

UNIVERSITY OF GHANA

**SUSTAINABLE FASHION ENTREPRENEURSHIP AND FIRM
PERFORMANCE IN GHANA: THE MEDIATING ROLES OF
ORGANIZATIONAL LEARNING AND SOCIAL MEDIA
CAPABILITIES**

BY

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**THIS THESIS IS SUBMITTED TO THE UNIVERSITY OF GHANA,
LEGON, IN PARTIAL FULFILMENT OF THE REQUIREMENT
FOR THE AWARD OF DOCTOR OF PHILOSOPHY DGREE IN
MARKETING**



DECEMBER 2025

DECLARATION

I certify that this thesis presented for the award of PhD, is entirely my own work and has not been presented by anyone for any academic award in this or any other university. All references used in the work have been fully acknowledged.

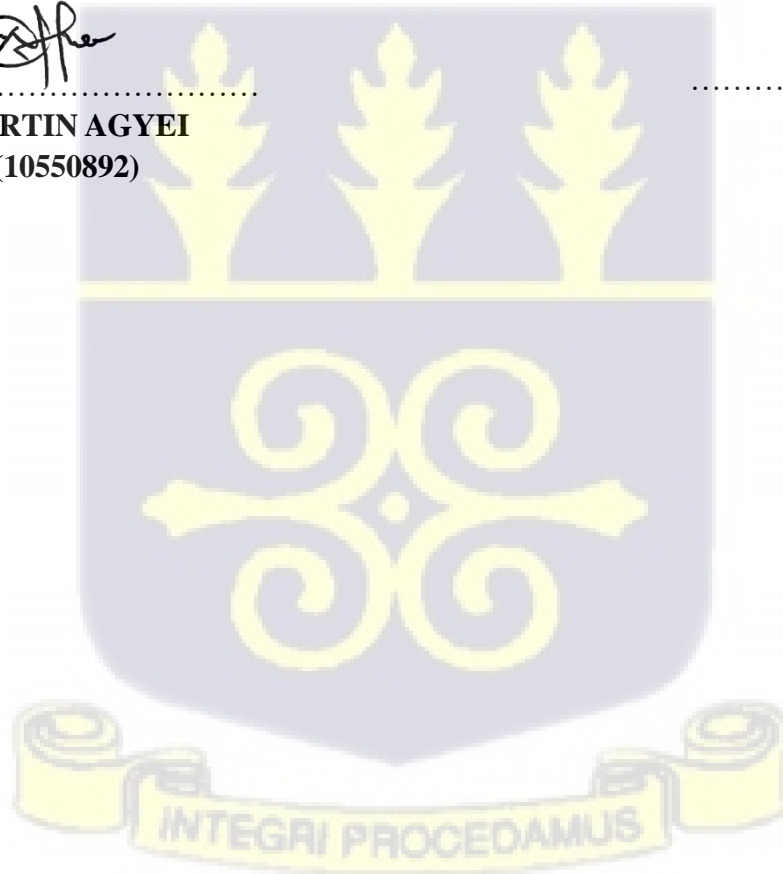
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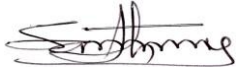
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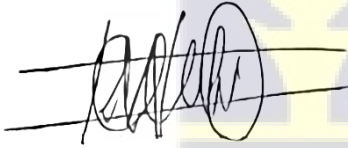
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DEDICATION

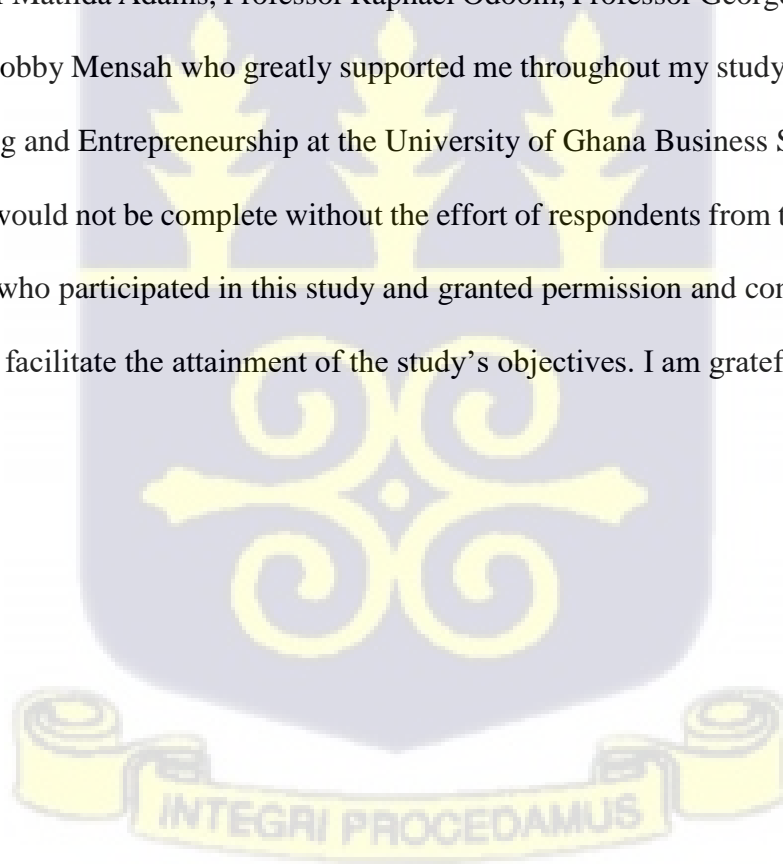
I dedicate this work to my lovely wife and my children. I love you all.



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ABSTRACT

Sustainable entrepreneurship has emerged as a business model that combines opportunity-seeking behaviour with sustainability strategies to achieve the Triple Bottom Line agenda in the circular economy. Based on the gaps in the literature, this study sought to explore the nature of sustainable entrepreneurship and its effects in the Ghanaian fashion industry. The specific objectives anchoring this study were to explore the nature and dimensions of sustainable fashion entrepreneurship in Ghana, to test the mediating role of social media capabilities on the relationship between firm sustainable fashion entrepreneurs and firm performance in Ghana and to test the mediating role of organisational learning capability on the relationship between sustainable entrepreneurship and firm performance amongst fashion entrepreneurs in Ghana. To achieve these objectives, a pragmatic research philosophy was embraced leading to the choice of a mixed methods approach. Qualitative data was collected through face-to-face interviews with thirty (30) fashion entrepreneurs selected from Accra and Kumasi, whilst a survey was conducted among six hundred (600) fashion entrepreneurs also from the two cities mentioned in a sequential data collection process to facilitate the refinement of scale items. The purposive sampling technique was used in selecting respondents. Qualitative data was analysed using Thematic Analysis, whilst the quantitative data was analysed using the Statistical Package for Social Sciences (SPSS) and Amos software, where the hypothesised relationships were examined using the Structural Equation Modelling (SEM) approach with the Maximum likelihood estimation technique and the bootstrapping mediation technique. The findings of this study revealed that sustainable fashion entrepreneurship in Ghana is represented mainly by the waste reduction dimension and energy conservation. Design practice and upcycling were not found to reflect the practice of sustainable fashion entrepreneurship in the Ghanaian context. Further, it was found that both social media and organisational learning capabilities have positive effects on firm performance. The mediation analysis also revealed that organisational learning and social media partially mediated the relationship between sustainable fashion entrepreneurship and firm performance. The outcomes of this investigation necessitate the recommendation that fashion entrepreneurs in Ghana imbibe the sustainable practice of waste reduction and energy conservation through prudent use of fabric and materials, whilst also ensuring that conscious efforts are put in place to conserve energy, in this case, electricity consumption. The study further recommends that fashion entrepreneurs in Ghana's creative arts sector adopt social media as a firm resource, and develop capabilities to maximise its use for customer acquisition, competitor monitoring and also customer relationship management. Further, the study recommends the development of organisational learning capabilities to ensure continuous improvement and competitor benchmarking for the development of new ideas and business practices to achieve optimum firm performance. Finally, it is recommended that policy makers in Ghana's creative arts sector develop policies to support sustainable fashion enterprises such as the provision of solar energy panels and other support such as training on sustainability practices to ensure the industry contributes towards the attainment of Sustainable Development Goals (SDGs).

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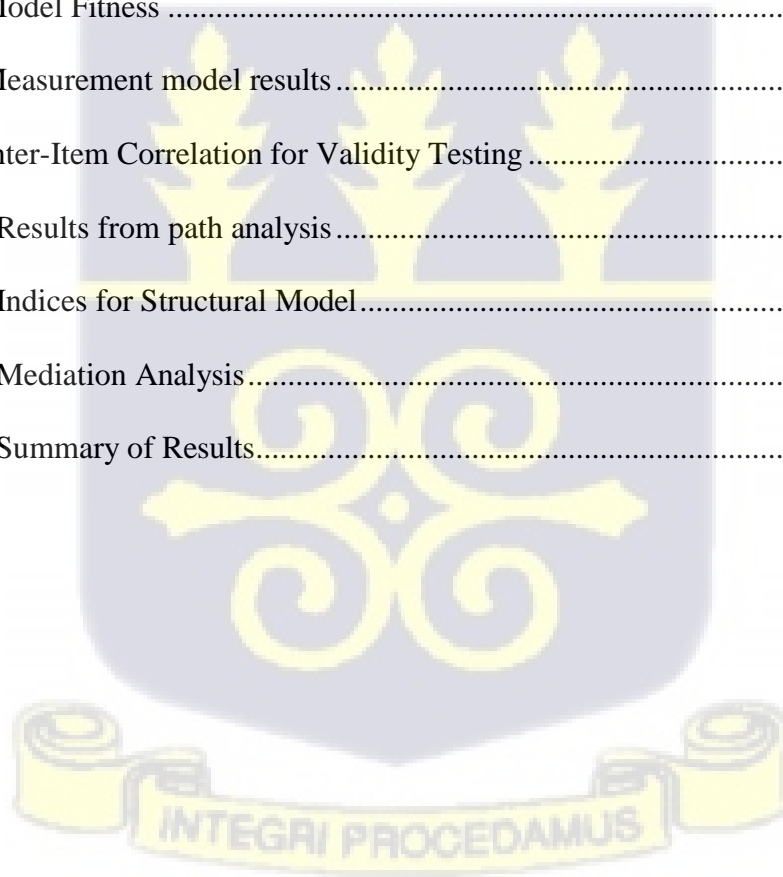
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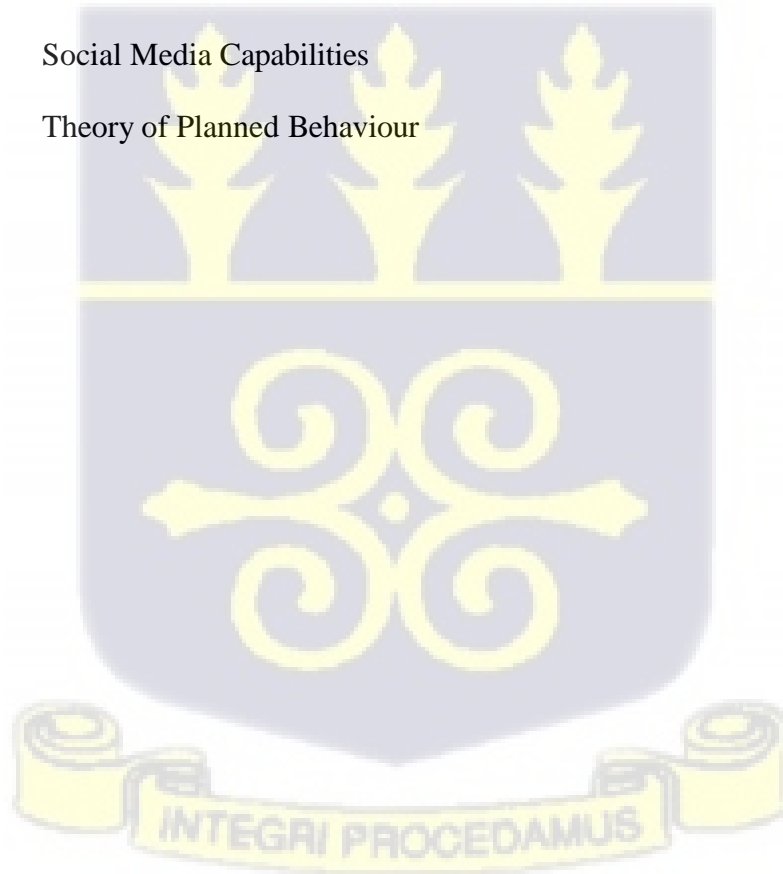
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LIST OF ABBREVIATIONS

AVE-	Average Variance Extracted
CA-	Cronbach Alpha
CE-	Circular Economy
CR-	Composite Reliability
DC-	Dynamic Capabilities
EB-	Entrepreneurial Bricolage Theory
EEM-	Entrepreneurial Event Model
OLC-	Organisational Learning Capabilities
SEM-	Structural Equation Modelling
SFE-	Sustainable Fashion Entrepreneurship
SMC-	Social Media Capabilities
TPB-	Theory of Planned Behaviour



CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Sustainable fashion entrepreneurship entails the combination of traditional entrepreneurship models and sustainability strategies to create a hybrid business model that concurrently promotes profit maximisation and environmental preservation (Nkrumah et al., 2023). The extent to which this is being practiced in the Ghanaian fashion industry is unknown. The past decades have witnessed sustainability evolve from a peripheral concern to a pressing priority for organizations, policymakers, and consumer groups (Jagani & Hong, 2022; Jagani, 2023; Muñoz et al., 2023). This has led to increased advocacy for initiatives that place environmental preservation at the top of society's agenda (Wagner, 2012; Koo et al., 2014). The fashion industry ranks among the most polluting sectors globally, accounting for nearly 8% of greenhouse gas emissions (UN, 2025). Experts suggest that extending the lifespan of clothing by just twofold could cut global greenhouse gas emissions by as much as 44 percent, underscoring the transformative potential of durability and reuse in reducing fashion's environmental footprint (UN, 2025). The United Nations (UN) have championed the Sustainable Development Goals (SDGs), and these goals are meant to be catalysts for social transformation towards a sustainable future (Thakker & Sun, 2023). Entrepreneurs have not been left out of this clarion call, leading to the emergence of Sustainable Entrepreneurship (Terán-Yépez et al., 2020; Anand et al., 2021; Hummels & Argyrou, 2021).

