Managerial Resilience and Performance: A Human Capital Approach
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Abstract
Managerial resilience is a strategic resource within the contingencies of organizing in Small and Micro Enterprises (SMEs). In this regard, the notion of resilient human capital has come to dominate the contemporary discourse on the performance of SMEs. Drawing on human capital theory as a meta-theoretical lens, we examine the cumulative impact of managerial training on the performance of managers in the context of relatively underdeveloped institutions and markets. Employing a quantitative research methodology, data for our empirical inquiry comes from a survey of 506 Ghanaian SMEs operating in diverse sectors of the economy. Following SMEs being at the convergence point of resource constraint, we show why some firm managers are more likely to exhibit managerial resilience than others. Our data evidence suggests that targeted managerial training, in practice, has the potential to strengthen managerial resilience. Nevertheless, the content, efficiency, and frequency of the training received, we argue, accounts for the differential performance of managers within the contingencies of everyday organizing in the SME. We conclude by delineating some relevant implications of our study for the theory and practice of managerial resilience nurturing in SMEs.

Keywords: Ghana, SMEs, Managerial Performance; Resilient organizations, Training

Paper type: Research paper
Introduction

Over the past decade, the concept of resilience has become an important phenomenon in organisational studies. Resilience sustains organisational performance in the current face of the turbulent external business environment and technological turbulence (Akgün & Keskin, 2014). Organisational resilience also ensures entrepreneurial agility, adaptability, and behavioural preparedness which is needed for ‘‘bounce-back ability’’ in case of business failure (Akgün & Keskin, 2014: 6918; De Vries & Shields, 2006). Undoubtedly, one of the most important factors which create resilient organisations is the quality of the human resources in the organisation which is attributed to the resilience nature of the managerial training received in terms of its content, efficiency, and frequency (Nicoleta, Anisoara and Mircea, 2016). Managerial training refers to any attempt within or outside the firm to increase the job-related knowledge and skill of the manager in an anticipation of having an effect on the performance his role (Skylar and Yalcin, 2010). Crucially, managerial training promotes the adoption of suitable business practices by managers which increases business performance at all levels of the organisation and thereby creating a resilient organisation (Valdivia, 2015). Implicitly, successful ventures are driven by effective managers who have the requisite managerial capital in terms of essential cognitive skills and knowledge (Mahmood and Rosli, 2013).

Managerial performance refers to the personal effectiveness of the manager which is achieved by deploying the right set of managerial competencies in the form of knowledge, skills, behaviours, and attitudes that can contribute to organisational performance (Ahmad et al., 2010; Rambe and Makhalemele, 2015; Agbim, 2013). Managerial performance is important because managers at all levels in the SME have a great effect on outcomes and performance (Skylar and Yalcin, 2010; Ahmad et al., 2010; Rambe and Makhalemele, 2015). Developing such managerial competencies produces the capacity by which a manager performs specific job functions with clarity and precision and this leads to efficiency, cost reduction as well as effective use of organisational resources (Agbim, 2013; Bager et al. 2015). According to Pryor and Taneja (2010), the performance of management functions including planning, organising, commanding, coordinating and controlling are crucial for the success of any organisation. However, the extent to which these functions are executed depends on how equipped the manager is in terms of skills, knowledge and other competencies. Carson (2000) in their study distinguished between technical and managerial competencies. While technical competency refers to the manager’s specific knowledge and skills which enable him to perform specific managerial tasks such as in accounting and budgeting, managerial competencies includes the acquisition of skills in the areas of communication, planning, customer management and conflict management which supports the manager in managing various kinds of relationships and developing broad social networks (Sidek and Mohamad, 2014; Eniola and Entebang, 2017).

The SME sector is crucial for economic growth in almost all countries. In Ghana, for instance, it is estimated that about 46% of all households operate some form of SME typically in the agricultural, fishing, small-scale mining, food processing and hospitality sectors (Ghana Statistical Service, 2010; Agyapong, 2010). This sector is also noted to generate about 85% of all employment in Ghana (Amoako and Matlay, 2015). The growth and performance of SMEs have therefore become one of the important research concerns in entrepreneurial studies (Chen and Thompson, 2016). However, in pursuit of this growth agenda, it has been observed that SME managers in developing countries lack the requisite managerial capital in terms of experience, knowledge, and skills which would boost their performance (Boukamchaa, 2015). Therefore in order to augment the contribution of SMEs to the Ghanaian economy in terms of employment generation and contribution to Gross Domestic Product (GDP), there is the need to develop the relevant managerial capital for the sector (Dubihlela and Rundora, 2014).
so, the acquisition of such levels of specialised human capital by the SME manager has a significant effect on the firm’s strategic decisions and long-term performance (Lau et al., 2012; Raven and Le, 2015).

The relationship between training and managerial performance particularly in the corporate sector is well documented in the management literature (Nicoleta, Anisoara and Mircea, 2016). However, the same cannot be said of the SME sector particularly in developing countries where training designs, efficiency and frequency are deficient and ineffective in enhancing managerial performance (Neirotti and Paolucci, 2013). Managerial training therefore needs to be resilient enough in order to develop the right capacity in SME managers to cope with structural, procedural, organisational and environmental changes (Skylar and Yalcin, 2010). In this regard, various researchers have called for research in SME resilience in the face of environmental turbulences in the forms of technological discontinuities, regulatory upheavals and the fast changes in consumer taste and preferences (Akgün & Keskin, 2014). This is crucial particularly at the SME level where critical managerial skills are known to be lacking (Wishart, 2018). In most developing countries, it has been noted that the lack of effective managerial training is known to be one of the reasons for the high attrition rate of (Fatoki and Garwe, 2010). Even though much has been written in terms of prescribing various skills which spur organisational resilience, it is not quite clear how these skills can be built into an organisation and its managers (Boin & Van Eeten, 2013).

