Nairobi City County, Kenya.

2.2.4 Social Capital, Organizational Innovation 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 (Kaua & Namusonge, 2015). Stakeholders thus need to boost social capital among small businesses, as a means to overcome the current impediments including the prejudice among financiers that MSMEs are a high risk category to lend to, consequently making debt too expensive for these low end ventures. Previous studies on social capital, organizational innovation and enterprise performance include Nguyen, and Ha, (2020) who studied social capital and the performance of Vietnamese manufacturing and service firms. The findings enumerated a positive correlation on all three aspects of social

capital in relation to firm performance, with the mediation of knowledge transfer and innovation.

Mosonik *et al.*, (2021) sampled 384 manufacturing MSMEs in Nairobi County and investigated the mediating role of firm strategic competencies on the link between entrepreneurial orientation and the growth of ventures in the manufacturing sector. 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 (2015) found that pro-activeness significantly projected enterprise performance among agro processing MSMEs, aligning with Eggers, Kraus, Hughes, Laraway and Syncerski, (2013), who opined that pro-active firms often set the pace in introduction of new ideas, products and services.

Kithusi (2015), in a closely related study, investigated the role of firm resources on enterprise 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. The study findings depict a direct relationship between social capital and performance of enterprises; the resources owned by a firm have a substantial statistic effect on firm performance. However, the study established that, though dissimilar to the individual effects, when considered conjointly, the study variables indicated a substantial effect on the performance of enterprises

Innovation was found to play a major role in enhancing the association between capital deployed and performance (Rodrigo-Alarcón, García-Villaverde, Ruiz-Ortega & Parra-Requena, 2018; Setini, Yasa, Gede Supartha, Ketut Giantari & Rajiani, 2020). McDowell, Peake, Coder, and Harris (2018), Doh and Acs (2010) and Filieri and Alguezaui (2010) found a positive connection between social capital, innovation and intellectual capital development. Further, Iturrioz, Aragon and Narvaiza (2014) revealed that the main stimulators for developing invention nets were dependent on mediators and social capital systematic dynamics.

Rojas, Cerda, Garcia and Barcenás (2012) and Aziz and Samad (2016) researched on invention and competitive edge; findings showed that invention affects a firms' competitive edge. Akintimehin, Eniola, Alabi, Eluyela, Okere and Ozordi, (2019), found that internal social capital had a significant effect on firm performance, while external social capital was found to have no noteworthy effect on enterprise performance. However, not all study findings have supported the role of social capital on innovation and firm performance. Zhang, Zhang and Song, (2019) demonstrated that social capital could weaken sustainable organizational performance owing to huge costs of sustaining network ties. The findings indicated that structural social capital had a positive influence on sustainable firm performance but had no effect on

Kaberia Salome Kanini et al, Social Capital, Organizational Innovation and Performance of Manufacturing MSMEs in Kenya

sustainable innovation speed. Cognitive social capital was found to correlate positively to sustainable organizational performance and had an effect on innovation, while relational social capital had no significant effect on sustainable venture performance, but instead was negatively correlated with innovation speed. The findings of Laursen, Masciarelli, and Prencipe (2012) also indicated that there existed an inverse association between social capital and sustainable firm performance.

There are various approaches to organizational innovation; Razavi (2013) suggests three approaches to organizational innovation. In the first approach, innovation is understood as the aspect determining development of business and organizational performance. The second approach considers innovation as an outcome of firm growth; subsequently laying emphasis on the firm's working condition and atmosphere. The third approach demonstrates innovation as an enabler for enhanced performance, and therefore seeks a balance between innovation and other factors that affect performance.

Organizational innovation can be measured in terms of new methods of allocating responsibilities implemented, business re-engineering, quality-management system, introduction of management systems, routines for the conduct of work, new ways of establishing and coordinating relations with external parties, and pursuing lean production costs. It can also be measured by workplace organization, firm business practices and external relations (Bolaji & Adeoye, 2018). Manufacturing businesses are almost always reorganizing themselves due to various changes in the industry, often as a result of or in order to align themselves with external stakeholders be they customers, peers, suppliers etc.