In recent years, Ghanaian fashion entrepreneurs have acquired knowledge in sustainability to improve their efficiency and minimise the negative effects of the fashion business on the environment and stakeholders (Adjabeng, 2022; Amankwah et al., 2024). Fashion entrepreneurs from developing countries such as Ghana play a vital role in the global fashion industry, especially in the quest to minimise the effects of fast fashion (Osei & Bosro 2024;

Amankwah et al., 2024). Despite the precarious nature of the Ghanaian fashion industry, sustainability can play a key role in helping fashion designers to harness scarce resources and develop sustainable fashion products that minimise operational costs and contribute towards waste reduction (Aboytes et al., 2022; Thakker & Sun, 2023).

The rise of sustainable entrepreneurship can be attributed to the development of the Circular Economy (CE) which has created a platform for sustainable production and consumption habits amongst individuals and entrepreneurs (Witjes & Lozano, 2016; Pizzi et al., 2021; Aggrawal et al., 2022). The circular economy refers to the economic model where sustainability is prioritised, and policies on reusable materials and recycling old items is viewed as a means of protecting the environment by developing sustainable behaviours (Geissdoerfer et al., 2017; Kirchherr et al., 2017; Korhonen et al., 2018). Amankwah et al. (2024) found that some Ghanaian fashion small and medium scale enterprises (SMEs) have adopted circular economy strategies in their businesses. As compared to other fashion industries in the international market, Ghanaian fashion entrepreneurs are lagging behind in the adoption and implementation of sustainable and circular economy strategies (Adjabeng, 2022; Afun et al., 2023).

The practice of sustainable entrepreneurship does not neglect the adoption and implementation of strategies that contribute to firm performance (Munoz & Cohen, 2018; Terán-Yépez et al., 2020). The management of all businesses (whether start-ups, SMEs or large corporations) require the establishment of basic governance systems and strategies (Roelofsen et al., 2014). The literature on sustainable entrepreneurship suggests that entrepreneurs need to develop capabilities to respond to the environment needs within which they operate, and the clients they intend to serve (Koe et al., 2014; Koe et al., 2015; Qader et al., 2022; Xu et al., 2022). In the Ghanaian context, it is clear that whilst some fashion entrepreneurs are practicing sustainable entrepreneurship, the scope and scale remains uncertain (Adjabeng, 2022; Nkrumah et al., 2023).

The precarious nature of fashion entrepreneurship in Ghana implies that successful fashion entrepreneurs need to develop skills and competencies that can enable them navigate the rigours of the industry whilst meeting their operational targets and enterprise goals (Afun et al., 2023). Organisational learning capabilities stands out as one of the relevant capabilities that can be adapted to the sustainable fashion entrepreneurship domain (Theodorakopoulos et al., 2014). Sustainable entrepreneurs seek to achieve positive impact in society by developing products/services that have a positive effect on the environment (Gibbs, 2009; Choi & Gray, 2008; Gu & Wang, 2022). To achieve such goals, an organisational learning capability is required to enhance the firm's ability to spot opportunities, resources and other capabilities that need to be harnessed and configured to achieve the aims of the sustainable entrepreneur.

Organisational learning capabilities are critical to firm growth and performance (Malik et al., 2012; Aragón et al., 2014; Urban & Gaffurini, 2017). Firms that develop organisational learning capabilities are able to adapt to new changes in their environment (Berndt et al., 2024). These firms are also able to respond appropriately to opportunities and threats through innovation and new product development that meets the evolving needs of consumers, thus creating firm revenue (Calantone et al., 2002; Spicer & Sadler-Smith, 2006). Organisational learning has also been recognised as a major determinant of business performance (Pérez López et al., 2005; Van Kleef & Roome, 2007). The COVID-19 pandemic highlighted the need for firms to be more deliberate to developing organisational learning, market intelligence and digital technology capabilities (Bhaskara & Filimonau, 2021; Orth & Schuldis, 2021). This study therefore argues that sustainable entrepreneurs need to be acquainted with the development of organisational learning as well as social media capabilities, as these two competencies can contribute to maximising firm performance.

The emergence of social media as a new element of a firm's promotional mix (Mangold & Faulds, 2009) has paved the way for smaller enterprises and businesses to be able to promote their business in an affordable manner (Wardati & Mahendrawathi, 2019; Tiwasing, 2021). As a result, this study proposes that social media capabilities can play an important intervening variable in the relationship between sustainable entrepreneurship and firm performance. Researchers have found that, the development of social media capabilities is a significant factor driving small enterprises towards the attainment of their marketing goals and objectives ultimately contributing to firm performance (Mahmoud et al., 2023; Wang et al., 2016; Odoom & Mensah, 2019; Fang et al., 2022). Muna et al. (2022) recently attempted to establish the use of media as a capability which could enhance firm performance, giving further credence to the argument that social media capabilities can enhance firm performance and play a possible role in facilitating the effect of sustainability entrepreneurship on firm performance.

In Ghana's fashion industry, social media capabilities equip entrepreneurs with the skills to promote their products online, cultivate client relationships, and enhance brand visibility, thereby serving as a critical mechanism for overcoming resource constraints and expanding market reach (Acquaye et al., 2023). In Ghana's fashion industry, social media capabilities have emerged as a critical mediator of entrepreneurial success due to cultural, economic, and technological factors (Senanu et al., 2023). Culturally, fashion embodies identity and heritage, and social media provides a platform for entrepreneurs to narrate these stories to both local and global audiences (Clotey & Gyampoh, 2025). Economically, limited access to traditional marketing and distribution channels makes social media a cost-effective tool for promoting products, building client relationships, and enhancing brand visibility (Jacobson & Harrison, 2022; Bilro et al., 2022).

Technologically, the rapid diffusion of mobile internet and the widespread use of platforms such as Instagram, TikTok, and Facebook have created accessible avenues for entrepreneurs to signal sustainability practices, benchmark industry trends, and engage directly with consumers (Noris et al., 2021). These dynamics position social media capability as a vital mechanism through which sustainable fashion entrepreneurship can influence firm performance in Ghana. This study therefore sought to determine the effects of sustainable fashion entrepreneurship on organisational learning capabilities, social media capabilities and firm performance in the fashion industry in Ghana.

1.2 Problem Statement and Research Gaps

Despite growing recognition of sustainability as a critical dimension of entrepreneurial practice, there remains limited understanding of how sustainable entrepreneurship translates into firm performance within resource-scarce contexts. In particular, the mediating roles of digital strategies such as social media engagement and organisational learning capabilities have not been systematically examined in Ghana's fashion sector. Consequently, the relationship between sustainable entrepreneurship and firm performance, and the mechanisms through which social media and organisational learning capabilities shape this relationship, remains largely unexplored.

The Sustainable Development Goal (SDG) 12 calls for responsible consumption and production (Adjabeng, 2022; Amankwah et al., 2024), a mandate with profound implications for the fashion industry, particularly in the Global South. While fashion is celebrated as a driver of creativity and economic growth, it is simultaneously recognized as a significant threat to sustainability. Across its supply chain, the industry generates vast by-products of waste from production to consumption that exacerbate environmental degradation and challenge the very principles of sustainable development (Atik & Ozdamar Ertekin, 2023). Further, due to resource constraints most of these micro and small-scale enterprises do not deploy the strategic capabilities that larger corporations implement (Sternad et al., 2013).

Typically, most large corporations are attuned to the practice of organisational learning and develop firm-level competencies based on data and insights from the organisational learning process (Alerasoul et al., 2022). Aside from organisational learning, social media has emerged as a technology that has disrupted the fashion sector especially in relation to how designers create and share their fashion output with consumers (Osei & Bosro, 2024). To achieve enterprise sustainability, firms in the fashion sector need to arrive at a confluence where entrepreneurship concepts like bricolage interact with contemporary technology like social media. Developing social media capabilities is therefore one of the challenges that fashion entrepreneurs are confronted with in their quest to develop sustainable business models (Osei & Bosro, 2024). This study intends to examine how organisational learning and social media competency mediate the link between sustainable entrepreneurship and firm performance among small-scale enterprises in Ghana's fashion sector.

Traditional models of entrepreneurship have focused on how individuals can identify feasible ideas and opportunities which can be translated into viable business ventures that provide self-employment and also offer job opportunities to others (Shockley & Frank, 2011; Drucker, 2014). The emergence of the circular economy has shifted focus from the traditional models of entrepreneurship where the profit motive was the main concern, to the sustainable model of entrepreneurship where a focus on environmental preservation ranks just as high as the profit motive (Holzmann & Gregori, 2023; Watson et al., 2023). Recognising the shift from traditional methods of entrepreneurship to social and environmentally-friendly forms of entrepreneurship, scholars in the field have for the past two decades investigated the phenomenon of sustainable entrepreneurship in order to contribute to the literature by exploring the concept and its outcomes (Anand et al., 2021; Di Vaio et al., 2022). Presently, there are numerous studies that have examined the concept of sustainable entrepreneurship and yet, there are still a number of gaps in the literature, some of which the present study intends to address. The gaps underpinning this study are discussed in the ensuing sections under the headings: issue, theory, method and context gaps.

Issue Gaps

Sustainable entrepreneurship has attracted increased scholarly attention especially in the past decade (Gast et al., 2017; Muñoz & Cohen, 2018; Terán-Yépez et al., 2020; Anand et al., 2021). Previous studies on sustainable entrepreneurship have provided conceptual clarity to the issue of sustainability in entrepreneurship by defining the concept and offering insight into its components (Cohen & Winn, 2007; Binder & Belz, 2015; Belz & Binder, 2017). Other notable studies in the area of sustainable entrepreneurship have been systematic reviews which have sought to identify existing studies and their focus, whilst proposing new areas for future research in the area (Schaefer et al., 2015; Muñoz & Cohen, 2018; Terán-Yépez et al., 2020; Anand et al., 2021; Rosário et al., 2022).

The extant literature also highlights issues such as sustainability innovation (Schaltegger & Wagner, 2011), sustainable entrepreneurship education (Sharma et al., 2021), perceived barriers and risk (Hoogendoorn et al., 2019), and also a competence framework for sustainable entrepreneurship (Ploum et al., 2018). As far as sustainable entrepreneurship and firm performance is concerned, few studies that have attempted to explore this relationship, with majority of studies focusing on the link between sustainability orientation and performance, and not sustainable entrepreneurship and firm performance (Roxas et al., 2017; Adomako et al., 2019; Kautonen et al., 2020). A recent study by Afum et al. (2023) for instance, explored the effects of sustainability orientation on three dimensions of performance namely: financial performance, environmental performance and social performance. Their findings show that sustainable entrepreneurship orientation has a direct and significantly positive impact on environmental and social performance, but not financial performance (Afum et al., 2023). Other studies have also given attention to the performance effects of entrepreneurial orientation (Alegre & Chiva, 2013), and the sustainable entrepreneurial orientation and its effect on business performance (Criado-Gomis et al., 2018).

Even though there is a paucity of literature examining the relationship between sustainable entrepreneurship and performance, there have been some attempts to explicate the roles of capabilities and organisational learning as related to the field of sustainable entrepreneurship. For example, Zhao et al. (2011) gathered evidence from China to determine the effect of entrepreneurial orientation on firm performance, considering the role of organizational learning. Lewrick et al. (2011) also examined the role of management capabilities and sustainable growth. An earlier study by Andreu and Ciborra (1996) highlighted the important role of organisational learning and capabilities development, thus providing further impetus for this study's aim of investigating the relationship between sustainable fashion entrepreneurship and firm performance via organisational learning capabilities and social media capabilities.

Scholars have also explored the role of social media usage as an intervening variable influencing the relationship between entrepreneurial orientation and firm performance (Susanto et al., 2021). However, Susanto et al. (2021) conceptualised social media usage as a firm resource and not a firm capability. Nonetheless, a resource refers to what a firm owns and uses, whilst a capability refers to the skills that firms develop in order to configure resources for maximum performance and competitiveness (Wang et al., 2012; Lévesque & Murray, 2013). This leaves some room for the exploration of social media as a firm capability which can help to facilitate firm performance via the predictive role of sustainability entrepreneurship. This study therefore conceptualises social media capabilities as a firm level capability. This would add some new perspective to the literature on sustainable entrepreneurship and firm performance, as it would show how important the development of social media capabilities is to the overall performance of firms that practice sustainable entrepreneurship. This has been lacking in the present literature, and the inclusion in this study is an attempt at a modest contribution to the literature.

Theoretical Gaps

A review of the literature on sustainable entrepreneurship reveals that there are some theoretical gaps which can be exploited to further contribution to knowledge in this area. Scholars in the field of sustainable entrepreneurship have used theories such as the Theory of Planned Behaviour (TPB) (Ajzen, 1991), Entrepreneurial Event Model (EEM), (Krueger, 1993), Upper Echelon Theory (Hambrick & Mason, 1984), Effectuation Theory (Sarasvathy, 2001), and Social Identity Theory (Stryker and Burke, 2000) to explain the intentions and behaviour of entrepreneurs in relation to the concept of sustainable entrepreneurship (Nayak & Philia, 2022). Whilst these theories have offered insight into the factors accounting for the intention to practice sustainable entrepreneurship, there has been few attempts to adopt and integrate theories that focus on the development of capabilities which can drive sustainable entrepreneurs towards optimum firm performance. This is an area where the present study intends to make a contribution to literature by adopting and integrating the Dynamic Capabilities (DC) theory and the Entrepreneurial Bricolage (EB) Theory to explain how the development of organisational learning and social media capabilities can have positive effect on firm performance.

Method Gaps

Over the years, the literature on sustainable entrepreneurship has featured a vast array of inductive based studies which have sought to break the grounds and demystify the concept and practice of sustainable entrepreneurship (Dean & McMullen, 2007; Cohen et al., 2008; Hockerts & Wüstenhagen, 2010). Notably, there have been quite a number of systematic literature reviews which have taken a critical analysis of the issues, methods and theoretical dispositions of the literature on sustainable entrepreneurship (Gast et al., 2017; Muñoz & Cohen, 2018; Terán-Yépez et al., 2020; Anand et al., 2021). There have also been some conceptual studies which have discussed sustainable entrepreneurship from a theoretical point of view, with the end result being the proposition of concepts for further research testing through empirical studies (Gibbs, 2009; Hockerts & Wüstenhagen, 2010).

Some limited examples of empirical works on sustainable entrepreneurship can be found, and these include the studies by Afum et al. (2023) and Vasilescu et al. (2023) which utilized a quantitative approach to investigating the effects of sustainable entrepreneurship. Surprisingly, there are few studies which have adopted a mediating analysis effect to test for indirect effects on relationships which lead to outcomes of sustainable entrepreneurship. As such, there are still many causal effects in relation to sustainable entrepreneurship that have not been tested. Unlike in the case of mainstream entrepreneurship concepts such as entrepreneurial orientation which has seen a significant number of research works testing its effect on firm performance (Roxas et al., 2017; Adomako et al., 2021; Danso et al., 2020), the literature on sustainable entrepreneurship still lacks depth.