It is in the light of the above-discussed need for creating the SME as a resilient organisation, this study is designed to measure the impact of resilient training offered by Financial Non-Governmental Organisations (FNGOs) on the managerial performance in Ghana. The study is designed to investigate whether the training offered to SME managers has driven managerial performance in the execution of various managerial functions and thereby creating a resilient SME. The human capital theory perspective adopted for this study argues for the importance of both the cognitive and non-cognitive skills of the manager in the performance of his role in the SME (Chen and Thompson, 2016). The theory underscores the knowledge, skills and problem-solving ability of the SME manager which is critical for the survival of the SME in turbulent times (Davidson and Honig, 2003; Adom and Asare-Yeboah, 2016).

This study has two main contributions to offer. Firstly, this study aims at making a theoretical contribution to the human capital theory by focusing on the provision of managerial training programmes to SMEs. This study is therefore a contribution to understanding the design of resilient training by focusing on the content, efficiency and frequency of training programmes delivered to SME managers and its impact on their performance (Newman et al., 2014; Padilla-Meléndez et al., 2014). Secondly, this study also aims at contributing to the resilient literature by focussing on the need for managerial training in order to create resilient organisations particularly at the SME sector where little resilience research is available (Wishart, 2018). Research evidence found that SME suffer the most in times of crises and they are the least prepared to recover from environmental shocks (Sullivan-Taylor & Branicki, 2011). It is therefore important to understand the strategy and sources of achieving SME resilience as this definitely influences its sustainability and performance. Bhamra, Dani, & Burnard, (2011) suggest that since employees in the SME cannot be separated from the business itself, it is important for its employees particularly the managers to possess resilient qualities. Also, given the potential consequences of environmental shocks on SMEs, an attempt to understand resilience in an SME context is an important one (Burnard & Bhamra, 2011).

The study is organised into seven sections including the introduction. While section 2 presents the background to the study, section 3 discusses the theoretical framework and presents the
various hypotheses guiding the study. Section 4 presents the methodology for this study. Section 5 and 6 presents and discusses the results respectively. Section 7 provides a conclusion to this study.

**Background**

**The Concept of Resilience in Organisations**

Resilience as a concept comes from the Latin root word ‘‘resi-lire’’ meaning to spring back or the ability to bounce back from shocks and uncertainties (Davoudi et al., 2012; Davoudi, Brooks, & Mehmood, 2013). The concept whether used in the context of individuals or organisations relates basically to performance and how organisations and individuals could overcome circumstances which threaten their survival and performance (Wishart, 2018). It basically concerns the ability of an organisation to reinvent its business model innovatively to deal with changing circumstances strategically (Demmer, Vickery, & Calantone, 2011). Within the resilience literature, there is a variability of approaches to understanding the concept and each of these has been subjected to debate. Typically, resilience is seen as the ability to recover from adversity, cope with current environmental turbulence and preparedness to deal with future shocks (Liu, Reed, & Girard, 2017). With this understanding, it is thought that, employees within the organisation must have certain inherent characteristics such as competence, resourcefulness, flexibility and emotional regulation in to become resilient (Liu, Reed, & Girard, 2017). Resilience also involves the maintenance of positive outlook under challenging conditions and having the ability to anticipate, avoid, adjust to business shocks (Wishart, 2018). The organisational literature, therefore, maintains that since disruptions are inevitable, a resilient organisation will maintain a high level of performance even in the face of environmental shocks and uncertainties and has the ability to bounce back quickly (Truffinoa, 2010).

However, in its broader perspectives, various definitions exist with some focusing on the characteristic perspective and others concentrating on the developmental approach to resilience. The individual perspective focuses on the fact that individuals and organisations could maintain their performance levels or even recover from shocks under challenging conditions due to their inherent abilities. On the other hand, the developmental approach sees resilience as a continuous process whereby shocks and challenging circumstance could further provoke a resilient attitude which is primarily evidenced by the ability and resourcefulness of the organisation to respond to and emerge from business shocks (Demmer, Vickery, & Calantone, 2011; Wishart, 2018). Resilience is also associated with concepts such as temporality, transformation and strategic objective of the organisation in the sense that resilience is the pathway through which organisations develop new capacities from previous shocks and the preparedness to absorb future disruptive surprises in the business environment which threatens organisational survival. Resilience is a strategic objective in the sense that, it should be a conscious initiative of all organisations to be resilient in order to remain competitive (Davoudi et al., 2012; Liu, Reed, & Girard, 2017). Sullivan-Taylor & Branicki, (2011:5565) has also associated the concept of resilience to ‘‘crises management, business continuity or disaster recovery’’. In strategic management, resilience has been explained to mean the ability of the organisation to overcome barriers by developing multiple sources of competitive advantage through resourcefulness, risk awareness, competency development by adopting a flexible approach and developing early warning systems to quickly identify potential challenging situations (Demmer, Vickery, & Calantone, 2011).
Business resilience in an SME Context

The SME sector remains vital to the economy of all countries. In the UK, it is estimated that SMEs account for about 99.9% of all businesses and provides 59.2% of all private-sector employment and contributes 51.5% to private sector turnover (Sullivan-Taylor & Branicki, 2011). Similarly, in the Ghanaian context, it is estimated that about 90% of all registered businesses are SMEs and 46% of all households operate some form of SME (Ghana Statistical Service, 2010; Agyapong, 2010). However, despite their economic importance, SMEs are known to be hard hit during economic recessions and turn to have high attrition rates given that SMEs operate with greater levels of uncertainty in their environment compared to large organisations (Sullivan-Taylor & Branicki, 2011). For instance, the past decade has been challenging for SMEs due to intense global competition, increasingly demanding customers and rapid changes in technology (Demmer, Vickery, & Calantone, 2011). Moreover, a survey conducted in 2011 in the UK reveals that about 46% of SMEs did not have a business continuity plans in case of any business interruption (Bhamra, Dani, & Burnard, 2011).