Consequently, through the cross functional networks, the small businesses can gain insights into ways through which

they can improve internal processes and business practices. Therefore, given that this study focuses on small businesses mainly in manufacturing sector, the study used workplace organization, firm business practices and external relations to measure organizational innovation. Based on the literature review and theoretical backing of the study, this research 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.

2.4 Summary of Literature Review and Research Gaps

Detailed review of earlier studies exhibit that majority focused on only one form of social capital, mainly relational social capital; e.g. Bratkovic and Antoncic (2016), Chuairuang (2013), Sutanto and Tan (2015) and Pinho (2013). Different studies have used different research designs informed by various factors that determined the choice of research design applied; Sainaghi and Baggio (2014) adopted a cross sectional research design while García-Villaverde *et al.* (2018) adopted a desktop research design. Muniady *et al.* (2015) focused on relational and cognitive aspects of capital; a cross sectional research design was applied.

Saunders, Lewis and Thornhill, (2007), and Mugenda and Mugenda (2003) opine that no research design exists in isolation; application of varied research designs in a study helps to optimize the study findings. Previous studies that have applied more than one research design include Musau, Muathe and Mwangi (2018), whereby the researchers used both descriptive and explanatory research designs in their study on the effect of financial inclusion and competitiveness on the firms' credit risk among commercial Banks in Kenya.

Table 1: Summary of Literature Review and Research Gaps

| Author & year | Focus of the Study | Methodology | Findings | Knowledge Gap | Focus of the Current Study |
|--|---|-----------------------------|---|--|---|
| Murphy, Pickernell, Thomas and Fuller (2018) | Effect of innovation and social capital on regional policy in Wales | Descriptive research design | Communities programme partnerships are loyal of constructing both connection and connecting social capital. | First The study focused on invention, social capital and regional policy and hence a contextual gap. The research adopted a descriptive research design which presents a methodological gap. | This study considered the mediating effect of innovation on social capital and performance of MSMEs, and adopted both descriptive and explanatory research designs. |
| Tan, Sutanto and Tan (2015) | Relational Social Capital and Virtual Community for Website Programming | Descriptive Research design | Social capital influences Virtual Community for Website Programming. | A conceptual gap as the study used website programming as the dependent variable. The methods used differ | The outcome variable was enterprise performance and adopted both |

| | | | | | |
|--|--|---------------------------------|--|--|---|
| | | | | from that adopted by current study | descriptive and explanatory research design. |
| Chuaijuang (2013) | Relational Networks and Family Firm Capital Structure in Thailand | Cross sectional Research design | Owners who possess many feeble connections beyond their family circles were more inclined to take and use bank finance and other credit facilities as compared to those with close and robust ties | Research was done in Thailand thus showing a scope gap. The study also exudes a conceptual gap as it related relational capital with firm capital structure. The study applied a cross-sectional research design only. | Carried out in Kenya, the current study's dependent variable is enterprise performance and adopted both descriptive and explanatory research designs. |
| Muniady, Mamun, Mohamad, Permarup an and Zainol (2015) | Cognitive and relational social capital and their influence on structural social capital in driving micro-enterprise performance | Cross sectional research design | Relational social capital does not influence the structural social capital | The research used cross sectional research design. | The current study combined explanatory and descriptive research design. |
| Ortiz, Donate and Guadamillas (2017) | Relationships between structural social capital, knowledge identification capability and external knowledge acquisition | structural equation model | Structural social capital had a significant impact on attainment of knowledge and competencies | The study used structural equation model which presents a methodological gap. Knowledge identification and knowledge acquisition were the dependent variable which exudes a conceptual gap. | The proposed research used multiple regression. The study used enterprise performance as the dependent variable |
| Zhang, Xu and Lu (2019) | The role of community-based cognitive social capital on self-rated health among elderly Chinese adults | structural equation modeling | Cognitive social capital had an impact on health. | The study was done in China which presents a scope gap. A methodological gap is also evident as the study used structural equation modelling. | The current research is carried out in Kenya and uses multiple regression. |