There are limited examples of research that has addressed the predictive capability of sustainable entrepreneurship on outcomes such as firm performance. As such, the need to test for indirect effects of variables which may influence the effect of sustainable orientation on firm performance still remains one of the conspicuous gaps in the sustainable entrepreneurship literature. This study seeks to address this gap in literature, by exploring the possible mediating effects of organisational learning capability and social media capability on the baseline relationship between sustainable entrepreneurship and firm performance in the fashion industry.

Context Gaps

The literature on sustainable orientation has prominently featured studies across various geographical terrains such as Europe, Asia, America and the Middle East (Munoz & Cohen, 2018; Teran-Yeppez et al., 2020; Anand et al., 2021). From a contextual perspective, it appears as if the phenomenon is gaining research attention in the above-mentioned areas. In Africa however, there is a paucity of literature that focuses on exploring the nature and effects of sustainable entrepreneurship in the fashion industry. The few studies that exist in

this domain have featured issues pertaining to disruptive innovation and sustainable entrepreneurship in Nigeria (Ibidunni et al., 2022), motivations of sustainable entrepreneurship in South Africa (Nhemachena & Murimbika, 2018), and impact of sustainable entrepreneurship indicators on business success in South Africa (Kanayo et al., 2021). These studies represent some of the notable research efforts on sustainable entrepreneurship from an African perspective.

The other studies on sustainable entrepreneurship in Africa that were sighted include the efforts of Ogujiuba et al. (2020) which also looked at sustainable entrepreneurship in the services sector of South Africa. Juma et al. (2017) provided a useful perspective on sustainable entrepreneurship in Sub-Saharan Africa and explored the dimensions involved in creating sustainability-focused entrepreneurial ventures. Although prior studies have examined sustainable entrepreneurship in Africa, there remains a striking absence of research on sustainable fashion entrepreneurship and its relationship to firm performance from a Ghanaian or broader African perspective. This gap is particularly salient given the growing importance of digital and knowledge-based mediators in shaping entrepreneurial outcomes. Social media capabilities enable entrepreneurs to signal sustainability practices, engage consumers, and expand market reach at relatively low cost, while organizational learning capabilities allow firms to absorb, adapt, and institutionalize sustainability knowledge into their operations. Yet, the interplay of these mediators within the sustainability–performance nexus remains underexplored. This study therefore addresses these gaps by investigating how sustainable fashion entrepreneurship in Ghana leverages social media and organizational learning capabilities to enhance firm performance.

1.3 Research Purpose

This study sought to determine the impact of sustainable fashion entrepreneurship on firm performance in Ghana. Specifically, this study assesses the direct relationship between

sustainable fashion entrepreneurship and firm performance, whilst simultaneously measuring the indirect effects of organisational learning capabilities and social media capabilities within Ghana's fashion industry.

1.4 Research Objectives

In line with the overarching aim of determining the impact of sustainable fashion entrepreneurship on firm performance in Ghana, this study pursued the following research objectives:

- (1) To explore the nature and dimensions of sustainable fashion entrepreneurship in Ghana
- (2) To determine the impact of sustainable fashion entrepreneurship on firm performance amongst fashion entrepreneurs in Ghana
- (3) To ascertain the effect of organisational learning capabilities on firm performance amongst fashion entrepreneurs in Ghana
- (4) To determine the effect of social media capabilities on firm performance amongst fashion entrepreneurs in Ghana
- (5) To test the mediating role of organisational learning capability on the relationship between sustainable fashion entrepreneurship and firm performance amongst fashion entrepreneurs in Ghana
- (6) To examine the mediating role of social media capabilities on the relationship between sustainable fashion entrepreneurship and firm performance amongst fashion entrepreneurs in Ghana.

1.5 Scope of the Study

This study focuses on determining how sustainable entrepreneurship impacts on firm performance amongst fashion entrepreneurs in Ghana. This study collected empirical data that determines the impact that the practice of sustainable entrepreneurship has on fashion

entrepreneurs in Ghana. The study focused on fashion entrepreneurs in the creative arts sector. Data was collected from fashion entrepreneurs in Accra and Kumasi, two of the prominent cities in Ghana, and home to many fashion-based entrepreneurs.

1.6 Significance of the Study

This study aims to make some modest but notable contributions to the literature on sustainable fashion entrepreneurship. The potential impact areas of this study relate to contribution to knowledge, contribution to managerial strategy and contribution to policy formulation and implementation. The first area of significance this study seeks to achieve is contribution to knowledge.

1.6.1 Contribution to Knowledge

This study is amongst the few empirical studies that aims to quantitatively examine the causal effects and outcomes of sustainable entrepreneurship. The extant literature records various conceptual and systematic literature reviews pertaining to sustainable entrepreneurship, as various authors have sought to offer deep inductive insights into the concept and area of sustainable entrepreneurship. Few of these studies have however focused on statistically testing for the effects of sustainable entrepreneurship. This study contributes to knowledge by examining the impact of sustainable entrepreneurship on firm performance of fashion businesses in a developing economy setting. This baseline relationship is also examined in relation to the indirect effects of organisational learning capabilities and social media capabilities. By mediating the baseline relationship with these two variables, the study offers a unique insight into how sustainable entrepreneurship can contribute to firm performance when social media and organisational learning capabilities are present and established within the fashion industry of Ghana.

1.6.2 Theoretical Contributions

The study also contributes to theory by examining how the use of the dynamic capability theory and the entrepreneurial bricolage theory can explain the influence of organisational learning capabilities and social media capabilities on the relationship between sustainable entrepreneurship and firm performance amongst fashion entrepreneurs. Previous studies have not considered this theoretical blend, and this study intends to determine how these two theories can be combined to delineate the role of OLC and SMC in predicting firm performance amongst sustainable entrepreneurs.

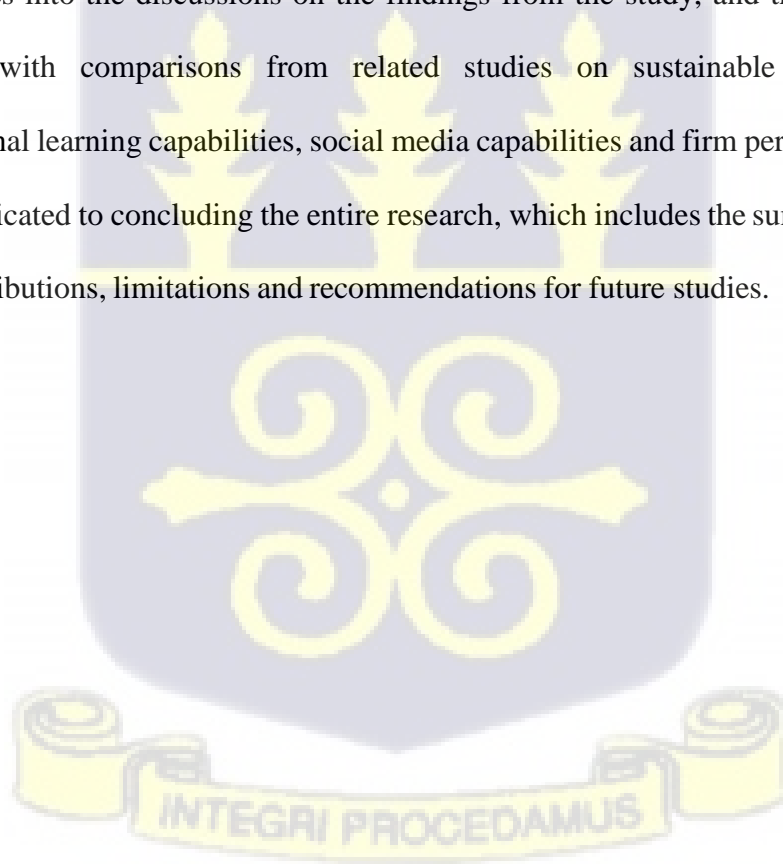
1.6.3 Contextual Contributions to Literature and Policy

The study contributes from a contextual perspective by being amongst the few studies on sustainable entrepreneurship from a Ghanaian and African perspective. By further focusing on fashion designers practising sustainable entrepreneurship in the creative arts industry in Ghana, this study offers a specific contextual contribution that the Ghana Enterprise Agency (GEA) and other stakeholders can consider for policy formulation and implementation in the sector.

1.7 Organisation of the Study

This study is organized in nine (9) chapters. Chapter one provides an overview of the research, and the background of sustainable entrepreneurship are discussed. The problem statement and research gaps are also highlighted. The research objectives, research questions, purpose of the research, and scope of the study feature in this chapter as well. Chapter two provides an overview and discussions on the context of the study. The chapter gives credence to issues such as the composition of the sector and the overall contribution to GDP are also be deliberated on. The creative arts sector is featured in this discourse in order to situate the study and its contextual premise. Chapter three presents a review of related literature where issues pertaining to basic concepts in entrepreneurship, sustainability and the

nexus between the two concepts are discussed. Chapter four entails a critical discourse on the theoretical framework underpinning the study, and two important theories namely: The Dynamic Capabilities theory and the Entrepreneurial Bricolage theory are discussed. The assumptions underlying these two theories, and their application in this study are examined. The also presents the conceptual framework of the research and facilitates a discussion on the hypothesised relationships as influenced by evidence from the extant literature and the theoretical framework of the study. Chapter five provides important details about the research methodology. In this chapter, the research paradigm, approaches, strategies, data collection, data collection instrument and data analysis are all discussed. Chapter six presents the profile of respondents, descriptive statistics as well as the results from the data analysis. Chapter seven delves into the discussions on the findings from the study, and this discussion was supported with comparisons from related studies on sustainable entrepreneurship, organisational learning capabilities, social media capabilities and firm performance. Chapter eight is dedicated to concluding the entire research, which includes the summary of findings, major contributions, limitations and recommendations for future studies.



CHAPTER TWO

CONTEXT OF THE STUDY

2.0 Introduction

This chapter provides insight into the context of the study. This study examines Sustainable entrepreneurship and firm performance among fashion entrepreneurs in Ghana, and this chapter provides the contextual background to this investigation. The creative arts industry in Ghana is broadly discussed, and the fashion sub-sector within this industry is examined. The chapter commences by providing an overview of the Ghanaian creative arts industry, which explicates the components of this sector and proceeds to narrow down to the fashion industry, which is the sub-sector of interest in this study. Other elements captured in this study are the nature and classification of firm sizes in the fashion sector of the creative arts industry in Ghana, and the implications of these characteristics on sustainable fashion entrepreneurship and firm performance.

2.1 Ghana's Creative Arts Industry

Ghana is a country renowned for its talent, arts and crafts (Darkwa Asare, 2021; Addo & Adu, 2022). Academic interest in Ghana's creative hub has been scant but there are some studies which confirm that Ghana is one of the African countries that has developed a global footprint with its culture, artifacts and other products emerging from its creative arts (Adu-Gyamfi & Boahinn, 2013; Quainoo, 2022). Over the years, researchers have observed Ghana's variety of creative arts outputs such as fashion products such as textiles, food, and music (Delhaye & Woets, 2015). These developments led to increased government attention, resulting in the formation of the Creative Arts Council in Ghana. In 2017, the Government of Ghana set up the Ghana Creative Arts Council to oversee activities pertaining to arts and culture (Aikins & Akoi-Jackson, 2020; Bobie et al., 2023). The purpose of this council was

to provide policy direction and strategic impetus for the creative arts sector in Ghana. It has been established that Ghana has the potential for a thriving, dynamic creative arts industry, yet in spite of this, the industry has for a long time been unregulated and has not received adequate government backing to support the various artistes and talents within this sector.

Ghana's creative arts industry comprises of various elements ranging from music, to fashion, theatre, architecture and the visual arts and design (de Graft Aikins, 2020; Addo & Aidoo, 2022). The advancements made by various individuals within this sector over the years has led some scholars to reckon that the Ghanaian creative vision is a strong force to be reckoned with in Africa, and other parts of the world (Sarpong et al., 2011; Nobler, 2021). In the area of fashion especially, Ghana has and continues to stand out with its unique textiles and fashion products and accessories which continue to make waves in the international market (Kühne, 2015; Waddell, 2017). The efforts of Ghanaians in the diaspora have been key to the global footprint that Ghanaian fashion has received (Akyeampong, 2000; Madison, 2013).

In other areas such as music, Ghanaian artistes such as “Sarkodie”, “Shattawale” and recently “Black Rasta” have all made an impact in their respective musical genres and won international acclaim through awards and partnerships with other international artistes such as Beyonce, Bob Marley, to name a few (Eze, 2020; Nikoi, 2020). It is evident from the progress from these two sectors that the Ghanaian creative can become a global icon if the right policy and industry support is provided, and a prime example of how far the Ghanaian creative can rise can be found in the exemplary career of the late Virgin Abloh, who was regarded as one of the most influential fashion and creative arts entrepreneur in his generation (Abloh, 2017; Peters, 2020). Virgil Abloh was the head of global fashion brand Louis Vitton's men's collection from 2018 to 2021, when he passed away (Peters, 2020).

The success of Vigil Abloh has served as a catalyst to inspire a new generation of creatives in Ghana, and this also presents various opportunities for the creative arts sector, especially for fashion entrepreneurs seeking to follow the same path as Virgil Abloh who established his own streetwear brand named “Off-White” which is globally regarded as one of the top brands and has featured several collaborations with artistes and other prominent brands. The establishment of Ghana’s creative arts council can help bring more structure and policy support to local talents who have the potential to showcase Ghana’s creative arts to the world. In the next section, the fashion industry in Ghana is discussed.

2.2 Overview of the Fashion Industry in Ghana and Africa

Data from Statista (2025) projects that the apparel market in Ghana is bound to grow by 3.48% from 2025 to 2029. This growth is expected to culminate in a market value worth approximately US\$3.68 billion by 2029. Amankwah et al. (2022) further report that the fashion industry is largely made up of micro-enterprises and small scale fashion businesses. Compared to European, Western and Asian counterparts, the Ghanaian fashion industry is largely unstructured with data availability scant and hard to come by (Afun et al., 2023). The emerging body of literature on creative arts and fashion points to the emergence of the fashion industry as one of the leading creative arts sectors in Ghana and Africa (Sarpong et al., 2011; Langevang, 2017).