Several researchers have therefore begun to consider various factors that could make SMEs much more resilient to withstand economic turbulence and environmental shocks (Wishart, 2018). De Vries & Shields, (2006) argue that for SMEs to develop resilience, they need to continuously develop several competencies, skills and knowledge through training and education. SMEs are also encouraged to focus on being adaptable, responsive, knowledge retaining and exchange, strategic managerial thinking, high technology usage and succession planning to remain competitive in the global market (Gunasekaran, Rai, & Griffin, 2011). An SME’s competitive strategy should also encompass cost reduction, quality service delivery, flexibility and human resource development, effective information and communication management and forging collaborative networks (Gunasekaran, Rai, & Griffin, 2011). Other researchers have emphasised that SMEs need to develop various other strategies including knowledge sharing, competency development and adopting a unified approach to marketing and innovation in order to become resilient (Demmer, Vickery, & Calantone, 2011).

Resilience managerial training and performance

Managerial training needs to be resilient enough to be able to produce the desired results in managerial performance. According to Raja et al. (2011), managerial training should seek to improve the individual performance of the manager through changes in knowledge, skills and attitudes. Azila-Gbetor and Adjimah (2013) also argue that managerial training should be aimed at boosting the managerial capacity of the manager using structured courses to inform, train and educate on essential business and management skills. Similarly, Newman et al. (2014) noted that managerial training should be targeted at providing individually tailored training on very essential business roles including financial management, general business management practices, marketing and accounting. Usually, managerial capital or expertise is acquired through three main sources namely, formal education, training, and work-related experiences (Fatoki, 2011). Work experience acquired by the SME manager over several years brings to bear specific insights into customer challenges, market viability, product innovation and other competitive resources which are necessary for firm performance (Ulvenblad et al., 2013; Colombelli, 2015). Secondly, SME managers could also acquire managerial capital through the various training received whiles performing an assigned role in the organisation. However, Skylar and Yalcin (2010) argue that it is not only the quantity of training received which promotes managerial performance but rather the quality and resilience of the training received in terms of its content, frequency and efficiency remains an important factor.
FNGOs are microfinance institutions (MFIs) which adopt a social welfare logic by providing microcredit and other related non-financial services such as managerial training to SMEs to increase their performance and sustainability. The service design of FNGOs requires that SME managers are provided with training in order to have access to microcredit which serves as a source of a start-up fund or a working capital for their businesses. FNGOs therefore provide regular training programmes to SMEs with the purpose of improving their managerial capacity and performance as a whole (Gentry et al. 2008). It is therefore argued that SME managers need to be provided with efficient and resilient managerial training which includes communication, planning, customer management, conflict management and budgeting skills (Ahmad et al., 2010; Sidek and Mohamad, 2014; Eniola and Entebang, 2017).

Theory and hypotheses development

Developing resilient training through the human capital approach

In understanding the importance of managerial training and competence development for the SME manager, the human capital theory could provide an insightful lens to view how human capital development could help performance both at the individual and organisation level. Many studies in the field of entrepreneurship highlight the importance of the human capital theory to underpin the human capital needs of the entrepreneur which supports the performance of the firm. The concept of human capital refers to the knowledge, skills and problem-solving abilities that come through education, training and experience of the manager which enhances firm performance (Adom and Asare-Yeboah, 2016). Chen and Thompson (2016) refer to the concept as both the cognitive and non-cognitive skills of the entrepreneur acquired through education and experience which contributes to the entrepreneur’s success or failure. This theoretical perspective suggests that the ability of the manager to successfully manage the SME depends largely on the level of expertise and skill acquired through education and training as well as the experience gained through previous work activities. Again, the theory posits that the availability of adequate human capital in the firm enhances the resilience of the firm and its performance (Mahmood and Rosli, 2013; Simpson et al., 2012). In a similar vein, Aggestam (2014) argues that a skilled manager generates a positive externality and has a higher effect on the entrepreneurial process than the unskilled manager. Similarly, a skilled workforce also leads to a competitive advantage as well as an innovation in the firm (Johnston et al., 2010; Laforet, 2011). However, Barney (1991) argues that for such knowledge, skills, and experiences of managers bring a competitive advantage to the firm, it should be valuable, rare, inimitable and non-substitutable (VRIN). Thus, the theory emphasises investment in education, training and gaining work-related experience which explains performance differentials and entrepreneurial success among firms (Hashi and Krasniqi, 2011; Gabrielsson and Diamanto, 2012).

As noted above, SME managers, particularly in developing countries, lack the necessary managerial skills to steer the venture successfully (Manimala and Kumar, 2012). It is therefore not surprising that the lack of skilled managerial staff is attributed to be one of the causes of the high attrition of African SMEs. In the context of Ghana, it is expected that SME managers are provided with a consistent training programme which will refresh their knowledge on current managerial practices (Carsamer, 2012). However, it has been observed that training designs and the general conduct of training programmes are problematic in the SME sector (Neirotti and Paolucci, 2013). The authors in this study therefore hypothesized that there is a positive relationship between managerial training and performance of the SME manager. In drawing upon the human capital theory, managerial training content, efficiency and frequency are hypothesized as having an impact on managerial performance. The hypotheses are presented and discussed below.
Training content and managerial performance

The content and design of managerial training programmes are essential if it is to achieve the desired effect on SME managers. Raja, Furqan, and Muhammad (2011) indicate that the success or failure of a managerial training programme depends on the design, methods of delivery, and the content. Sabella and Analoui (2015) argue that the content of managerial training should be designed based on the tasks and duties to be performed in the SME. More importantly, managerial training designs should be based on the systematic analysis of the intended effects on the managerial function (Bhatti and Kaur, 2010).