(Source: Researcher, 2021)

3.0 RESEARCH METHODOLOGY

3.1 Research Philosophy

Research philosophy assists a researcher in the selection of an appropriate research design. The philosophies include positivism or phenomenological (Smith, 2015). 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 (Saunders, 2011). These kind of studies often derive typically evident and measurable findings, which are then computed to arrive at logical conclusions (Urus, 2013).

Positivism places emphasis on quantifiable observations which can be applied in data analysis (Remenyi, Williams, Money & Swartz 2005; Saunders et al., 2009). A research philosophy helps the researcher to derive appropriate study hypothesis to be tested by the study, in alignment with the study objectives (Bell & Bryman, 2007). Independence on the researcher's part ensures that he/she does not skew or affect the subject matter. The study adopted a positivism approach so as to establish an insight into the quantitative aspects. The choice was largely informed by the study's use of quantitative data for hypothesis testing. Consequently, the resultant findings of the study can easily be generalized to a

broader populace of manufacturing MSMEs, not necessarily within Nairobi City County.

3.2 Research Design

Mugenda and Mugenda (2003), Marczyk, DeMatteo and Festinger (2010), as well as Saunders et al., (2007), all concur that no solitary research design is self-sufficient or outshines the rest; 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.

The study is descriptive in that a detailed questionnaire is applied in the collection of primary data. Similar design was used in previous research work, e.g. Muathe (2010), and Muathe and Muraguri-Makau, (2020). The descriptive design is not without its demerits; it presents a weakness in confidentiality (Kiprotich, 2014) because respondents may not always be truthful and may only report to the researcher what they want to hear. Kothari (2004) 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 complimentary designs for the study. The study delved to explore the association between social capital and performance of MSMEs, mediated by organizational innovation. These designs thus helped to validate both the strength and the direction of the correlation between social capital and enterprise performance.

3.3 Empirical Model

An empirical model involving 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;

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

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;

$$\text{Social capital composite (SCC)} = \frac{\sum (W_1X_1 + W_2X_2 + W_3X_3)}{3} \dots \dots \dots (2)$$

4.0 FINDINGS AND DISCUSSION

4.1 Demographic characteristics

Table 2: 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)

Most of the respondent enterprise managers were fairly educated, suggesting that even the relatively uneducated venture owners hired educated managers to run their ventures. According to the findings of Amarteifio and Agbeblewu (2017) and Chiliya and Roberts-Lombard (2012), the entrepreneur's level of education, age brackets and other demographic factors play a significant role in influencing the firm's performance.

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 2 below.

Table 3: 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)

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

RSC₁ = Relational social capital

SSC₂ = Structural social capital

CSC₃ =Cognitive social capital

The model fitted had an adjusted R-Square =0.801 implying that social capital, which comprised of structural social capital, relational social capital and cognitive 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 significant and positive effect on enterprise performance of 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 2 above. The f-statistics were 517.884 and the p-value was 0.000, which was less than 0.05. As a result, the study was unable to reject the null hypothesis 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 findings reinforced Kozak and Piepho (2018) 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 (2013) found that social capital measures which comprises of relational, structural and cognitive social capital are good predictor variables of enterprise performance.

H₀₁: Relational social capital has no significant effect on performance of manufacturing MSMEs in Nairobi City County, Kenya

The study tested this hypothesis through fitting a multivariate regression analysis to determine whether relational social capital significantly predicted enterprise performance of MSMEs in Nairobi City County. 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 2.

With the p-value was 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. The findings further 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. Based on these findings, the null hypothesis H01: Relational social capital has no significant effect on performance of manufacturing MSMEs in Nairobi City County was rejected. The study concluded that relational social capital had positive and significant effect on performance of manufacturing MSMEs in Nairobi City County.