The fashion sector is crucial role in the socio-economic development of nations, generating cash for livelihoods and enabling individuals to meet their apparel requirements (Sarpong et al., 2011). Reports suggest that the global fashion industry’s worth at approximately 3 trillion dollars, accounting for 2 percent of the world’s Gross Domestic Product (GDP). It is further reported that between 1990 and 2014, the number of people employed in the Textiles and Clothing Industry increased from 34.2 million to 57.8 million respectively (Global Fashion

Industry Statistics). These figures are likely to increase over the years and this represents an opportunity for individuals already working in the sector, and those seeking to enter this particular sector. Fashion is a global product which is used to represent culture and heritage (Adjabeng, 2022), and the fashion industry has evolved to recognize its place as one of the leading sectors in creative arts which helps in providing stakeholders and supply chain partners with the framework within which to achieve their goals and supply quality fashion products for consumers.

The fashion industry is a diverse and multifaceted ecosystem, ranging from global retail giants and wholesalers to established design firms and independent shops (Essel, 2019; Howard et al., 2019). The industry offers a wide range of job opportunities, employing people across occupations such as fashion designers, computer programmers, lawyers, accountants, copywriters, social media managers, and project coordinators, among others (Sen, 2008; Brun & Castelli, 2008). The fashion industry is broad and wide, and has many players who contribute to the success and progress of the industry (Christopher et al., 2004; Moretto et al., 2018). Jennings (2011) reported that the fashion landscape in Africa is evolving and a dynamic fashion industry is emerging that has been described as “fashion’s new frontier”. Countries such as South Africa, Nigeria and Ghana are leading the drive to promote African fashion on the global scale, and this is having a positive effect on the fashion sector locally (Pather, 2015; Langevang, 2017; Aziz et al., 2019; Bobie et al., 2023).

According to Madichie (2009), Ghanaian and Nigerian fashion has gained worldwide acceptance and this has created entrepreneurs whose impact on the economy is profound, due to the job creation opportunities they provide to other citizens. Other benefits include creativity and country of origin associations (Madichie, 2009). Reviewing the literature on fashion in Ghana, it is painfully evident that there is a paucity of statistics and research on

Ghana's fashion industry, nonetheless, the available research confirms that the fashion sector in Ghana employs a significant number of people, especially micro enterprises (Kassah et al., 2023). According to Ampofo (2011), Ghana's garment sector is largely made up of small-scale dressmakers, most of whom establish and operate their businesses alone. This was confirmed by Amankwah, Badoe and Chichi (2014) who also stated that most fashion businesses in Ghana are micro-enterprises comprising one-man led businesses with few employees. Clearly, there is room for growth, and once suitable policies and government incentives are implemented, the industry can grow and thrive like European and American fashion industries.

2.3 Classification of Entrepreneurs and Firm Size in Ghana's Fashion Sector

One of the important characteristics of fashion entrepreneurs pertains to the size of their businesses (Asiedu, 2023). Over the years, scholars have investigated various effects emanating from the type and size of a business (Mastamet-Mason, 2016; Elf et al., 2022), and this study intends to examine the practice of sustainable entrepreneurship amongst fashion entrepreneurs in Ghana. In order to do this, it is essential to assess the classification of entrepreneurs in Ghana's fashion sector. A review of the extant literature reveals that in classifying firm size, several factors need to be considered (Costuleanu et al., 2015). A fashion enterprise is defined based on parameters including the number of staff, the scale and sophistication of technology being used and the number of outlets it has (Howard et al., 2019; Costuleanu et al., 2015). Most fashion enterprises are small-scale, with few falling into the classification of medium sized, and even fewer being eligible to be categorized as large-scale enterprises (Howard et al., 2019).

The classification of entities in the fashion sector in Ghana has been the subject of research enquiry. Amankwah et al. (2014) for example found that most of the businesses in this sector

are small-scale or micro-enterprises, with few employees and limited resources. Ampofo (2011) also found that most of the garment makers in Ghana are individuals with apprentices who operate on a micro level and usually cater for local clients with no conscious effort to engage in international trade or export. Furthermore, Howard et al. (2019) also discovered that many garments businesses in Ghana specialize in “kaba”, a traditional women’s outfit, and kaftans, a popular African themed “suit” for men. Other products made by fashion entrepreneurs in Ghana include: wedding dresses, burial garments, office wear, uniforms and suits (Howard et al., 2019). Research on Ghana’s fashion industry reveals that most enterprises specialise in custom-made clothing (sew and fit), while a smaller segment focuses on ready-to-wear production, that is sew and sell collections where customers walk in and have a range of ready-made garments to choose from (Ghana Skills Development Initiative, 2013-2017).

2.4 Sustainable Fashion Entrepreneurship in Ghana

According to Adjabeng (2022), Sustainability is becoming a growing trend in the fashion landscape, with eco-friendly and ethical choices becoming increasingly mainstream. The growing interest in sustainability in the fashion space is due to the Sustainable Development Goals (SDGs) 12 and 13, which call for urgent action to address climate change and environmental impacts linked to the fashion industry (Pérez-Bou & Cantista, 2023; Thakker & Sun, 2023). One of the challenges in this body of literature is scarcity in the literature on how Ghanaian fashion brands are approaching ethical and sustainable practices within their supply chain. Whilst there is generally scant literature examining the practice of sustainability amongst fashion entrepreneurs in Ghana, some research works have highlighted the growing trend of sustainability in the Ghanaian fashion landscape.

James and Kent (2019) for example, investigated the trend of clothing sustainability and upcycling in the Ghanaian fashion industry. In their study, they explained that upcycling referred to the practice of remaking used clothes for sale and further consumption. Their study focused on identifying how sustainability in fashion could be implemented in the Ghanaian fashion industry through upcycling second hand clothing imported into the country from China and other European countries (James & Kent, 2019). The findings by James and Kent (2019) reveal that there were opportunities for sustainability in the Ghanaian fashion industry through the disposal stage of the circular economy where waste clothing from other markets can be sourced and used to make new garments for sale in the Ghanaian market. This is one of the prime examples of the opportunities for sustainability in the fashion industry.

In further ascertaining the degree of sustainability engrained in the Ghanaian fashion industry, the study by Okai-Mensah et al. (2022) was examined. The authors assessed the practice of sustainability, specifically in relation to the Triple Bottom Line (TBL) amongst large-scale textile firms in Ghana. From their findings, they observed a disparity in how foreign textile firms approached issues of sustainability as compared to local textile firms. Okai-Mensah et al. (2022) found that foreign textile firms adhered to local laws regarding standards and best practices, whilst also engaging in best sustainability practices. Local textile firms on the other hand, also adhered to certification and standard compliance from the Ghana Standards Authority (GSA), although they did not adequately demonstrate adherence to global sustainable practices in the industry. The study by Okai-Mensah et al. (2022) indicates that there is a sustainability gap amongst textile firms in the Ghanaian fashion industry, with local firms evidently not adhering to global sustainability practices that transcend certification.

Amankwah et al. (2022) examined the structure of the Ghanaian fashion industry in the implementation of sustainable strategies. Their study found that issues of sustainability are relatively new to Ghanaian fashion SMEs, indicating that generally there is a low level of sustainability practice amongst fashion enterprises in the country. This study therefore seeks to contribute towards this gap by examining the sustainable fashion entrepreneurship practice and its effect on firm performance considering the roles of organizational learning and social media capabilities.

2.5 Challenges to Sustainable Fashion Entrepreneurship in Ghana

Various scholars have admitted to the lack of data and research on sustainable fashion entrepreneurship in Ghana. Amankwah et al. (2022) noted that many fashion enterprises in Ghana are oblivious to sustainability practices and cannot implement them. Other scholars claim that the sustainability practices adopted by larger fashion houses in the Global North are not easily adaptable by micro and small-size enterprises in Ghana (Adjabeng, 2022). These limitations represent broader systemic challenges confronting fashion entrepreneurs in Ghana (Adjabeng, 2022; Afun et al., 2023; Osei & Bosro, 2024). An examination of the present literature on sustainable fashion entrepreneurship reveals possible challenges which are hindering the progress and adoption of sustainable fashion entrepreneurship in Ghana. These include: policy challenges, education and capacity building, consumer culture and preference, and last but not least, economic conditions and entrepreneurial motivations.

2.5.1 Policy Challenges

One of the glaring challenges to the adoption and implementation of sustainability in the Ghanaian fashion industry is a lack of policy (Adjabeng, 2022; Afun et al., 2023; Osei & Bosro, 2024). This study has identified that there are simply no policies from the Government of Ghana that support or offer some incentives to firms seeking to implement sustainability in their fashion design and sale process. This creates an obvious problem of

motivation for fashion designers and creatives in the Ghanaian fashion industry. The lack of policy will restrict the growth of sustainability practices amongst fashion entrepreneurs in Ghana. In the circular economy, government policies also contribute to the decision by firms to engage in sustainable practices, and therefore, this study argues that a lack of government policy is one of the inhibitors of the adoption of sustainable practices amongst fashion entrepreneurs in Ghana (Nkrumah et al., 2023; Amankwah et al., 2024; Osei & Bosro, 2024).

2.5.2 Education and Capacity Building

Aside from the lack of government policy which creates a gap in terms of a framework that supports fashion entrepreneurs in Ghana, there is also a glaring challenge regarding education and capacity building amongst fashion entrepreneurs regarding sustainability. Presently, there are no recognized curriculums and training support programs tailored to the needs of fashion entrepreneurs on sustainability issues in fashion marketing. Institutions such as the Technical and Vocational Education and Training (TVET) can contribute to the sustainability agenda by developing courses that focus on sustainability practices in the fashion industry in Ghana. This can complement government-led policy on sustainability in the fashion industry, and contribute to the develop of capacity for sustainability-oriented practices by fashion entrepreneurs in Ghana.

2.5.3 Consumer Culture and Preference

The consumer culture in Ghana has over the years favoured second-hand clothing, fast fashion and textile-based fashion products (James & Kent, 2019; Skinner, 2019; Acquaye et al., 2023). Fashion entrepreneurs often respond to the demands of the market, and if consumers are not demanding pro-sustainable fashion products or putting pressure on fashion entrepreneurs to be sustainability-oriented, then it is likely that they will not engage in such practices. This confirms the findings of Amankwah et al. (2022) who found that there is a low degree of sustainability being practiced in the fashion industry in Ghana. However,

if the attitude of consumers in Ghana change towards sustainability, it can have an effect on the operations of fashion entrepreneurs.

2.5.4 Economic Conditions and Entrepreneurial Motivations

The general consensus amongst scholars who have researched on fashion entrepreneurs in Ghana suggests that these individuals operate with the primary motive of earning money to cater for themselves and their families (Langevang, 2017; Iacobellis & Winther, 2022). Most fashion entrepreneurs in Ghana operate with a Bottom-Line perspective and not a Triple Bottom Line perspective (Iacobellis & Winther, 2022). This can be attributed to the nature of the Ghanaian economy, and the priority for survival amongst fashion entrepreneurs. Motivation has been identified as an important concept for entrepreneurs, and therefore, the economic motivation amongst Ghanaian fashion entrepreneurs does not lend them so much towards sustainability, however, this can change when government implements policy to encourage sustainability in the fashion industry.

2.6 Chapter Summary

This chapter discussed the context for the study and examined the broader context which comprised of the creative arts industry in Ghana. The components of the sector were examined, after which the discussions were narrowed down to the fashion sector within the creative arts industry. The dynamic nature of Ghana's fashion industry represented one of the major points of discussion within this chapter, as existing literature pertaining to this sector was reviewed. Furthermore, the classification of firms working in the fashion sector in Ghana was examined, and this helped to unearth three classifications of firms operating in Ghana's fashion industry. The chapter also elaborated on sustainable fashion entrepreneurship in Ghana and reviewed existing literature in this area.

CHAPTER THREE

LITERATURE REVIEW

3.0 Introduction

This chapter offers both conceptual and empirical review of literature on sustainable entrepreneurship and its related concepts. The chapter commences by exploring a review of the concept of sustainable entrepreneurship, followed by characteristics of sustainable entrepreneurship. Other important issues such as the link between sustainable entrepreneurship and the circular economy, as well as bricolage and the circular economy are also discussed in this chapter. An empirical review of the sustainable entrepreneurship literature is also presented, as well as a review of literature on organisational learning capabilities and social media capabilities.

3.1 The Concept of Sustainable Entrepreneurship

The 21st century has experienced a significant increase in entrepreneurial ventures than at any point in human history (Lüdeke-Freund, 2020; Gregori & Holzmann, 2020). The rapid rate of entrepreneurial growth has been triggered by factors such as globalisation, increased access to internet and digital technology, growing middle class as well as increased opportunities due to the technological revolution (Wales et al., 2019; Valdez, 2020; Dabic et al., 2021; Benevolo et al., 2021). Entrepreneurs are individuals who identify and exploit opportunities (Kamineni, 2002; Walter & Heinrichs, 2015). Gartner (1988) described entrepreneurship as the process of establishing new organizations. As entrepreneurial activities expand, they contribute to heightened environmental and social risks, emphasizing the need for more sustainable and conscious business practices. Sustainable entrepreneurship has emerged a more viable approach to exploiting opportunities and establishing organisations that can leave minimal adverse effects on people and the environment. Table 3.1 presents an overview of some notable definitions of sustainable entrepreneurship.

Table 3. 1: Definitions of Sustainable Entrepreneurship

No.	Definition	Authors	Components
1.	“Sustainable entrepreneurship is characterized by some fundamental aspects of entrepreneurial activities which are less oriented towards management systems or technical procedures and focus more on the personal initiative and skills of the entrepreneurial person or team to realize largescale market success and societal change with environmental or societal innovations”	Wagner & Schaltegger (2010, p. 434)	Societal change Environmental & Societal innovations
2.	Sustainable entrepreneurship is the discovery and exploitation of economic opportunities through the generation of market disequilibria that initiate the transformation of a sector towards a sustainable environment and society	Hockerts & Wüstenhagen (2010, p.231)	Sector transformation Sustainable environment & sustainable society
3.	“Sustainable entrepreneurship as the discovery, creation, evaluation, and exploitation of opportunities to create future goods and services that are consistent with sustainable development goals”	Pacheco et al. (2010, p.471)	Goods and services consistent with sustainable development goals
4.	“Sustainable entrepreneurship is focused on the preservation of nature, life support, and community in the pursuit of perceived opportunities to bring into existence future products, processes, and services for gain, where the gain is broadly construed to include economic and non-economic gains to individuals, the economy, and society”	Shepherd and Patzelt (2011, p.137)	Preservation of nature, life support and community Economic and non-economic gains Holistic stakeholder gains

Table 3.1 offers insight into some of the definitions of sustainable entrepreneurship that are found in the extant literature. From these four definitions, it is evident that sustainable entrepreneurship is a form of entrepreneurship that focuses on how profit maximising opportunities can be capitalised on with holistic benefits for business owners, society and the environment. The four definitions also offer some insight into possible components of the concept of sustainable entrepreneurship, and among these components, environmental and societal innovations appear to be the common theme as each definition hints at the desired

outcome of sustainable entrepreneurship to be the creation of new goods and services that promote environmental preservation.