De Mel et al. (2014a) indicate that all managerial training programmes should start with needs assessment and organisational diagnostics of the managers to identify the various gaps which exist in their managerial capability. Sabella and Analoui (2015:685) refer to this as ‘gap identification’. Thus, FNGOs are supposed to conduct a need assessment of the current managerial situation and what ought to be done in the future. These needs assessment should not only be concerned about the needs of the managers but also should be focused on the strategic needs of the SME (Bhatti and Kaur, 2010). In this respect, methods such as the use of group discussions, assessment centres, advisory committees, interviews, performance reports, and surveys are recommended to identify such skill gaps (Sabella and Analoui, 2015).

Sidek and Mohamad (2014) indicate that managerial training programmes should provide business development skills which equip the SME manager with the right competence in developing his business. In this direction, it is suggested that the content of such programmes should focus on providing technical, communication, negotiation, conflict management, decision making and team-building skills (Chinomona, 2013). Also, Mano et al. (2012) pointed out that the content of managerial training should focus on increasing productivity as well as the quality of the managerial function in the SME. This implies that content-rich managerial training programmes would provide the SME manager with skills which are inimitable and also makes him efficient in performing the managerial role. In a similar vein, Sharma (2014) noted that the training content and methods of delivery should be motivating enough to generate the highest interest for participation and engagement. Based on the above discussion and evidence in the literature, the following hypothesis is proposed.

\[ H_{1a}: \text{Managerial training content is positively related to the performance of SME managers.} \]

Training efficiency and managerial performance

Training programmes designed to equip SME managers need to be efficient. Nembhard (2014) indicate that managerial training programmes should be efficient in terms of cost and time in meeting the needs of SMEs. Neirotti and Paolucci (2013) also argue that one of the reasons many SMEs withhold investment into training programmes is due to the cost associated with such programmes and the use of inefficient methods of training which prevents many SMEs from accessing quality managerial training. In a similar vein, Sharma (2014) observed that firms are reluctant to sign up for managerial training programmes which require substantial investment in terms of cost, personal and corporate time and organisational adjustments. SMEs therefore prefer training programmes which have greater flexibility in cost and business hours. The cost of training can, therefore, inhibit SMEs from accessing quality training opportunities. In dealing with the cost and time spent on managerial training programmes, it has been recommended that SMEs could adopt online training methods which are cost-effective and flexible to managers which do not require many organizational adjustments (Smith and Barrett, 2016). Moreover, Brotherton and Evans (2010) indicate that the quality of the trainer in terms of experience and education could have an effect on the efficiency of the training process as well as on the performance of managers after the training is delivered. Sharma (2014) therefore
concluded from a related study that the cost, quality and objectives of a training programme are essential factors which firms consider in assessing managerial training programmes. Sabella and Analoui (2015), also indicate that the selection of an appropriate training delivery method could determine whether a training programme becomes efficient or otherwise. This implies that the adoption of the most suitable training method enables trainees to learn effectively. In a similar study, Manimala and Kumar (2012) found that identifying the training needs of managers, designing the content, choosing suitable delivery methods for its implementation and effectively evaluating training results makes a managerial training programme efficient. More importantly, Ment (2011) argue that the efficiency of training programmes could also be enhanced through the use of appropriate training facilities as well as the training activities employed in the training programme. Based on the above discussion and evidence in the literature, the following hypothesis is proposed.

**H1b:** Efficient managerial training is positively related to the performance of SME managers.

**Training frequency and managerial performance**

Training frequency is as important as training efficiency. SME owners need to have a consistent training programme which refreshes their knowledge of critical business management practices and modern methods of management (Jones et al., 2013). Frequent training programmes could also intervene quickly in identifying business challenges at the early stages before it gets out of hand. In such a case, effective training programmes could prevent SMEs from failing totally. In a related study, Gordon et al. (2012) observe that the frequency of attendance at managerial training programmes by SME managers has a positive effect on SME performance compared to the control group which did not have frequent managerial training. Another study which sought to relate the managerial performance of female SME managers to their training frequency found out that, women who had frequent training performed better in their roles than those who did not (Muraguri et al., 2016). Usually, managerial training programmes are delivered by FNGOs to SMEs on a quarterly basis and in some few cases on a monthly basis. The general assumption therefore is, managers who have frequent managerial training and capacity development in the required skills, perform their roles better and have a significant effect on the business (Brotherton and Evans, 2010). Based on the above discussion and evidence in the literature, the following hypothesis is proposed.

**H1c:** Frequency of managerial training is positively related to the performance of SME managers.

The above discussion point to the fact that SME managers, need to be equipped with the requisite managerial skills to succeed in their ventures. This is essential due to the acute lack of these skills in the SME sector (Yeboah, 2015). Based on the above discussion and considering the major findings from the literature and the role of FNGOs in providing such managerial training to SMEs, the conceptual framework in as shown in Figure I below is proposed for this study in relation to the hypotheses presented above.
Figure I: A hypothesised model for the impact of resilient training on the managerial performance of SME managers

(1) Managerial Training
- Training Content
  \[ H_{1a}: \beta = 0.065^{**} \]
- Training Efficiency
  \[ H_{1b}: \beta = 0.106^{**} \]
- Training Frequency
  \[ H_{1c}: \beta = 0.232^{***} \]

(2) Control Variables
- Gender
- Manager's level of Education
- Business Age
- Industry Category

(3) Managerial Performance
Research context and method

Sample and data
This study was conducted in Ghana. This survey involved four FNGOs. The total population for this study was 2,647 SMEs who are clients of the FNGOs operating in the Volta region of Ghana. The sample frame for this study was 2,461. Based on a stratified random sampling technique, 720 SMEs were sampled out of the sample frame in March 2017 and a paper-based questionnaire was sent to these SMEs in April 2017. Out of the 720 questionnaires sent, 506 fully completed questionnaires were retrieved generating a response rate of 70.2%. The study generated a very high response rate because the authors were able to meet the SME managers during their credit group meetings which made it possible to have access to a lot of the respondents to complete the questionnaires at the same time. Table I presents the profile of the sampled SMEs which are found in the agricultural, construction, hotels and restaurant, transport and distribution, general trading, general services and education sectors. General services represent business activities such as barbershops, hair salons, shoe repairs, communication services and such likes. General trading represents the sale of items such as foodstuffs, water, and firewood. Construction category represents the manufacturing of building blocks, the sale of cement and other building materials. Transport and distribution category represents taxi and commercial drivers. Hotels and restaurant category represent guest houses and food services. The education category represents private basic schools. The profile of the sampled SMEs is provided in table 1 below.