The study outcomes revealed that MSMEs that had invested in relational social capital such as relationships amongst internal parties, between internal and external parties as well as entrepreneur's networks and support positively increased their performance. The research findings concurred with the proponents of the social capital theory who proposed that a major perspective of the theory is that network ties facilitate access to resources and knowledge, and facilitate sharing of information (Liao & Welsch, 2005) in Kaua and Namusonge (2015).

The finding are also aligned with Kaua and Namusonge (2015); that MSMEs evolve and develop under steady relationship structures. Various other studies revealed that relational social capital had a significant effect on enterprise performance (Zhou (2017; Tan, Sutanto & Tan, 2015; Muniady *et al.* 2015; Chollet, Géraudel & Mothe, 2014; Pinho, 2013; Carey *et al.* 2011; Jayawarna, Jones & Macpherson, 2011). Kim and Shim (2018) demonstrated that relational social capital enhances knowledge sharing among the parties, which in turn positively improves SMEs performance. A study by Liu (2017) 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 Chuairuang's (2013) findings, which found that owners with many weak relationships outside the circle of friends and family were more likely to employ credit facilities or other external financing than those with tight stronger ties. As a result, networks did not always operate as a connection in facilitating loan access, and the findings suggest that when obtaining money through bank loans, rapid information exchange rather than relationships was required to make the process easier.

H02: Structural social capital has no significant effect on performance of manufacturing MSMEs in Nairobi City County, Kenya

To test this hypothesis, the study fitted a multivariate regression analysis to determine whether structural social capital significantly predicted enterprise performance of MSMEs in 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, 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, the study therefore failed to reject the null hypothesis H02: Structural social capital has no significant effect on firm performance among manufacturing MSMEs in Nairobi City County.

These findings are aligned with Ortiz, Donate and Guadamillas (2017), 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 Sainaghi and Baggio (2014), Meseguer *et al.* (2018) and Turner (2011) that exhibited that structural social capital is the highest positive factor affecting firm performance.

The research outcomes further failed to support Hernández, Camarero and Gutiérrez (2017) and Lang and Fink (2019) who found evidence that the personal and institutional links influence economic performance and other social capital resources. These findings could be explained on the basis of moderate network diversity among customers for majority of the MSMEs, lack of coordinating and joint working MSMEs and moderate institutional links. The relationship between government institutional, financial institution and MSMEs is very moderate hence it impacts on the contribution between structural social capital and MSMEs performance.

H03: Cognitive social capital has no significant effect on performance of manufacturing MSMEs in Nairobi City County, Kenya

To test this 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, 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 significantly 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

Kaberia Salome Kanini et al, Social Capital, Organizational Innovation and Performance of Manufacturing MSMEs in Kenya

only be attained through the process of bargaining, where the members of the coalition agree on the specific aims (Cyert & March, 1992) and Le Van *et al.* (2018) who found that social networks, such as persons, custom, belief have definite influence on entrepreneurship orientation. Cognitive social capital influenced firm performance (Dahiyat, Khasawneh, Bontis & Al-Dahiyat, 2021; Analia *et al.*, 2020). Similarly, Chima and Amodu (2017) findings displayed that a significant connection happens amongst social networks density and reactive-ness amongst businesspersons. The study findings aligned with Wang *et al.* (2021) who revealed that cognitive social capital was significant in predicting Innovation performance.

However, this study's findings did not align with Ha and Wikramaratne (2021) whose findings revealed that out of the three social capital dimensions i.e. structural, relational and cognitive social capital, only cognitive social capital was positively related to firm operational performance. These findings partly aligned with Saha and Barnerjee (2015) and Kamboj *et al.* (2017) who found a partial mediating effect of

social capital on the relationship between social media usage and venture performance.