Over the past two decades, several opportunities to make a meaningful contribution to society through sustainable entrepreneurship has birthed many sustainable business ventures (Schaltegger et al., 2016; Gast et al., 2017). Pastran et al. (2021) defines sustainable entrepreneurship as the establishment of enterprises which integrate sustainability and environmental impact at the early stages of business incorporation and growth. Sustainable entrepreneurship emerged as an alternative to the profit seeking mainstream concept of entrepreneurship. Shepherd and Patzelt (2011, p. 632) define sustainable entrepreneurship as the “...preservation of nature, life support, and community in the pursuit of perceived opportunities to bring into existence future products, processes, and services for gain, where gain is broadly construed to include economic and non-economic gains to individuals, the economy, and society”. From this definition, it is clear that one of the defining tenets of sustainable entrepreneurship is the pursuit of ideas and opportunities that bring gains that transcend the traditional profit motive which mainstream entrepreneurs pursue.

Gupta and Matharu (2022, p.702) reported that the UN General Assembly, through its resolution 73/225 on entrepreneurship, acknowledged the vital role entrepreneurship plays in achieving sustainable development. This includes creating jobs, driving economic growth and innovation, improving social conditions, and addressing social and environmental challenges, all in line with the goals of the 2030 Agenda for Sustainable Development. This claim highlights the important role of sustainable entrepreneurship as recognised by the United Nations (UN) General Assembly. Gupta and Matharu (2022) highlighted that a UN resolution on sustainable development underscores the need for a comprehensive and integrated approach to entrepreneurship, incorporating long-term strategies and cross-

sectoral policies. This study acquiesces with this notion and further argues that sustainable entrepreneurship is vital for the fashion sector in Ghana due to the growing effects of fashion entrepreneurship especially fast fashion on the environment (Mensah, 2023).

Sustainable enterprises serve as fundamental drivers of long-term economic stability and development across global economies. Entrepreneurs, as key agents of transformation, are increasingly expected to catalyse innovation, foster job creation, and contribute to economic resilience. However, given contemporary challenges particularly the accelerating climate crisis, the role of sustainable entrepreneurship has become increasingly significant. Addressing environmental and social imperatives through sustainable business models is no longer a peripheral concern but a critical necessity for ensuring economic viability and ecological stewardship (Heinze, 2020; Trippeer & Gam, 2022). Entrepreneur orientation is essential for increasing entrepreneurial intention (Koe, 2016), particularly about environmental challenges (Kuckertz & Wagner, 2010). Scholars have noted that aspiring entrepreneurs focusing on the triple bottom line (TBL) perspective are building business models which ensure that companies pursue profitable opportunities but with the environment and sustainability in mind (Todeschini et al., 2017; Su et al., 2022).

Sustainable economies are the product of sustainable development initiatives and policies that create an ecosystem driving sustainable practices across all levels of the value chain (Jabareen, 2008; Muñoz & Cohen, 2018). Consequently, there is an argument that entrepreneurial development should be aligned to the aforementioned factors (Gupta & Matharu, 2022). Furthermore, sustainable entrepreneurship seeks to redefine entrepreneurship education to ensure that students are taught how to sustainability concepts (DelVecchio et al., 2021; Sharma et al., 2021). As a result, they will wish to develop sustainable innovations and manage sustainable businesses in the future. Although,

sustainable entrepreneurs foresee environmental shifts and play a part in the creation of a sustainable economy (Schaltegger and Wagner, 2011). Elkington et al. (1999) assert that sustainable businesses are guided by the Triple Bottom Line (TBL), where entrepreneurs are expected to balance profit with social and environmental responsibility. As a result, some scholars have emphasized on the need for educational institutions to be responsible for the development of students' entrepreneurial personalities (Obrecht, 2016; Klapper & Fayolle, 2023). In view of this, it is essential to ensure that students are educated on sustainability, its benefits and consequences. This will equip students to make ethical and sustainable decisions at every level of their entrepreneurial journey as they seek to adhere to the pursuit of the triple bottom line.

3.2 Characteristics of Sustainable Entrepreneurship

Sustainable entrepreneurship is perceived as a form of entrepreneurship that is peculiar and distinct from traditional entrepreneurship (DiVito & Bohnsack, 2017; Su et al., 2022). Some scholars argue that sustainable entrepreneurship has no limitations or boundaries as is commonly perceived (Pastran et al., 2021; Dana et al., 2024). In fact, mounting evidence suggests the contrary and indicate that start-ups, SMEs and larger businesses can all practice sustainable entrepreneurship and obtain social and economic benefits by providing sustainable solutions to existential problems in society (Hall et al., 2010; Gas et al., 2017). Not all businesses can be classified as sustainable, in the same way that not all entrepreneurs can be classified as sustainable entrepreneurs. This section highlights the key characteristics of sustainable entrepreneurship. According to Chavas-Vargas et al. (2024), sustainable entrepreneurship comprises of three main characteristics. These include: economic, social and technological factors. These are discussed in the ensuing sections.

3.2.1 Economic Factors

One of the cardinal characteristics of sustainable entrepreneurship is the priority given to economic factors. Contrary to the misconceptions surrounding sustainable entrepreneurship, economic factors are vital to the sustenance of sustainable enterprises (Belz & Binder, 2017; Farny & Binder, 2021). Poor economic factors and bad management skills can doom a sustainable enterprise to collapse or debt, or both (Cohen & Winn, 2007; Farny & Binder, 2021). Chavas-Vargas et al. (2024) highlight the pivotal role of economic factors in influencing the establishment, expansion, and long-term viability of entrepreneurial ventures. These determinants are intrinsically linked to broader macroeconomic indicators, including gross domestic product (GDP), inflationary trends, and foreign direct investment (FDI), which collectively shape the business environment and entrepreneurial dynamics. Other scholars like Chirinos Araque et al. (2018) have also observed the effect of macroeconomic factors on business ecosystems. Maniyalath and Narendran (2016) have also argued that a region's economic growth can significantly influence the sustainability of ventures over time because it can create a supportive environment for entrepreneurs. Conversely, unstable economic conditions can limit demand and supply, making it harder for businesses to operate or new ones to emerge (Fertala, 2008).

Spencer and Gomez (2004) observe that nations with lower GDP per capita often exhibit elevated self-employment rates and a prevalence of smaller enterprises compared to wealthier economies. In contrast, Huang et al. (2023) argue that a higher GDP per capita fosters more favorable conditions for entrepreneurial activity, facilitating both business establishment and continuity. Furthermore, foreign direct investment (FDI) serves as a catalyst for economic expansion (Leiva et al., 2014), primarily through technology absorption (Spencer & Gomez, 2004), which strengthens the long-term viability of sustainable ventures. Income levels (Moya-Clemente et al., 2019; Wennekers et al., 2005),

regulatory frameworks (Spencer & Gomez, 2004), and overarching economic policies (Valdez & Richardson, 2013) constitute critical determinants of entrepreneurial success. In periods of macroeconomic uncertainty, entrepreneurs tend to prioritize business survival over expansion, leading to considerable challenges in sustaining ventures over time (Maniyalath & Narendran, 2016).

3.2.2 Social Factors

A key characteristic of sustainable entrepreneurship is the influence of social factors, which shape the establishment, initiation, and growth of ventures (Lau & Busenitz, 2001). For example, high unemployment rates often drive individuals toward necessity-based entrepreneurship, such as self-employment, not as a voluntary choice but as a viable means of economic participation (Spencer & Gomez, 2004). Furthermore, access to financial resources plays a critical role in both the formation and long-term viability of business enterprises (Konkola et al., 2017). Additionally, digital infrastructure has been increasingly linked to entrepreneurial activity (Wennekers et al., 2005). Barnett et al. (2019) argue that Internet accessibility has a significant and positive impact on entrepreneurship, functioning as an essential tool for both professional and personal engagement, thereby contributing to subjective well-being (Nie et al., 2021).

A review of existing literature confirms that several studies have examined the role of social factors in sustainable entrepreneurship, highlighting their significant influence on entrepreneurial practices. Some research has focused on social entrepreneurship, while others have explored the broader relationship between social dynamics and sustainable business development (Spear, 2006; Saebi et al., 2019; Gupta et al., 2020). Additionally, studies on human development suggest that lower levels of human development correlate with reduced entrepreneurial interest and motivation (Maniyalath & Narendran, 2016). This

ties into the postulations of the present study which argues that the development of organisational learning capabilities can induce a capacity building initiative among employees of sustainable entrepreneurship enterprises.

3.2.3 Technological Factors

Sustainable entrepreneurship is viewed as an innovative and disruptive form of entrepreneurship that leverages on latest technology and tools to solve societal problems at a profit (Di Vaio et al., 2022; Al-Emran & Griffy-Briwn, 2023). Technology is therefore one of the critical elements of sustainable entrepreneurship. Technology plays a crucial role in shaping the sustainability of entrepreneurial ventures (Gu & Wang, 2022). Innovation, along with research and development (R&D), is fundamental to ensuring long-term business viability by facilitating the creation of high-quality, cost-effective products and services (Schaltegger & Wagner, 2011). Wennekers et al. (2005) assert that innovation, access to computers, and Internet utilization significantly impact entrepreneurial activity. Moreover, Botella-Carrubi et al. (2022) emphasize that innovation is closely tied to a firm's core competencies, which, in turn, enhance its potential for sustained growth. Digitalization provides substantial advantages, such as process automation, cost efficiencies, and the establishment of long-term competitive positioning (Knudsen et al., 2021; Ribeiro-Navarrete et al., 2021). Additionally, technology transfer serves as a catalyst for entrepreneurship by facilitating the diffusion of knowledge and capabilities across industries (Lado & Vozikis, 1997).

Technology transfer refers to the dissemination of technical knowledge tailored to local conditions, facilitating its absorption and diffusion both within and across national boundaries (Lado & Vozikis, 1997, p. 56). This process plays a significant role in driving economic growth, though its effectiveness is highly dependent on the contextual

environment in which it is implemented. Similarly, patents serve as critical enablers of entrepreneurial ventures and influence economic growth trajectories (Ferreira et al., 2020), as they reflect a firm's innovative capacity and strategic objectives (Meyskens & Carsrud, 2013). Botella-Carrubi et al. (2022) emphasize that innovation is a fundamental determinant of business success and a key factor in ensuring long-term sustainability. The next section discusses the nexus between sustainable entrepreneurship and the circular economy.

3.3 Sustainable Entrepreneurship and the Circular Economy

In recent years, the Circular Economy (CE) has attracted growing interest for achieving sustainable development through cleaner production and reducing waste and pollution. At the same time, digital technologies are recognized as crucial sustainability drivers by enabling efficiency, collaboration, and innovation (Mondal et al., 2023). It has become apparent to scholars in the area of sustainable entrepreneurship that governments, consumers and policy makers have become concerned with the spiralling rate of environmental pollution, necessitating new models of combating the effects of entrepreneurship (Sun et al., 2020). Mondal et al. (2023) reports that in the recent decades, rapid industrialization and globalization have taken a serious detrimental effect on the environment, such as environmental pollution, global warming, and a significant increase in waste generation. This has been observed by other scholars such as Bertello et al. (2022) who investigated sustainable entrepreneurship in entrepreneurial ecosystems and revealed that sustainable entrepreneurship has not become a mainstay in entrepreneurial ecosystems due to the lack of supporting policies, structures and partners. Whilst this is hardly surprising due to the deeply entrenched bottom-line perspectives of traditional entrepreneurship ecosystems, the emergence of the circular economy provides hope that an enabling ecosystem can be developed to drive forward the agenda of sustainable entrepreneurship.

The circular economy's focus on reuse, recycling and regeneration has provided opportunities for sustainable entrepreneurs to emerge in various industries (Suchek et al., 2022; Mondal et al., 2023). Del Vecchio et al. (2021) in their study examined the need for sustainable entrepreneurship education for the circular economy. That study acknowledges the facilitating conditions provided by the circular economy to support sustainability initiatives by entrepreneurs. Del Vecchio et al. (2021) assert that the effectiveness of the circular economy in fostering sustainable entrepreneurship is contingent on four key factors: circular economy business models, green supply chain management, technology-driven entrepreneurship and innovation, and public policy and institutional frameworks. Among these, governmental support and regulatory policies play a crucial role, as they significantly influence the success of economic sectors. The same principle applies to the circular economy and sustainable entrepreneurship, where strategic policy interventions are essential for long-term viability.

Vig (2022) also provided evidence to highlight the role of the circular economy in paving way for sustainable development through sustainable entrepreneurship. According to Vig (2022), entrepreneurs can achieve their objectives by pursuing a triple bottom line approach within the circular economy. Vig (2022) further claims that pursuing economic, social and environmental opportunities makes an entrepreneur more relevant in the circular economy, and this can attract investment opportunity and government support. Several scholars have explored the relationship between sustainability and entrepreneurship through concepts such as social entrepreneurship, "ecopreneurship" and sustainable entrepreneurship. In the circular economy, the focus of entrepreneurship is not just on creating economic benefits, but also societal sustainability by creating products and offering services which make use of existing materials thus reducing waste and enhancing efficiency in a way that contributes to the preservation of the environment and the protection of lives.

It is interesting to note that the increasing recognition of the importance of sustainability for businesses has impacted the field of entrepreneurship, and the sector has now evolved to address the challenges related to society and the environment (Schaltegger & Wagner, 2011; Schaltegger et al., 2018). Researchers have noted that entrepreneurship is now being tailored towards addressing areas of poverty, inequality and environmental degradation (Munoz & Cohen, 2018). Furthermore, stakeholders recognise the role entrepreneurship can play in facilitating the success of SDGs for the society and environment (United Nations, 2017). This study acquiesces with the notion that entrepreneurship can be a vital cog in society to ensure that businesses are established with the mindset to support the sustainable practices that reduce poverty and also degradation of the environment. Clearly, entrepreneurship is increasingly being viewed as a viable response to major global challenges, such as climate change and growing social inequality (Gregori & Holzmann, 2020). The increased focus on sustainability-related issues, has generated discourse on the relationship between sustainability and entrepreneurship.