Table I: Profile of the sampled SMEs

<table>
<thead>
<tr>
<th>Demographic Variables</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sectoral Distribution</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Construction</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Hotels and restaurants</td>
<td>22</td>
<td>4</td>
</tr>
<tr>
<td>Transport and distribution</td>
<td>98</td>
<td>19.4</td>
</tr>
<tr>
<td>General trading</td>
<td>185</td>
<td>36.6</td>
</tr>
<tr>
<td>General services</td>
<td>178</td>
<td>35.2</td>
</tr>
<tr>
<td>Education</td>
<td>8</td>
<td>1.6</td>
</tr>
<tr>
<td><strong>Age of Business</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-5yrs</td>
<td>21</td>
<td>4.1%</td>
</tr>
<tr>
<td>6-10yrs</td>
<td>75</td>
<td>14.9</td>
</tr>
<tr>
<td>11-15yrs</td>
<td>307</td>
<td>60.7</td>
</tr>
<tr>
<td>16yrs+</td>
<td>103</td>
<td>20.4</td>
</tr>
<tr>
<td>Total</td>
<td>506</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Constructs and measures

Dependent variable
The dependent variable for this study is managerial performance. Managerial performance is measured by an assessment of various identified managerial roles in the SME. The study followed De Oliveira et al. (2015), Olowu and Aliyu (2015) and Sidek and Mohamad (2014), in the design of the managerial performance-based measurement. Based on this approach, 4 items were used to measure the performance of managerial functions of SME managers in the
Ghanaian context. The specific managerial functions which were captured and measured include *product innovation functions, service innovation functions, networking functions (social capital development)* and *business information processing functions*. These measures were designed to test whether managerial training received from the FNGOs has improved the performance of the SME managers in the above-identified roles. These metrics were selected to measure performance because the functions of the SME manager is an omnibus one where several roles are performed by the same person. These items were measured on a Likert scale anchored by strongly disagree (1) and strongly agree (5). The mean score which has been used in the regression model is generated by aggregating the 4 items.

**Independent variables**

The study followed both and Gamage and Sadoi (2008) and Bhatti and Kaur (2010) to design a three-factor construct namely *managerial training (MT) content, efficiency and frequency* to measure the nature of managerial training provided by FNGOs to SME managers. Firstly, MT content was measured using 3 items namely training in accounting, training in customer relationship management (managerial skills,) and creativity and problem-solving skills (soft skills). Secondly, MT efficiency was measured using 3 items namely the cost of training, timeliness of training and whether training was well understood by managers. Finally, MT frequency was also measured using 3 items namely satisfaction with the frequency of training provided, whether training does not disrupt planned business activities and whether the frequency of training enabled knowledge application. The independent variables were measured on a Likert scale anchored by strongly disagree (1) and strongly agree (5). In total, 9 items were used to measure managerial training. The mean score which has been used in the regression model is generated by aggregating the items of each construct.

**Control variables**

Evidence shows that SME owner-manager characteristics, as well as firm characteristics, could influence firm growth, performance, and access to specific resources in the SME (Blackburn, Hart, and Wainwright, 2013). Owner-manager characteristics such as educational background, gender, management knowledge and specific industry knowledge are known to be essential in the performance of SMEs. Similarly, other firm characteristics such as the age of the SME, access to market, size of the SME, networks developed, mode of entry as well as industry category are all critical to the growth of SMEs (Hashi and Krasniqi, 2011; Parker and Praag, 2012; Newman et al., 2014). Based on the above evidence from the literature, the study controlled for gender, owner-managers level of education, industry category and business age. The authors have used dummy variables (1-male,0-female). Similarly, dummy variables were used to represent the industry category, business age and managers level of education.

**Confirmatory factor analysis**

A confirmatory factor analysis (CFA) was engaged to confirm the measurement model as identified in Figure I above. The CFA also helped to show how the variables are operationalised through the indicators or items. The path analysis conducted is shown in Figure II below.
Firstly, a number of recommended fit indices as well as the factor loadings were observed. Since the chi-square measure could be sensitive to sample size and may lead to other biased results (Jo¨reskog, 1993), other fit indices such as the goodness-of-fit index (GFI, Jo¨reskog and So¨rbom, 1989), the normed-fit index (NFI, Bentler and Bonett, 1980), the parsimonious normed-fit index (PNFI, Mulaik et al., 1989), the comparative fit index (CFI, Bentler, 1990), and other fit indices such as the Tucker-Lewis Index (TLI), the Root Mean Square Error of Approximation (RMSEA), and the Root Mean Residual (RMR) were all observed (Hoetler, 1983; Hu and Bentler, 1995). The values for GFI, NFI, CFI, and PNFI range from 0 to 1, whereby values which are closer to1.00 indicate a good model fit (Mulaik et al., 1989).

Secondly, the factor loadings of each variable were also observed. Usually, factor loadings of 0.6 and above for adopted questionnaire or 0.5 and above for a questionnaire developed for the first time is accepted. The results of the CFA and the factor loadings are reported in Table II below.