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

The study's fourth hypothesis was H04: There is no significant mediating effect of organizational innovation on social capital and firm performance of manufacturing MSMEs within Nairobi City County, Kenya. This study applied the four-step mediation model recommended by Baron and Kenny (1986).

Step One: Effect of Social Capital Composite on Enterprise Performance

The first step for mediation testing was to determine if there existed a significant relationship between social capital composite ((SCC) = $\sum (W_1X_1+W_2X_2+W_3X_3)/3$) and enterpriser performance. The purpose of this step was to establish whether there existed a significant effect to be mediated by organizational innovation. The model fitted was as follows;

$$P = \beta_0 + \beta_6 SCC + \varepsilon \text{ which became } P = 0.363 + 0.933 SCC + \varepsilon$$

Table 4: Step One: Test for Mediation Effect of Organizational Innovation

| | | Unstandardized | | Standardized Coefficients | | 95.0% Confidence Interval for B | |
|---------------|------------|----------------|------------|---------------------------|----------------------------|---------------------------------|-------------------------|
| Coefficients | | β | Std. Error | Beta | t | Sig. | |
| | | | | | | | Lower Bound Upper Bound |
| (Constant) | | 0.363 | 0.111 | | 3.278 | 0.001 | 0.145 0.581 |
| SCC | | 0.933 | 0.028 | 0.864 | 33.642 | 0.000 | 0.878 0.987 |
| ANOVA | | Sum of Squares | df | Mean Square | F | Sig. | |
| 1 | Regression | 103.897 | 1 | 103.89 | 1131.791 | 0.000 | |
| | Residual | 35.343 | 370 | 0.092 | | | |
| | Total | 139.24 | 371 | | | | |
| Model Summary | | R | R Square | Adjusted R Square | Std. Error of the Estimate | | |
| 1 | | .864a | 0.746 | 0.746 | 0.30298 | | |

a Predictors: (Constant), SCC

b Dependent Variable: Enterprise Performance

Source: Survey Data (2021)

The model for step one was statistically significant as shown by the analysis of variance results (ANOVA) f-statistics =1131.791 (p-value=0.000). Similarly, the coefficient of SCC was $\beta=0.933$ with a corresponding p-value = 0.000. These findings confirmed that there existed a significant connection between social capital and enterprise performance to be mediated upon. The criteria for step one test for mediation was achieved as recommended by Baron and Kenny (1986).

Step Two: Effect of Social Capital Composite on Organizational Innovation

In this step, the study sought to determine if the independent variable was significantly related to the mediator variable (OI₄). The model fitted was as follows; $SCC = \beta_0 + \beta_8 OI_4 + \varepsilon$ which became $SCC = 2.938 + 0.280 OI_4 + \varepsilon$. For complete mediation, the relationship between the independent variables and the mediating variable must be significant.

Table 5: Step Two: Test for Mediation Effect of Organizational Innovation

| Coefficients | Unstandardized Coefficients | | Standardized Coefficients | | | 95.0% Confidence Interval for B | |
|---------------------------|-----------------------------|----------------|---------------------------|-------------------|----------------------------|---------------------------------|-------------|
| | β | Std. Error | Beta | t | Sig. | Lower Bound | Upper Bound |
| (Constant) | 2.938 | 0.131 | | 22.381 | 0.000 | 2.68 | 3.196 |
| Organizational Innovation | 0.280 | 0.035 | 0.374 | 7.912 | 0.000 | 0.21 | 0.349 |
| ANOVA | | Sum of Squares | df | Mean Square | F | Sig. | |
| 1 | Regression | 16.701 | 1 | 16.701 | 62.597 | .000b | |
| | Residual | 102.716 | 370 | 0.267 | | | |
| | Total | 119.417 | 371 | | | | |
| Model Summary | | R | R Square | Adjusted R Square | Std. Error of the Estimate | | |
| 1 | | .374a | 0.14 | 0.138 | 0.51652 | | |

a Predictors: (Constant), Organizational Innovation

b Dependent Variable: SCC

Source: Survey Data (2021)

The results indicate that the model fitted in step two was statistically significant as shown by the analysis of variance results (ANOVA) f-statistics =62.597 (p-value=0.000). Hence, organizational innovation was found to significantly predict social capital. Similarly, the coefficient of OI was $\beta=0.280$ with a corresponding p-value = 0.000. These findings further confirmed that there was a significant association between social capital and organizational

innovation, therefore criteria for step two test for mediation was achieved as recommended by Baron and Kenny (1986).