In the shift towards the circular economy, various scholars have proposed concepts related to sustainable entrepreneurship such as environmental entrepreneurship, often themed as “ecopreneurship” (Lober, 1998; Schaltegger, 2002; Cohen, 2006). Ecopreneurship refers to business initiatives that aims to make profit by solving an environment-related challenge. In contrast to traditional entrepreneurship, social entrepreneurship is driven by the aim of addressing pressing social issues through innovative ventures that create meaningful change within specific communities (Pralhad & Hammond, 2002; Seelos & Mair, 2005; Ridley-Duff, 2008). According to Zahra et al. (2009), social entrepreneurship integrates social and economic objectives that are often viewed as conflicting. “Sustainable entrepreneurship” has also gained some considerable attention as a significant area since 2012 (Teran-Yopez et al.,

2020; Sarango-Lalangui, et al., 2018). This study opts to focus on the concept of sustainable entrepreneurship in the fashion sector in Ghana.

The entrepreneurship bricolage theory supports the growing influence of the circular economy and its effect on sustainable entrepreneurship. According to Baker and Nelson (2005), entrepreneurs who are confronted with penurious circumstances and environments are compelled to adopt bricolage practices by making do with resources at their disposal, which in the circular economy includes accessing sustainable input and raw materials from recyclable or reusable elements. The practice of entrepreneurial bricolage also lends itself to the adoption of sustainable practices where entrepreneurs identify opportunities which can be exploited using sustainable methods (Baker & Nelson, 2005; Gundry et al., 2011; Hooi et al., 2016). New opportunities emerge from existing problems, and sustainable solutions provide the basis for sustainable entrepreneurship (Cohen & Winn, 2007).

The etymological foundation of bricolage originates from a traditional French expression which means crafts-people who creatively use left-over materials from other projects to construct new artifacts. To pursue their bricolage activity, bricoleurs use only the materials and tools “at-hand” (Levi-Strauss, 1966) as cited in Rogers (2012, p.1). Baker and Nelson (2005) inductively derived the foundations of a theory of entrepreneurial bricolage. They noted that entrepreneurs often operate in penurious environments, that is, environments that are dynamic and pose a problem of presenting new challenges without accompanying resources. To survive in such an environment, Baker and Nelson (2005) recommended three strategies; the first was to propose that when entrepreneurs are confronted with penurious environments, that is environments that present new challenges without providing new resources. The three strategies available to firms are: (1) to seek resources from external

domain to the firm; (2) to circumvent new challenges by remaining inert, downsizing, or dissolution; or (3) to enact bricolage by making do with the combinations of resources at hand to new problems and opportunities.

According to Baker and Nelson (2005), those who adopt the third approach have the choice to enact bricolage in five domains: (1) physical inputs (imbuing forgotten, discarded, worn, or presumed single-application materials with new use-value); (2) labour inputs (involving customers, suppliers, and hangers-on in providing work on projects); (3) skills (inputs permitting and encouraging the use of amateur and self-taught skills that would otherwise go unapplied); (4) customers/markets (providing products or services that would otherwise be unavailable); and (5) institutional and regulatory environment (refusing to enact limitations with regard to many “standards” and regulations, and by actively trying things in a variety of areas in which entrepreneurs either do not know the rules or do not see them as constraining).

3.4 Sustainable Fashion Entrepreneurship: An Empirical Analysis Exploring the Intersection between Fashion and Sustainability

The previous sections provided detailed discussions on the nature of sustainable entrepreneurship and its characteristics. Over the years, scholars have raised concerns regarding the role of the global fashion industry and pollution (Suraci, 2021; Liu et al., 2021). Fast fashion has been hailed as one of the leading threats to sustainability (Bick et al., 2018; Garg, 2020), and this has triggered contentious debate among stakeholders (Bick et al., 2018). As the world strives to adhere to the Sustainable Development Goals (SGDs), it has become imperative that the role of sustainability in fashion be pronounced (Thakker & Sun, 2023). Sustainable fashion entrepreneurship has therefore emerged as one of the contemporary issues dominating fashion studies especially in the Global North

(Rajyalakshmi & Priyadarshini, 2024). In the Global South, issues on sustainability have begun growing sprouts, but have not taken centre stage from a policy and implementation perspective, leaving significant gaps requiring further stakeholder interventions (Thakker & Sun, 2023).

By way of definition, sustainable fashion entrepreneurship is defined as the attempt by fashion manufacturers, clothing brands or micro-fashion enterprises to incorporate environmental and social issues into the production and consumption of fashion products (Heinze, 2020; Todeschini et al., 2017). Sustainable fashion entrepreneurship therefore represents the conscious business effort to adopt a triple bottom approach to pursuing fashion excellence through the framework of environment, social and economic governance (DiVito & Bohnshack, 2017). Over the years, scholars have been at pains to point at the inherent deficiencies' in traditional fashion entrepreneurship, citing waste and pollution as factors that make the industry a threat to all humanity (Su et al., 2022). In response to this, and in light of the growing consciousness of the circular economy, there has been a paradigm shift in the global fashion industry towards the adoption and use of sustainable materials and resources to improve the degree of sustainability in the fashion value chain (Werner et al., 2025). Scholars have found that the circular economy is providing more opportunities for sustainable fashion entrepreneurs seeking to drive business growth through sourcing sustainable materials, promoting fair work practices and remuneration, and adopting digital technology to promote sustainable fashion consumption (Bohnshack & DiVito, 2018).

The fashion industry is undergoing significant changes globally as industry stakeholders and policy makers are embracing sustainability and pushing for its implementation at the various stages of the value chain (Boulocher-Passet et al., 2024). Sustainable fashion entrepreneurship attempts to promote the social, economic and environmental promotion of

fashion products and accessories (Alblowi et al., 2021). The concept of sustainable fashion entrepreneurship also focuses on mitigating the negative effects of fashion production and consumption through interventions such as waste reduction, upcycling, energy conservation, and design practice (Arias-Meza et al., 2023; Boulocher-Passet et al., 2024). Even though there is no global consensus regarding the dimensions of sustainable fashion entrepreneurship (Schaltegger & Hansen, 2017), the aforementioned variables have gained prominence in the nascent literature on sustainable fashion entrepreneurship and as such represent the focus of this study. This study attempts to explore the intersection between fashion entrepreneurship and sustainability by empirically investigating the effect of sustainable fashion entrepreneurship on enterprise performance.

Empirically, some studies have narrowed in on the relationship between sustainability and fashion entrepreneurship. Su et al. (2022) investigated the practice of sustainable fashion entrepreneurship, focusing on the role of passion, and exploring the challenges inherent in this endeavour. Arias-Meza et al. (2023) examined the theory of sustainable paths for fashion entrepreneurs, and found theories that could support the practice of sustainability in the fashion sector. Werner et al. (2025) recently contributed to the ongoing discourse of sustainability in the fashion sector by examining responsible practices among sustainable fashion entrepreneurs. The growing consensus among scholars is that issues of sustainability will continue to dominate the fashion sector in the coming years as stakeholders strive to minimise the negative practices embedded in the fashion sector (Elf & Werner, 2024). Aboytes et al. (2022) researched on the role of Instagram as a communication tool by sustainable fashion entrepreneurs. Reviewing these studies, it is clear that though sustainability issues are on the agenda in the fashion industry, the extent to which sustainable practices are embedded within fashion firms and enterprises is not clear.

Another challenge in exploring the link between sustainability and fashion entrepreneurship is the lack of empirical studies exploring this intersection. Admittedly, the concept of entrepreneurship has been in existence for decades and centuries, whilst its contemporary counterpart, sustainable entrepreneurship is largely considered a contemporary concept (Terán-Yépez et al., 2020; Di Vaio et al., 2022). In this section, an empirical review of literature on sustainable entrepreneurship studies is conducted to identify the issues, methods, theories and gaps in the literature on sustainable entrepreneurship especially in relation to the fashion industry.

Table 3. 2: Empirical Review of Sustainable Entrepreneurship Literature

No.	Author(s)	Issue(s)
1.	Rodgers (2010)	Sustainable Entrepreneurship in SMEs
2.	Schaltegger & Wagner (2011)	Sustainable entrepreneurship and sustainability innovation
3.	Spence et al. (2011)	Sustainable entrepreneurship and entrepreneurial will
4.	Koe et al. (2014)	Propensity for sustainable entrepreneurship
4.	Binder & Belz (2015)	Concept of sustainable entrepreneurship
5.	Belz & Binder (2017)	Convergent process model of sustainable entrepreneurship
6.	Stubbs (2017)	Sustainable entrepreneurship and “B-Corps”
7.	Fichter & Tiemann (2017)	Factors influencing university support for sustainable entrepreneurship
8.	Ploum et al. (2018)	Competence framework for sustainable entrepreneurship
9.	Hummels & Argyrou (2021)	Sustainable development and sustainable entrepreneurship
10.	Gupta et al. (2023)	Artificial intelligence and sustainable entrepreneurship

Table 3.2 reveals that there is a paucity of studies examining the relationship between sustainable entrepreneurship and performance related outcomes. Most of the existing studies have focused on clarifying the nature of sustainable entrepreneurship, whilst exploring the

factors that impact its adoption. The ten (10) studies listed in the table feature the notable studies on sustainable entrepreneurship published in reputable journals over the past decade.

3.4.1 Challenges of Implementing Sustainable Fashion Entrepreneurship in Developing Countries in the Global South

A key question that confronts the globalisation of sustainability in the fashion industry is this; “is Africa ready for sustainable fashion entrepreneurship?” An examination of the current literature on sustainability within the fashion industry reveals that there is a dearth of literature delineating how fashion enterprises in African countries can develop capabilities that optimize the practice of sustainability and result in positive performance outcomes (Langevang, 2017). The issue of sustainability is heralded globally as a panacea to the degradation problems facing society (Moreno-Gavara & Jiménez-Zarco, 2019). The concept of scarcity of resources has influenced a change in organisational paradigms shifting focus from the bottom-line approach to the triple bottom-line approach that prioritizes sustainability (Birkel & Muller, 2021; Khan et al., 2021). Interestingly, scholars have argued that adopting and integrating sustainability into established organisational structures is not an easy feat (Awan & Sroufe, 2022; Kinnunen et al., 2022). This has led some companies, mostly large ones, to fall foul of the law especially in relating to green washing (Majeed & Kim, 2022; Santos et al., 2024). The extant literature reveals that in an attempt to court positive corporate reputation and sustainable-minded consumers, some companies have pretended to be “green” when in actual fact, they are not (Zhao & Lee, 2024). This typifies the concept of green washing (Chen & Dagestani, 2023). In the African context, specifically the Ghanaian context, sustainability awareness is on the increase (England et al., 2021). Yet, the extent to which corporations are practicing sustainability varies and is nowhere near the same level as that of companies in the Global North (Mutarindwa et al., 2024).

The global fashion industry has been flagged as one of the significant contributors to environmental pollution (Romziana et al., 2024). Fast fashion in particular has emerged as a bane to the practice of sustainability (Centobelli et al., 2022). In response to this, many established global fashion brands have initiated various sustainability efforts to counteract the effects of fashion on the environment (Wren, 2022). In European countries, the established legal and policy frameworks compel fashion brands to comply and practice sustainability (Nguyen et al., 2021). In Ghana, there are limited sustainability frameworks that regulate the operations of stakeholders within Ghana's fashion industry (Amankwah et al., 2023). This makes the practice of sustainability difficult for fashion entrepreneurs. Ghanaian fashion entrepreneurs are in that space because they learned a skill that can allow them to earn a decent living (Afun et al., 2023). These individuals are therefore focused on leveraging their bricolage competencies to achieve profitability and business growth (Afun et al., 2023). Issues of sustainability are therefore not a matter of priority for most fashion entrepreneurs in Ghana (Afun et al., 2023). In view of this, it is imperative to unearth some of the challenges hindering the practice of sustainable fashion entrepreneurship within the Ghanaian fashion industry.

One of the challenges hindering the adoption and practice of sustainable fashion entrepreneurship is the lack of awareness and limited orientation and training on sustainability practices (Adjabeng, 2022; Amankwah et al., 2024). Majority of fashion entrepreneurs in Ghana are micro-enterprises and small-scale fashion businesses (Adjabeng, 2022; Afun et al., 2023). These enterprises are often managed by individuals with limited educational background and qualifications (Afun et al., 2023). Their lack of resources also hinders them in recruiting marketing and sustainability leads to implement innovative and practical sustainability strategies (Adjabeng, 2022; Amankwah et al., 2024). Consequently, it has become evident that most fashion entrepreneurs in Ghana are focused on the bottom-

line, and on how to generate revenue from making clothes for customers (Afun et al., 2023). Issues of sustainability are not being prioritised, in spite of the financial and social benefits that can accrue to fashion entrepreneurs practicing it.

The consensus among scholars is that sustainability can unlock many benefits for the fashion industry (Quagraine, 2023; Amankwah et al., 2024). The Ghanaian fashion industry appears to lack a strategic roadmap that can elevate it to global levels in terms of visibility, revenue and brand recognition (Adjabeng, 2022; Afun et al., 2023; Nkrumah et al., 2023). Government policy and entrepreneurial training will be key to unlocking the potential of Ghana's fashion sector as acknowledged by various scholars (Amankwah et al., 2024). Entrepreneurial training for fashion entrepreneurs will be crucial to harness various organisational capabilities that can lead to the attainment of the triple bottom line among fashion entrepreneurs. The subsequent sections of this review discuss organisational learning and social media capabilities, and their potential impact on sustainable fashion entrepreneurship outcomes in Ghana.

3.5 Organisational Learning Capabilities (OLC)

Scholars have identified various capabilities as essential to sustainable entrepreneurship, including dynamic capabilities (Teece, 2007), innovation (Schaltegger & Wagner, 2011), and digital capabilities (Xu et al., 2022). However, given the emerging nature of research in this field, certain capabilities such as Organisational Learning Capability (OLC) and Social Media Capability (SMC) have not been extensively examined as potential mediators or predictors of the relationship between sustainable entrepreneurship and firm performance. Teece (2007) suggests that the development of dynamic capabilities can positively influence the performance of sustainable enterprises. This study aims to expand the scope of inquiry by exploring additional capabilities and their impact on sustainable entrepreneurship

outcomes, specifically focusing on organisational learning capabilities and social media capabilities.