Table II: Standardized Regression Weights and Model Fit Indices

<table>
<thead>
<tr>
<th>Factors</th>
<th>Items</th>
<th>Estimate</th>
<th>Model Fit Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training Frequency</td>
<td>MTFrequency3 &lt;---</td>
<td>.450</td>
<td>CMIN</td>
</tr>
<tr>
<td></td>
<td>MTFrequency2 &lt;---</td>
<td>.695</td>
<td>P-Value</td>
</tr>
<tr>
<td></td>
<td>MTFrequency1 &lt;---</td>
<td>.486</td>
<td>CMIN/DF</td>
</tr>
<tr>
<td>Training Content</td>
<td>MTContent3 &lt;---</td>
<td>.500</td>
<td>GFI</td>
</tr>
<tr>
<td></td>
<td>MTContent2 &lt;---</td>
<td>.676</td>
<td>NFI</td>
</tr>
</tbody>
</table>
Construct reliability and validity

In checking for the internal consistency of the constructs used in this study, the Cronbach’s α was utilised to test the reliability of the variables. The test indicates that all the variables show a Cronbach's α scores of 0.800 and above which is considered reliable and internally consistent (Sekaran, 2003; Hair, et al.,2010) (MT Content = 0.977; MT Efficiency = 0.926; MT Frequency = 0.897; MP = 0.997). In terms of content validity, Parasuraman et al. (1988) state that the content validity of a construct depends on the extent to which the construct items represent the themes being measured. The constructs used in this study are believed to possess content validity because the constructs were sourced from the managerial and training and performance literature such as De Oliveira et al. (2015), Olowu and Aliyu (2015) and Sidek and Mohamad (2014). For the control variables, content validity is based on literature such as Blackburn, Hart, & Wainwright (2013) Anderson and Eshima (2013) and Hashi and Krarsiqi (2011). The authors have also followed Fornell and Larcker (1981) criterion to conduct both convergent and discriminant validity to test whether the specified items converge to measure the factors as well as if these factors are unique from each other (Hamid, Sami, and Sidek, 2017). The results of the reliability and validity test are reported in Table III below.

Table III: Results of the Cronbach’s alpha test of reliability, convergent and discriminant validity

<table>
<thead>
<tr>
<th>Factors</th>
<th>Cronbach’s Alpha</th>
<th>Cronbach’s Alpha based on standardised items</th>
<th>No. of Items</th>
<th>CR</th>
<th>AVE</th>
<th>MSV</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)   Managerial training content</td>
<td>0.977</td>
<td>0.983</td>
<td>11</td>
<td>0.933</td>
<td>0.824</td>
<td>0.038</td>
</tr>
<tr>
<td>(2)   Managerial training efficiency</td>
<td>0.926</td>
<td>0.931</td>
<td>4</td>
<td>0.928</td>
<td>0.813</td>
<td>0.019</td>
</tr>
<tr>
<td>(3)   Managerial training frequency</td>
<td>0.897</td>
<td>0.900</td>
<td>5</td>
<td>0.724</td>
<td>0.630</td>
<td>0.034</td>
</tr>
<tr>
<td>(4)   Managerial performance</td>
<td>0.997</td>
<td>0.997</td>
<td>12</td>
<td>0.983</td>
<td>0.937</td>
<td>0.832</td>
</tr>
</tbody>
</table>

Table III: Results of the Cronbach’s alpha test of reliability, convergent and discriminant validity
Results

Descriptive statistics and correlations
Table IV below presents the descriptive statistics in terms of the mean and standard deviations of both the dependent and independent variables and the correlations among the variables. The number of observations for this study is 506 SMEs. Manager’s level of education has the highest mean of 5.090 whiles the lowest mean is MT frequency (3.956). In terms of the standard deviation, the highest is the industry category (1.0586) whiles the lowest is gender (0.2127).

The correlation analysis also shows low inter-correlations among the predictor variables as well as among the control variables. There is also a potential concern for multicollinearity between the predictor variables. However, the regression analysis in Table V indicates that the model reported low variance inflation factors (VIF) with the highest being 1.068 indicating low multicollinearity hence a strong model.
Table IV: Descriptive statistics and correlations

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Obs.</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
<th>(8)</th>
<th>(9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Managerial performance</td>
<td>4.247</td>
<td>0.4</td>
<td>506</td>
<td>_</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) Gender</td>
<td>4.952</td>
<td>0.2</td>
<td>506</td>
<td>0.100*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3) Manager’s level of education</td>
<td>5.090</td>
<td>0.6</td>
<td>506</td>
<td>0.155*</td>
<td>0.158*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4) Business age</td>
<td>4.000</td>
<td>0.6</td>
<td>506</td>
<td>0.203*</td>
<td>0.014</td>
<td>0.064*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(5) Industry category</td>
<td>5.003</td>
<td>1.0</td>
<td>506</td>
<td>0.243*</td>
<td>0.124*</td>
<td>0.139**</td>
<td>0.079**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(6) Training frequency</td>
<td>3.956</td>
<td>0.5</td>
<td>506</td>
<td>0.247*</td>
<td>0.016</td>
<td>0.042</td>
<td>-0.037</td>
<td>0.125**</td>
<td>0.061*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(7) Training content</td>
<td>4.361</td>
<td>0.6</td>
<td>506</td>
<td>0.075*</td>
<td>-</td>
<td>-0.039</td>
<td>0.057*</td>
<td>0.061*</td>
<td>0.008</td>
<td>-0.027</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(8) Training efficiency</td>
<td>4.180</td>
<td>0.8</td>
<td>506</td>
<td>0.088*</td>
<td>-0.042</td>
<td>-0.096**</td>
<td>0.115**</td>
<td>-0.018</td>
<td>0.054</td>
<td>-0.131</td>
<td>0.040</td>
<td></td>
</tr>
</tbody>
</table>

Notes: *p<0.1, **p<0.05, ***p<0.01
### Table V: Regression analysis of managerial training and performance of SME managers