Step Three: Effect of Organizational Innovation on Enterprise Performance

In this step, the $P = \beta_0 + \beta_4 OI_4 + \epsilon$ was fitted to test whether the mediator variable was significantly associated to the dependent variable. For complete mediation the effect of organizational innovation (mediator) on enterprise performance (dependent variable) must be significant.

Table 6: Step Three: Test for Mediation Effect of Organizational Innovation

| Coefficients | Unstandardized Coefficients | | Standardized Coefficients | | | 95.0% Confidence Interval for B | |
|---------------------------|-----------------------------|----------------|---------------------------|-------------------|----------------------------|---------------------------------|-------------|
| | β | Std. Error | Beta | t | Sig. | Lower Bound | Upper Bound |
| (Constant) | 2.458 | 0.128 | | 19.148 | 0.000 | 2.205 | 2.71 |
| Organizational Innovation | 0.438 | 0.035 | 0.543 | 12.679 | 0.000 | 0.37 | 0.506 |
| ANOVA | | Sum of Squares | df | Mean Square | F | Sig. | |
| 1 | Regression | 41.012 | 1 | 41.012 | 160.746 | .000b | |
| | Residual | 98.227 | 370 | 0.255 | | | |
| | Total | 139.24 | 371 | | | | |
| Model Summary | | R | R Square | Adjusted R Square | Std. Error of the Estimate | | |
| 1 | | .543a | 0.295 | 0.293 | 0.5051 | | |

a Predictors: (Constant), Organizational Innovation

b Dependent Variable: Enterprise Performance

Source: Survey Data (2021)

Kaberia Salome Kanini et al, Social Capital, Organizational Innovation and Performance of Manufacturing MSMEs in Kenya

The results in Table 4.17 show model fitted in step three was statistically significant as shown by the analysis of variance results (ANOVA) f-statistics =160.746 (p-value=0.000). Hence, organizational innovation was found to significantly predict enterprise performance. Similarly, the coefficient of OI was $\beta=0.438$ with a corresponding p-value = 0.000 revealed that the influence of organizational innovation on enterprise performance was substantial, therefore the criteria for step three test for complete mediation was also achieved as recommended by Baron and Kenny (1986).

Step Four: Effect of SCC, Organizational Innovation on Enterprise Performance

The model fitted as follows; $Y= \beta_0+ \beta_6X_6+\beta_4OI_4+\varepsilon$ Where SCC_6 is the social capital composite, OI_4 is the mediator (organization innovation) and P is performance. The purpose of this step was to test the influence of social capital on enterprise performance while controlling for organizational innovation. The result of the model estimated is as shown; $Y= 0.021+ 0.830X_6+0.206OI_4+\varepsilon$. The coefficient for Social Capital Composite (X_6) must be insignificant to achieved complete mediation.