3.5.1 Definition(s) of OLC

Organizational learning is the ongoing process of gathering information, analyzing it, and turning it into useful knowledge that helps a business adapt and grow (Franco & Haase, 2009). It also involves recognizing when something isn't working as expected and making necessary corrections (van Grinsven & Visser, 2011). Argyris and Schön (1996) describe this as addressing the gap between what an organization aims to achieve and what it actually accomplishes, ensuring continuous improvement and resilience. From the perspective of dynamic capabilities, organisational learning serves as a crucial mechanism through which these capabilities are embedded within a firm's internal processes. Historically, it has been widely recognized as a fundamental driver of sustained competitive advantage. Empirical research (e.g., Levinthal & March, 1993; Franco & Haase, 2009) has consistently demonstrated that organizational learning positively impacts both financial and non-financial dimensions of firm performance. However, an emerging body of literature suggests that the relationship between dynamic capabilities and firm performance is not necessarily direct. Instead, it is frequently mediated by internal organizational factors or more tangible capabilities, which can be refined and reconfigured through the application of dynamic capabilities.

Eisenhardt and Martin (2000) contend that dynamic capabilities achieve optimal effectiveness when supported by learning processes that foster the creation of new knowledge. Within the firm's internal ecosystem, organizational learning functions as a critical mechanism for translating dynamic capabilities into enhanced firm performance. In this regard, organizational learning may act as an intermediary variable, facilitating the relationship between dynamic capabilities and performance outcomes. Levitt and March

(1988) posit that organizational learning is deeply influenced by a firm's historical experiences, which serve as complementary assets to dynamic capabilities that are inherently future-oriented (Breznik & Hisrich, 2014). Additionally, the continuous evolution of resources and competencies linked to dynamic capabilities (Breznik & Hisrich, 2014) is often reflected through organizational learning processes, which are predominantly structured around routine-driven and objective-focused actions (Levitt & March, 1988). Consequently, when dynamic capabilities are channeled through organizational learning mechanisms, they emerge as a foundational source of sustained competitive advantage (Shane & Venkataraman, 2000).

The literature widely acknowledges the positive impact of organizational learning and dynamic capabilities on firm performance. However, empirical studies suggest that this relationship is frequently mediated by innovation, which serves as a crucial mechanism for translating learning-driven adaptability and resource reconfiguration into sustained competitive advantage. Innovation facilitates the refinement of processes, the development of novel solutions, and the enhancement of strategic agility, thereby reinforcing the interplay between organizational learning, dynamic capabilities, and performance outcomes. It is found within academic studies that organizational learning serves as a key precursor to innovation (Jimenez-Jimenez & Sanz-Valle, 2011). Breznik and Hisrich (2014) argue that innovation is inherently linked to an ongoing learning process, emerging as a natural outcome of continuous organizational knowledge development. Other scholars further suggest that organizational learning, along with its associated outputs, fosters innovation through the systematic acquisition, sharing, refinement, and transformation of knowledge (Huber, 1991; Sanz-Valle et al., 2011). Since the 1990s, the concept of dynamic capabilities has been extensively explored in strategic management literature, with researchers offering varied definitions to enhance conceptual clarity and refine its theoretical foundations. For

example, Teece et al. (1997) conceptualized dynamic capabilities as a firm's ability to integrate, adapt, and reconfigure its competencies in response to rapidly evolving market conditions. This framework underscores the strategic agility required for firms to navigate uncertainty, leverage opportunities, and sustain competitive advantage in dynamic environments.

Eisenhardt and Martin (2000) conceptualize dynamic capabilities as strategic routines that organizations utilize to continuously reshape their resource configurations in response to fluctuating market conditions. Similarly, Zahra and George (2002) underscore the role of these capabilities in facilitating organizational transformation through resource reconfiguration. Expanding on this perspective, Zollo and Winter (2002) argue that dynamic capabilities enhance performance by fostering learned, stable patterns of collective activities that improve adaptability and efficiency. The theoretical evolution of dynamic capabilities is closely intertwined with foundational frameworks such as the resource-based view and the knowledge-based view of the firm (López, 2005). Helfat et al. (2009) refine this understanding by defining dynamic capabilities as an organization's sustained ability to generate, adapt, and modify its resource base in alignment with environmental demands. Sirmon et al. (2007) further delineate these capabilities as strategic decisions regarding how firms structure, bundle, and leverage their resources to optimize performance. Teece (2007) advances the discourse by introducing micro-foundations, which encompass the firm's ability to sense, seize, and shape emerging opportunities and threats, while continuously reconfiguring both tangible and intangible assets to sustain competitive advantage.

Helfat and Peteraf (2003) emphasized that dynamic capabilities are essential for understanding how firms can maintain a competitive edge in rapidly changing environments. A review of the various definitions in the literature revealed a growing consensus around the

core components of dynamic capabilities. As highlighted by Wang and Ahmed (2007), this convergence centers on viewing dynamic capabilities through three interrelated dimensions: adaptive capability, absorptive capability, and innovative capability. However, scholars have also concluded that other capabilities such as organisational learning can be considered as dynamic capabilities (Gupta et al., 2020; Ruiz-Ortega et al., 2024).

3.5.2 Components of OLC

Scholars such as Argote and Miron-Spektor (2011) and Brockman and Morgan (2003) have emphasized that, under certain conditions, organizational learning can function as a core rigidity, thereby constraining the development of capabilities within the hotel industry. Recognizing this potential limitation, Mahoney (1995) and Zollo and Winter (2002) assert that a firm's approach to learning is integral to the effective development of dynamic capabilities. Subsequent research has increasingly positioned organizational learning as a fundamental mechanism through which knowledge is systematically generated, disseminated, and embedded within an organization, thereby facilitating the evolution of dynamic capabilities (Winter, 2003; Chien & Tsai, 2012). Specifically, Zollo and Winter (2002) highlight knowledge creation and management as central enablers in this developmental process. Building on these insights, Winter's (2003) hierarchical model, later refined by Easterby-Smith and Prieto (2007), conceptualizes learning as a second-order capability, serving as an essential conduit for the refinement and operationalization of dynamic capabilities.

Within the hospitality and tourism sector, Nieves and Haller (2014) and Leonidou et al. (2015) underscore the critical role of organizational learning in enhancing dynamic capabilities among hotel enterprises. By adopting a knowledge-driven perspective, firms can systematically acquire, refine, and apply expertise, thereby fostering adaptability and

sustained competitive advantage in an evolving market landscape. Similarly, Fraj et al. (2015) aver that organizational learning serves as a foundation for enhancing innovation capabilities in hotels. More recently, Namada (2017) asserted that organizational learning plays a pivotal role in facilitating strategic renewal within firms. Additional research by Liu (2017) found that exploitative learning contributes to the development of cognitive social capital, while Liu (2018) further suggested that organizational learning acts as a conduit between social capital and knowledge transfer capabilities. These are essential in the context of this study and were explored among fashion entrepreneurs in Ghana's creative arts sector.

3.6 Social Media Capabilities

3.6.1 Defining SMC

Social media has emerged as a significant resource for smaller businesses in the absence of the huge financial might and budget that larger corporations dedicate towards advertising and other related marketing communications activities (Wardati & Mahendrawathi, 2019; Tiwasing, 2021). Scholars have noted that social media has disrupted the marketing communications environment and provided smaller businesses and SMEs with a unique opportunity to interact directly with, and have access to consumers from various geographies and market access points through digital technology (McCann & Barlow, 2015; Gilboa et al., 2019; Salam & Hoque, 2019; Qalati et al., 2021; Sedalo et al., 2022).

Scholars have noted that social media has disrupted the marketing communications environment and provided smaller businesses and SMEs with a unique opportunity to interact directly with, and have access to consumers from various geographies and market access points through digital technology (McCann & Barlow, 2015; Gilboa et al., 2019; Salam & Hoque, 2019; Qalati et al., 2021; Sedalo et al., 2022). Drawing on Kaplan and

Haenlein's (2010) emphasis on specific technologies and the relational perspective offered by Peters, Chen, Kaplan, Ognibeni, and Pauwels (2013), some scholars refer to social media as internet-based communication platforms that enable users to create, share, and engage with content within digitally connected communities. Importantly, social media is not confined to content produced by individual users; it also encompasses content generated and disseminated by organizations, which plays a vital role in shaping the broader social media environment (Lamberton & Stephen, 2016). A defining characteristic of social media, in contrast to traditional media, is its interactive and networked structure, which underscores the dynamic interconnections among users, businesses, and various stakeholders (Hennig-Thurau et al., 2010; Roberts, Piller, & Lüttgens, 2016). Social media performance, therefore, reflects the extent to which an organization effectively integrates social media into its marketing strategy, often measured by metrics such as the number of followers, fans, or subscribers engaging with the firm's digital presence.

Social media capability refers to the expertise that firms develop in using social media networking platforms to engage customers, participate in interactions between network marketers, and to create a mutual social relationship between consumers and the company (Kargaran et al., 2017). The deployment of dynamic capabilities in this context is aimed at enhancing managerial agility and optimizing resource allocation, particularly within complex environments involving multiple actors and multi-stakeholders (Haarhaus & Liening, 2020). Positioned at the interface of internal operations and the external landscape, social media platforms have emerged as prominent tools in modern management. As a result, the strategic importance of social media has led to growing organizational focus, with increasing investments dedicated to its adoption and use. A recent study by Bruce et al. (2022) investigated social media usage and SME firm sustainability, and found that social media usage has a positive and significant effect on SME sustainability. They also found

that social media usage drives SME motivations towards resilience and sustainability. Social media capabilities have therefore become important competencies that firms seeking to thrive in this modern digital environment need to develop and adapt to.

3.6.2 Components of SMC

A well-structured social media strategy, functioning as a dynamic capability, has the potential to enhance social media performance beyond its influence on other social media-related capabilities and resources. Malthouse et al. (2013) emphasize that a clearly defined strategy plays a crucial role in enabling firms to produce engaging content, which is essential for achieving strong performance on digital platforms. In line with this perspective, Weinberg et al. (2013) caution against the indiscriminate adoption of social media technologies without a coherent, strategic framework to guide their implementation. Empirical evidence provided by Wu (2016) further supports this notion, demonstrating a positive and significant relationship between social media strategy and firm performance, as reported by firms themselves, relative to their competitors. However, Wu approaches social media strategy primarily from a “content” perspective centering on specific objectives such as customer acquisition, rather than from a dynamic “development” perspective, which would emphasize continuous strategic adaptation and long-term capability evolution

According to Batra and Keller (2016), the connection between strategic planning and social media effectiveness can be attributed to two key mechanisms. First, well-defined strategic planning outlines a firm’s intended social media initiatives, fostering coordinated marketing efforts that integrate seamlessly with other media channels such as television and digital advertising ultimately resulting in more cohesive and impactful communication (Batra & Keller, 2016; Wu, 2016). Second, advanced strategy formulation is characterized by clearly articulated objectives and measurable performance indicators, including the systematic tracking of engagement metrics (e.g., likes or shares) across various platforms. These

structured approaches ensure that social media activities align with broader marketing strategies, enhancing overall brand visibility and audience engagement (Batra & Keller, 2016; Odoom, 2023).

In tandem with existing literature on performance management and employee engagement (Gruman & Saks, 2011), this study contends that a well-developed social media strategy can serve as a catalyst for employees to actively engage with and prioritize performance metrics. By integrating strategic social media initiatives into organisational processes, employees are encouraged to reflect on key performance indicators, fostering greater accountability and alignment with overarching business objectives. By emphasising the relevance of key performance indicators (KPIs), such a strategy can guide employees in crafting social media content that aligns with organisational goals, thereby enhancing overall social media effectiveness. Additionally, it is assumed that the relationship between strategic social media planning and performance outcomes may be moderated by the size of the firm.

Anecdotal evidence suggests that the effects of social media marketing vary between small and large firms. Quesenberry (2018) notes that larger organizations are particularly susceptible to social media crises, commonly referred to as “firestorms,” due to their expansive and highly visible digital presence. Similarly, Howard (2011) identifies several challenges unique to larger firms, including constrained managerial oversight, rigid departmental structures, and complexities in maintaining message consistency across platforms. These structural limitations often impede larger firms' ability to execute cohesive and agile social media strategies, differentiating their experience from that of smaller, more flexible enterprises. However, past suggests that smaller firms often face greater challenges in allocating sufficient resources toward developing a structured social media strategy. In contrast, larger organizations are more likely to have established overarching strategies that

can be adapted and extended to include social media efforts. Small firms, by comparison, frequently operate in a more reactive or informal manner, with less comprehensive strategic planning in general (Cooper, 1981). Within this framework, social media activities undertaken by employees can be conceptualized as a form of organizational dynamic capability, encompassing the firm's internal processes, structural positioning, and strategic orientations that shape its approach to digital engagement. Malthouse et al. (2013) emphasise the necessity of aligning organizational structures and operational processes with the unique demands of social media platforms (see also Trainor, 2012; Trainor et al., 2014; Weinberg et al., 2013; Wu, 2016). Unlike traditional pre-social media business environments, these platforms require heightened agility in decision-making and significantly faster response times to maintain competitive relevance (Peters et al., 2013).

Social media data embody key attributes commonly associated with big data (Chintagunta, Hanssens, & Hauser, 2016), characterized by its immense volume (e.g., millions of relevant Facebook posts), diverse formats (e.g., both quantitative and qualitative content), and rapid velocity (e.g., high-speed data generation and dissemination, particularly during social media firestorms). Consequently, firms risk losing track of this vast and dynamic data landscape unless they implement a structured and strategic approach to measurement and analysis. In this context, measurement encompasses the systematic acquisition, monitoring, and analysis of business-relevant information extracted from social media networks in real time, guided by explicitly defined performance criteria. Various studies have identified key methodologies and tools that support this objective, including data mining techniques (Culotta & Cutler, 2016), performance assessment frameworks (Kumar et al., 2013; Peters et al., 2013), the strategic integration of social media within broader marketing initiatives (Lipsman, Mudd, Rich, & Bruich, 2012; Mintz & Currim, 2013), and mechanisms for managing high-intensity public interactions online (Hansen et al., 2018; Hewett, Rand, Rust,

& Van Heerde, 2016). However, given the dynamic and evolving nature of digital engagement, the measurement of social media performance must be continuously refined as a strategic capability, ensuring firms can maintain competitive advantage in an increasingly volatile digital landscape.

3.6.3 Exploring SMC in Entrepreneurship

A review of the extant literature reveals that some studies have examined the concept of social media capabilities in the context of entrepreneurship (Gregori & Holzmann, 2020; Borah et al., 2022; Fang et al., 2022). The study by Olanrewaju et al. (2020) investigated the prevalence of social media in entrepreneurship research and found that the emergence of social media has changed how entrepreneurs conduct their business. Olanrewaju et al. (2020) established that entrepreneurs all over the world were adopting social media not just as a marketing tool, but more as a business networking tool. Other capabilities associated with the use of social media include: information search and crowdfunding (Olanrewaju et al., 2020).