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unstandardized Coefficients $\beta$</td>
<td>Std. Error</td>
</tr>
<tr>
<td>---------------------------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>Gender</td>
<td>0.119</td>
<td>0.093</td>
</tr>
<tr>
<td>Manager’s level of Educational</td>
<td>0.074</td>
<td>0.030</td>
</tr>
<tr>
<td>Age of business</td>
<td>0.124</td>
<td>0.029</td>
</tr>
<tr>
<td>Industry Category</td>
<td>0.090</td>
<td>0.019</td>
</tr>
<tr>
<td>Training Frequency</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training Content</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training Efficiency</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** $**p<0.05$, $***p<0.01$
Regression analysis

The study adopts a multiple linear regression analysis in testing the three hypotheses identified above. Two sets of regression models were run. Model 1 which is the restricted model is performed only with the control variables (gender, manager’s educational level, industry category and business age) and the dependent variable (managerial performance). Model 2 which represents the full regression model combines the three independent variables (MT content, MT efficiency and MT frequency), the dependent variable (managerial performance) and all the control variables as indicated above. The regression analysis of managerial performance, the predictor variables and the control variables are presented in Table V below.

From the full regression model (model 2), MT content with a p-value of 0.013 and a coefficient of 0.065, is statistically significant at p<0.05 level. This implies a unit increase in MT content increases managerial performance by 6.5%. The first hypothesis (H_{1a}) is therefore accepted regarding the positive effect of training content on managerial performance. Secondly, MT efficiency with a p-value of 0.011 and a coefficient value of 0.106 is also statistically significant at p<0.05 level. Thus, a unit increase in MT efficiency, therefore, increases managerial performance by 10.6%. In this case, also the second hypothesis (H_{1b}) is confirmed. Thirdly, MT frequency with a p-value of 0.000 and a coefficient value of 0.232 is statistically significant at p<0.01 level. This implies a unit increase in MT frequency leads to a 23.2% increase in managerial performance. Hypothesis H_{1c} is also accepted for having a significant effect on managerial performance. From the above analysis, the results therefore support H_{1a}, H_{1b}, and H_{1c}, which implies that there is a positive relationship between MT content, MT efficiency, and MT frequency and the managerial performance of SME managers.

In terms of the control variables, gender (p=0.164, β=0.058) is not statistically significant. Gender, therefore, has no effect on managerial performance. Manager’s level of education (p=0.019, β=0.098) is statistically significant at p<0.05 level. In the same vein, business age (p=0.020, β=0.159) is also statistically significant at p<0.05 level. Finally, industry category (p=0.040, β=0.177) is also statistically significant at p<0.05 level. To assess the overall fitness of the model, ANOVA F-values were also inspected. In the restricted model for managerial performance, the F-value is 15.261. However, in the full regression model, the F-values is 14.910 which are all significant at p<0.01 level. R² is another variable which can indicate the overall fitness of the regression model. In the restricted model for managerial performance, the R² is 0.609 and its adjusted R² is 0.501. In the full regression model for MT, the R² is 0.894 and its adjusted R² 0.781. This explains that both the restricted model and the full regression model can explain 50.1% and 78.1% (using adjusted values) respectively of the variances in the dependent variable.

Model specification for managerial performance

From the full regression model, managerial performance can therefore be predicted by:

\[ MP = \alpha + \beta_1 \text{GEN} + \beta_2 \text{EDU} + \beta_3 \text{AGE} + \beta_4 \text{IND} + \beta_5 \text{MTFREQ} + \beta_6 \text{MTCONT} + \beta_7 \text{MTEFF} + \epsilon \]

where: \( \alpha \) = constant term, \( \beta_1 \) to \( \beta_8 \) = Regression coefficients, \( \text{GEN} \) = Gender, \( \text{EDU} \) = Manager’s level of education, \( \text{IND} \) = Industry category, \( \text{AGE} \) = Age of business, \( \text{MTFREQ} \) = Managerial training frequency, \( \text{MTCONT} \) = Managerial training content, \( \text{MTEFF} \) = Managerial training efficiency and \( \epsilon \) = Error term.
Discussion

As indicated in Table VI above, managerial performance was measured using main variables namely managerial training content, efficiency, and frequency. The results of this study show that managerial training content, efficiency and frequency significantly explain the managerial performance of SME managers. The provision of managerial training for SME managers in the Volta region has been neglected for so long and this has been noted to contribute to the current failure rate of SMEs (Awal, 2017). Over the years, as an attempt to reduce poverty through SMEs, financial institutions in Ghana solely focus on the provision of financial capital to SMEs without paying much attention to their human capital needs. As indicated by Newman et al. (2014), the provision of microcredit alone does not make the poor successful in business. Rather, SME managers need to be provided with managerial training to develop various competencies which are critical for managing SMEs. Therefore, the contribution of FNGOs in providing both microcredit and managerial training to SME managers in Ghana is worthy of note.

Firstly, the results indicate that managerial training content contributes significantly to the performance of SME managers. The content and design of a managerial training programme are paramount to the success or failure of such training activities (Raja, Furqan, and Muhammad, 2011). When providing managerial training to SME managers, Gamage and Sadoi (2008) argue that managerial training programmes should be able to achieve three main objectives. First, managerial training programmes should contain entrepreneurship awareness modules which should provide information and reflection on entrepreneurship as a career choice. Second, such training programs should focus on the provision of business creation skills such as technical, human and managerial skills (Bhatti and Kaur, 2010). Finally, managerial training activities should provide business development skills which would equip the SME manager with various competencies to further improve upon the business (Sidek and Mohamad, 2014). This implies that content-rich managerial training programmes would provide the SME manager with skills which are valuable, rare and inimitable to make him competitive. More importantly, the content of managerial training programmes should be tailored to meet the managerial inadequacies of SME managers which are derived from an extensive gap analysis (Sabella and Analoui, 2015). In designing managerial training programmes, it is also important to consider the strategic needs of the business. For instance, managerial training programmes could focus on future product development, strategic partners, the nature of competitors, the growth of technology and various market dynamics. (Manimala and Kumar, 2012). The activities aligned with managerial training programmes should also be motivating enough to fully engage the participants. It has been observed that managerial training programmes which are not engaging enough suffer poor attendance in future training programmes (Sharma, 2014). Therefore, in the delivery of managerial training to SMEs, microfinance institutions including FNGOs are supposed to design training programmes taking into consideration the peculiar needs of their clients.