Table 7: Step Four: Test for Mediation Effect of Organizational Innovation

| | | Unstandardized Coefficients | | Standardized Coefficients | | | 95.0% Confidence Interval for B | |
|---------------------------|---------|-----------------------------|-------|---------------------------|-------|-------------|---------------------------------|--|
| Coefficients | β | Std. Error | Beta | t | Sig. | Lower Bound | Upper Bound | |
| (Constant) | 0.021 | 0.103 | | 0.20 | 0.842 | -0.182 | 0.224 | |
| Social Capital Composite | 0.830 | 0.026 | 0.768 | 31.40 | 0.000 | 0.778 | 0.882 | |
| Organizational Innovation | 0.206 | 0.02 | 0.255 | 10.44 | 0.000 | 0.167 | 0.245 | |

| ANOVA | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|-----|-------------|---------|-------|
| 1 | Regression | 111.709 | 2 | 55.855 | 779.077 | .000b |
| | Residual | 27.53 | 369 | 0.072 | | |
| | Total | 139.24 | 371 | | | |

| Model Summary | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---------------|-------|----------|-------------------|----------------------------|
| 1 | 0.896 | 0.802 | 0.801 | 0.26776 |

a Predictors: (Constant), Organizational Innovation, Social Capital Composite

b Dependent Variable: Enterprise Performance

(Source: Survey Data, 2021)

The results show the model estimated to predict the effect of social capital and organizational innovation on enterprise performance had a goodness of fit, as evidenced by f-statistics = 779.077, (p-value=0.000). Adjusted R Square indicated by social capital and organizational innovation accounted for 80.1% of the variation in enterprise performance.

The coefficient for Social Capital Composite was $\beta=0.830$, with a corresponding p-value = 0.000 while the coefficient for organizational innovation was $\beta=0.206$ (p-value=0.000). Since the coefficient value for Social Capital Composite was

significant, complete mediation was not achieved. The study therefore concluded that organizational innovation partially mediated the association between social capital and enterprise performance of MSMEs in Nairobi County.

Iturrioz, Aragon and Narvaiza (2014) found that the main stimulators for developing invention nets were dependent on mediators and social capital systematic dynamics. McDowell, *et al.* (2018) found that innovativeness partially intervened on the association between intellectual capital and firm performance.

Table 8: Summary for Test for Mediation Effect of Organizational Innovation

| Steps | Models | Results | Conclusion |
|-------|---|---|--------------------------------|
| 1 | $P = \beta_0 + \beta_6 SCC_6 + \epsilon$ | $\beta_6 = 0.933$ (p= 0.000) β_6 was significant | Partial mediation was achieved |
| 2 | $SCC = \beta_0 + \beta_8 OI_4 + \epsilon$ | $\beta_8 = 0.280$ (p = 0.000) β_8 was significant | |
| 3 | $P = \beta_0 + \beta_4 OI_4 + \epsilon$ | $\beta_4 = 0.438$ (p= 0.000) β_4 was significant | |
| 4 | $Y = \beta_0 + \beta_6 X_6 + \beta_4 OI_4 + \epsilon$ | $\beta_6 = 0.830$ (p= 0.000) $\beta_4 = 0.206$ (p=0.000) β_6 was significant β_4 was significant | |

(Source: Survey Data, 2021)

However, these findings of the current study did not conform to Zhang et al. (2019) whose findings revealed that structural social capital had a positive effect on sustainable firm performance but had no effect on sustainable innovation speed, while cognitive social capital correlated positively to sustainable organizational performance but had an effect on innovation. The study further demonstrated that relational

social capital had no significant influence on sustainable venture performance, but was instead negatively correlated with innovation speed. The findings were also echoed by those of Laursen, *et al.* (2012); that there was an inverse relationship between social capital and sustainable firm performance.

Table 9: Overall Summary of Test of Hypotheses

| Hypothesis | Analysis Results | Remark |
|---|--|----------------------------------|
| H₀₁: Relational social capital has no significant effect on performance of manufacturing MSMEs in Nairobi City County, Kenya | $\beta = 0.573$ (p-value = 0.000) | H ₀₁ was rejected |
| H₀₂: Structural social capital has no significant effect on performance of manufacturing MSMEs in Nairobi City County, Kenya | $\beta = 0.003$ p-value = 0.936 | H ₀₂ was rejected |
| H₀₃: Cognitive social capital has no significant effect on performance of manufacturing MSMEs in Nairobi City County, Kenya | $\beta = 0.310$ p-value = 0.000 | Failed to reject H ₀₃ |
| H₀₄: There is no significant mediating effect of organizational innovation on social capital and performance of manufacturing MSMEs in Nairobi City County, Kenya | $\beta = 0.933$ (p= 0.000) $\beta = 0.280$ (p = 0.000) $\beta = 0.438$ (p= 0.000) $\beta = 0.830$ (p= 0.000) $\beta = 0.206$ (p=0.000) | H ₀₄ was rejected |

(Source: Survey Data, 2021)

This study finding concurred with that of Liu (2017) whose finding indicated that environmental uncertainty had negative moderating effect on the connection between social capital and firm performance of cultural and creative organizations

in China. Similarly, the finding agreed with Li *et al.*, (2017) 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 Mahmood and Pratono (2014) that 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. This is possibly because negative classified information was spread through the networks just as effectively as positive information would.

5.0 CONCLUSION

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 further exhibited a great level of trust by the customers, and gathered a lot of information from their social groups, which form some of the elements of relational social capital that contributed to enhanced performance. Given the association between structural social capital and enterprise performance of manufacturing MSMEs, this study inferred that enterprises tapped structural social capital through improving network diversity among customers, coordinating and jointly working with other firms in different lines of business. These elements of structural social capital contributed to a rise in performance of manufacturing MSMEs in Nairobi City County.

Cognitive social capital was found to significantly influence the performance of manufacturing MSMEs within Nairobi City County. The study, therefore, 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 on partners' information and business expertise to enrich the performance of their ventures. This is the basis of cognitive social capital.

The study further concluded that organizational innovation such as new business practices, new methods of establishing external relationships with other firms, new products and services and rewarding of employees in terms of their efficiency provided the necessary room for MSMEs management and owners to use social capital to enhance the performance.

5.2 Policy Recommendation

The study recommends that management of the MSMEs should leverage on relational social capital to positively influence 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, a high 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 to improve firm performance.

The study further recommends that MSMEs managers and owners should champion activities that harness cognitive social capital; creating numerous networks and encouraging information sharing with other firms, streamlining their goals with those of key suppliers, and creating 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.

To ensure sustained good performance, MSMEs management and owners must continuously innovate their business practices to create the necessary room to exploit available resources. Some of the business practices that need improvement among MSMEs in Nairobi include the management practices, introduction of new services and products ahead of those by new competitors and adoption of new trade procedures and services. This will enable them to stay ahead of the competition and guarantee high performance.

5.3 Limitations and future Research

While there are many registered and many more informal ventures in Nairobi City County, only ventures that have been registered with the Nairobi County Council were considered. Studies on social capital within developing economies typically encounter many limitations, mainly because the measure of social capital is often based on membership in formal institutions (Muniady *et al.*, 2015). Requirements for membership into these formal associations has both cost and time implications, hence prohibitive for many small entrepreneurs, (Krishna, 2008). It is thus recommended that among developing countries, informal groups should be included as a measure of social capital.

This study was carried out among MSMEs in Nairobi City County, a densely populated county that is home to the highest number of MSMEs. According to Muathe (2010), for a research carried out in a highly mechanized region, the study findings may not be easily be generalized to other less industrialized zones or counties, because the environments are quite dissimilar. Therefore, this study having been done among MSMEs in Nairobi City County makes it difficult to generalize the findings. This presents an opportunity for further research among dissimilar Counties, findings of which would help enrich the knowledge, by confirming or refuting the findings of this study.

The study was conducted during the period when the country was experiencing the COVID 19 pandemic, therefore physical meetings and interactions were prohibited as a way of curbing the spread of COVID 19, which limited to the data collection process. The researcher thus embraced online dispatch and collection of the questionnaires to mitigate this limitation.

The study was limited to the primary data as provided by the enterprise owners and / or managers, which could be subjective. However, it was assumed that the respondents were well versed with information pertaining to the ventures they represented. 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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