Secondly, the results also indicate that the efficiency of managerial training significantly predicts the performance of SME managers. The efficiency of managerial training in terms of cost and time is also of essence in providing SME managers with the required training (Nembhard, 2014). Since SMEs have several resource constraints, the cost of training could be a prohibitive factor for participating in managerial training programmes (Neirotti and Paolucci, 2013). In some developing countries including Ghana, free managerial training programmes are provided by government institutions due to such cost-related challenges encountered by SMEs. However, it has been observed that such government-sponsored training programmes are usually not sustainable and fail to achieve the intended objectives in developing the
managerial capacities of SME managers. Therefore, the contribution of FNGOs in developing the human capital base of SMEs is very crucial since such services are offered without any cost to the SMEs. Efficient training programs should also be able to address the current challenges being faced by SME managers in their businesses. This is because, research evidence indicates that many small business owners attend training programmes with some identifiable business challenges in mind (Azila-Gbettor and Adjimah, 2013). This implies that efficient programmes are judged by being able to resolve managerial difficulties in the SME.

Finally, the results show that the frequency of managerial training provided to SME managers significantly predicts their performance. The frequency of managerial training programmes is as important as its efficiency. SME managers need to have constant training programmes which will refresh their knowledge of critical business practices and new methods of management (Gordon et al., 2012). In this era of fast technological advancement and consumer sophistication coupled with the fact that SME managers lack the required skills to manage successfully, there is the need to provide SME managers with constant training programmes which are able to address current managerial difficulties as well as strategic needs of the business (Brotherton and Evans, 2010). Frequent training programmes could intervene quickly in identifying business challenges at earlier stages before it gets out of hand (Fatoki, 2011). In such a case, effective training programmes could prevent SMEs from failing totally.

In summary, from the model proposed in this study, $H_{1a}$, $H_{1b}$ and $H_{1c}$ are accepted. This has shown that all the variables used in measuring managerial training are positively related to managerial performance. As noted above, providing managerial training to SME managers particularly in developing countries such as Ghana would equip them with the necessary managerial skills to successfully manage their SMEs. However, in the provision of such training programmes, quality content, efficiency and frequency are fundamental issues which FNGOs and other organisations providing managerial training to SME managers need to critically consider.

**Contribution to Knowledge**

This study has been built on previous studies of the SME sector in Ghana and elsewhere. Even though research on SMEs and managerial training is enormous, the contribution from FNGOs in the development of SMEs and particularly in the Ghanaian context remains under-researched (Dichter, 1999). The current study has two main contributions. Firstly, this study contributes to the scanty research about the role of FNGOs in the development discourse of developing countries such as Ghana. The study, therefore, highlights the importance of FNGOs in the development of managerial capacity among SME managers in Ghana. Secondly, this study also contributes to the human capital development literature particularly in the African context where SME managers are known to lack critical managerial skills (Rambe and Makhalemele, 2015). Therefore, a study of this nature is crucial in developing the human capital base of the SME sector. This study therefore highlights the need for the development of competency skills of SME managers which will improve the management culture of SMEs in Ghana.

**Implications for policy and practice**

This study has implications for policy and practice in the sense that, there is the need for the government of Ghana and other stakeholders, both public and private, training organisations, financial institutions and international organisations who provide human capital development services to SMEs in Ghana to understand the need for managerial training to SME managers particularly those being served by microfinance institutions. Providing managerial training which is content-rich, cost-efficient and frequent would improve the managerial skills of SME
managers. This is because managerial competencies such as technical, interpersonal, conceptual, communication, budgeting, planning, customer management, conflict management, and networking skills are known to improve the performance of SME managers and the business as a whole (Shehu et al., 2013; Sidek and Mohamad, 2014; Eniola and Entebang, 2017).

Limitations to the study
There are a few limitations to this study. Firstly, this study was conducted in a single region in Ghana. This puts a limitation to this study in terms of the generalisation of the results to the whole of Ghana. A cross-regional study would have provided a better insight into the effect of managerial training on the performance of SME managers. Secondly, this study depended on quantitative data and could have also benefited from some qualitative dimension to contribute to or confirm the findings of this study.

Future research direction
The findings from this study highlight some further research areas which future research could be focused. Firstly, future research could focus on commercial microfinance institutions rather than the poverty-oriented FNGOs used in this study to examine the same phenomenon of managerial competency development through the provision of managerial training to SME managers. Secondly, the researchers suggest that future research could be extended beyond the Volta Region of Ghana in testing the model used in this study. Particularly, other regions such as the three Northern Regions where several FNGOs operate could be involved. Finally, it is suggested that a mixed research approach could be explored in future research endeavour of this kind whereby the qualitative findings could be used to confirm the findings in this study.

Conclusion
The research context in this study provides a unique environment for the study of SMEs. In a developing country such as Ghana, the contribution from SMEs to employment generation as well as to the general economic development is enormous. However, human capital development needs are usually ignored (Yeboah, 2015). Conventional knowledge has it that, access to financial capital has been the most common cause of SME failure (Chowdhury and Amin, 2011). Even though this study agrees that financial capital is important, it also agrees with Newman et al. (2014) that the provision of financial capital alone may not ensure a successful venture management. Rather, managerial training programmes which are content-rich, efficient, and frequent to the SME manager is needed for developing managerial capabilities.
References


Appendix

![Normal P-P Plot of Regression Standardized Residual](image-url)
Histogram

Dependent Variable: TotalManPerformance

- Mean = 0.7905
- Std. Dev. = 0.564
- N = 500