A comprehensive review of the literature on entrepreneurial engagement with social media underscores its multifaceted role in advancing both strategic and operational business functions. Social media's inherent connectivity and openness mitigate barriers that entrepreneurs frequently encounter when seeking expert guidance and industry insights (Kuhn, Galloway, & Collins-Williams, 2016; Nylander & Rudström, 2011). This function is particularly crucial during the nascent stages of entrepreneurship, where timely access to relevant information and advisory networks significantly influences business viability and early-stage growth. Moreover, social media serves as a cost-effective avenue for entrepreneurs to market their products and services, facilitating brand visibility and customer acquisition. Beyond promotional efforts, these platforms foster dynamic networking

opportunities and peer-to-peer interactions, enabling entrepreneurs to cultivate valuable relationships with co-entrepreneurs, industry professionals, and potential collaborators (Kuhn et al., 2016; Hussain, 2023). By integrating social media into their business strategies, entrepreneurs enhance their capacity to navigate complex market environments while leveraging digital engagement as a catalyst for sustainable growth.

Social media has emerged as a powerful tool for entrepreneurs, enabling them to establish meaningful connections with like-minded individuals and expand their professional networks (Quinton & Wilson, 2016). These interactions often lead to collaborative partnerships that foster co-creation and drive innovation (Bhimani, Mention, & Barlatier, 2018; Rathore, Ilavarasan, & Dwivedi, 2016). Beyond networking, active engagement with social media platforms has been empirically linked to enhanced business performance (Alarcón-del-Amo, Rialp-Criado, & Rialp-Criado, 2018; Franco, Haase, & Pereira, 2016; Tajvidi & Karami, 2017), playing a critical role in the sustained growth and long-term viability of entrepreneurial ventures. Recent findings by Hussain (2023) further highlight social media's pivotal role in facilitating digital entrepreneurship, while Susanto et al. (2023) demonstrate that social media usage mediates the relationship between entrepreneurial orientation and SME performance. This aligns with earlier research by Fang et al. (2022), who also identified social media as an intervening variable in this dynamic relationship, reinforcing its importance as a strategic asset for entrepreneurial success.

3.7 Chapter Summary

This chapter presented a review of literature on sustainable entrepreneurship, organisational learning and social media capabilities. A review of the extent literature was performed to determine the conceptual composition of the various concepts, whilst also reviewing empirical studies on the related concepts. The chapter has provided clarity regarding the

nature, composition and relevance of sustainable entrepreneurship, and the role of organisational learning and social media capabilities in facilitating firm performance in sustainable enterprises. The next chapter presents the conceptual and theoretical frameworks which examine the underpinning relationships being explored as well as the theories supporting the core arguments of this study.



CHAPTER FOUR

THEORETICAL AND CONCEPTUAL FRAMEWORKS

4.0 Introduction

The previous chapter offered insight into the contextual background of this study. The creative arts sector in Ghana was discussed as the larger umbrella encompassing the fashion sub-sector. Building upon the contextual foundation established in preceding discussions, this chapter delineates the theoretical and conceptual frameworks that inform and structure the present study. The chapter commences by discussing the theoretical framework, where two theories, namely the Dynamic Capabilities Theory and the Bricolage Theory, are examined. These two theoretical frameworks are well-suited for this study, providing distinct perspectives that elucidate the impact of sustainable entrepreneurship on organizational learning capabilities, social media capabilities, and firm performance within the sustainable fashion industry.

In this chapter, the origins and assumptions anchoring each theory are discussed, whilst the components of the theory and how they are applied in this study are also considered. The application of the theories in this study also takes into its effect on the various causal relationships in the study's conceptual framework. Furthermore, the limitations and criticisms of the two theories are discussed. The chapter finally proceeds to present the conceptual framework underpinning the study, where the major variables and relationships being examined are considered. The framework also highlights the hypothesised relationships amongst sustainable entrepreneurship, organisational learning capabilities, social media capabilities and firm performance. These relationships are underpinned by arguments from scholars in the extant literature.

4.1 Theoretical Framework

Scholars have argued that theory plays an important role in research (Anfara Jr & Mertz, 2014; Lederman & Lederman, 2015). Theories help to elucidate on a concept or phenomenon and provide a basis for understanding causality and inference between variables (Sutton & Staw, 1995; Boateng, 2016). In the extant literature, theories such as the Resource-Based View (RBV), Institutional and Stakeholder theories have been used in explaining how entrepreneurs deal with personal, enterprise, institutional and environment factors to improve firm performance (Freudenreich et al., 2020; Zhao et al., 2023; Davis et al., 2024). This study adopts two theories to explain the effects of sustainable entrepreneurship on firm performance among fashion entrepreneurs, considering the mediating roles of organisational learning capabilities and social media capabilities. In this study, the dynamic capabilities theory and the bricolage theory are adopted to support the arguments being proffered in relation to the effect of sustainable entrepreneurship on firm performance among fashion entrepreneurs.

4.1.1 Dynamic Capability Theory

The Dynamic Capabilities Theory (DCT) is one of the prominent management and innovation theories adopted by scholars over the past two decades to explain how firms can gain sustainable competitive advantage through the development of competencies (Teece et al., 1997; Teece & Pisano, 2004; Teece, 2014; Teece, 2018). This theory has been widely adopted to underpin research in the area of competitive advantage, business development and firm growth (Teece, 2007; Teece & Leih, 2016; Teece, 2018). The dynamic capabilities theory is largely perceived to be a theory that facilitates a deeper understanding of the intricacies of firm competitiveness, and the skills and competencies that firms need to develop in order to remain competitive over time (Feiler & Teece, 2014; Lessard et al., 2016).

Scholars have defined dynamic capabilities as the development of specific abilities that

enable individuals within organisations to fulfil their roles, leading to competitive advantage (Teece et al., 1997; Teece, 2007). Research on dynamic capabilities has unearthed two key aspects of dynamic capabilities that have not been considered in past studies on firm strategy; these are competency renewal and innovative responses to market opportunities (Teece, 2014; Teece et al., 2016). The concept of dynamic capabilities refers to the deliberate configuration of firm capabilities to meet new changes in the firm's environment, which further necessitates strategic renewal across functional areas and the elements of the marketing mix (Wildens & Gudergan, 2015; Pfajfar et al., 2024). As the name suggests, dynamic capabilities are competencies that are configured to improve a firm's ability to respond to new opportunities, and also threats. By its nature, dynamic capabilities require firms to be innovative, thus, developing new processes, ideas, techniques and skills in order to ensure that the firm is able to satisfy the requirements of its customers, suppliers and other stakeholders (Fang & Zou, 2009; Ferreira & Coelho, 2017; Roach et al., 2018).

The concept of competitiveness entails the development of capabilities to improve firm performance (Ferreira et al., 2018; Xu et al., 2018). The dynamic capabilities theory has therefore been used by various scholars to explain the link between firm capabilities and firm performance (Morgan et al., 2009; Cataltepe et al., 2022). The term 'capabilities' highlights the critical role of strategic management in appropriately adapting, integrating and reconfiguring internal and external skills, resources, and core competences to respond to the demands of a changing environment. This theory shares some similarity with the Bricolage theory, and both theories emphasize the need for firms to adapt to their environment and develop creative capabilities that can contribute towards desired firm performance.

The dynamic capabilities theory was developed to address the conundrum of firms pertaining to the development of skills to match the demands of external stakeholders. The proponents of the theory claimed that "one aspect of the strategic problem facing an innovating firm in

a world of Schumpeterian competition is to identify difficult-to-imitate internal and external competencies most likely to support valuable products and services” (Teece et al., 1997, p.515). This perspective highlights the need for firms to cultivate dynamic capabilities to facilitate the production of products and services that meet the needs of customers and other external stakeholders. Teece et al. (1997, p.515) supported this assertion and recommended that “...at any given point in time, firms must follow a certain trajectory or path of competence development...” (Teece et al., 1997, p.515).

Historically, scholars have conceptualized dynamic capabilities as "the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments" (Teece et al., 1997, p. 515). In this context, Teece et al. (2016) further emphasize that dynamic capabilities embody an organization's strategic agility, enabling it to identify, adapt to, and capitalize on emerging opportunities for competitive advantage. In this study, dynamic capabilities are defined as the deliberate and conscious process a firm engages in to ensure that competencies and skills are developed to respond to rapidly changing needs in the firm's environment, and that the firm evolves to become more competitive through the acquisition of these skills. The next section discusses the origins and major assumptions of the dynamic capabilities theory, before proceeding to discuss how the theory is applied in this study on sustainable entrepreneurship and firm performance in the fashion industry.

4.1.1.1 Origins and Major Assumptions of the Dynamic Capabilities Theory

The dynamic capabilities theory is the product of years of theoretical discourse in business, management and entrepreneurship literature (Teece et al., 1997). The theory built on previous perspectives from past studies by Schumpeter (1944), Penrose (1959), Barney (1986), Teece (1988), and Teece et al. (1994). These studies were the frontrunners in establishing the notion of firm competitiveness, and identifying critical factors that needed

to be considered to ensure competitive advantage. The main assumption underpinning the dynamic capabilities theory is that firms cannot achieve sustainable competitive advantage by merely possessing valuable resources (Teece et al., 1997; Teece, 2007; Teece et al., 2016). That viewpoint was largely propagated by proponents of the resource-based view, but after years of studying the impact of external environmental forces on business operations, Teece et al. (1997) argued that business competitiveness to a large extent depends on the ability to transform resources into competencies which can enable firms respond to emerging opportunities and threats in the global and local business environment.

The dynamic capabilities theory proposes that the environment in which firms operate, is constantly changing, and requires firms to keep up with the rate of change by developing skills, competencies and techniques across all functional areas (Teece, 2007; Teece et al., 2016). The dynamic capabilities theory further posits that in a constantly evolving environment, businesses need to demonstrate strategic agility to respond to new opportunities in a timely manner (Teece et al., 2016). The theory conceptualizes opportunities as time-bound events, which require immediate and appropriate firm response through strategic configurations of resources (Teece et al., 2016; Teece, 2017). Thus, the term “dynamic capabilities” is in reference to the need to develop skills and competencies that can empower firms in responding to the changing environment and stakeholder needs (Teece et al., 1997). Clearly, one major assumption the theory submits is that to be successful in the ever-changing business environment, firms need to constantly upgrade their competencies and skills.

Another assumption underpinning the dynamic capabilities theory is in relation to the processes required to attain competitive advantage. The theory postulates that the process of attaining competitive advantage is dependent on the firm’s ability to exploit opportunities. However, it is impossible to exploit opportunities without first of all developing skills and

competencies across all functional areas of the firm (Morgan et al., 2009; Ferreira & Coelho, 2017; Xu et al., 2018). Therefore, proponents of the dynamic capabilities theory argue that a firm's ability to innovate is essential to its quest for sustainable competitive advantage (Teece et al., 1997). This has led various scholars to decompose the theory into component parts that include innovative capability, adaptive capability and exploration capability (Terán-Yépez et al., 2020; Provasnek et al., 2017). These components of the theory provide further insight into the nature of competencies required to capitalize on opportunities in a firm's environment.

Leading scholars assert that firms must continuously configure both internal and external capabilities to sustain competitiveness, while simultaneously fostering the development of new capabilities that align with stakeholder expectations (Teece, 1982; Wernfelt, 1984; Teece et al., 1997). A fundamental dimension of dynamic capabilities involves the ability of organizations to transcend cognitive constraints and framing biases shaped by historical experiences. Teece (2007) identifies three advanced cognitive abilities integral to dynamic capabilities: the capacity to recognize and interpret emerging opportunities and threats, the capability to effectively seize those opportunities, and the strategic agility to restructure resources and organizational frameworks to sustain long-term competitive advantage. A review of the literature on dynamic capabilities reveals three distinct conceptualizations of history: as a fixed asset or resource, as a process through which capabilities become embedded in organizational routines, and as a socially constructed perception shaped by collective cognitions that link past experiences to an envisioned future (Sudabby et al., 2019). Each interpretation highlights the role of historical context in shaping a firm's ability to adapt, innovate, and sustain competitive advantage within evolving market environments. The dynamic capabilities theory is particularly relevant to this study as it underscores how sustainable fashion entrepreneurs can harness organizational learning and social media capabilities to adapt, integrate, and reconfigure resources in pursuit of sustainability

objectives. Through organizational learning, entrepreneurs absorb industry best practices and refine client engagement strategies, while social media capabilities enable them to acquire the knowledge and skills necessary to effectively communicate sustainability narratives, build legitimacy, and expand market reach.

4.1.1.2 Applications of the Dynamic Capabilities Theory in this Study

In this study, the dynamic capabilities theory is applied to explain the effect of sustainable entrepreneurship on two outcomes, namely: organisational learning capabilities and social media learning capabilities. The dynamic capabilities theory posits that firms can gain competitive advantage if they leverage on resources to develop skills and competencies in response to market opportunities and threats (Teece, 2014; Teece et al., 2016). In this study, the theory is applied to explain the effect of sustainable entrepreneurship on the development of organisational learning capabilities as well as social media capabilities. In cognisance of the evolving business environment, sustainable entrepreneurs develop organisational learning capabilities that enable them to acquire knowledge, process knowledge and integrate knowledge into their sustainable entrepreneurship practices to boost firm performance. Organisational learning is therefore developed as a capability to optimize opportunity seeking behaviour of firms in the fashion industry.

The core argument this study advances theoretically, is that sustainable entrepreneurship is a catalyst to the development of organisational learning capabilities and also social media capabilities. In the world of fashion, sustainable entrepreneurs are aware of the need to cultivate skills across the entire production and marketing process (DiVito & Bohnsack, 2017; Todeschini et al., 2017). This drives them to build organisational learning and social media capabilities as a skill for transforming knowledge and experience into profitable outcomes (McKeown & Shearer, 2019).

The major argument this study makes in line with the dynamic capability theory is that sustainable entrepreneurs, in recognition of the peculiar environment they operate within, tend to develop organisational learning competencies to be able to integrate sustainable ideas into their business model for maximum firm performance. Per the general postulation of the dynamic capability theory, firms seek to build and configure competencies to respond to opportunities and threats. Applying that perspective to the present study, firms that engage in sustainable entrepreneurship similarly develop skills related to organisational learning, and this enables them to acquire, process and apply knowledge related to their field to spur innovation, meet customer expectations and fulfil performance targets.

Various scholars have argued that dynamic capabilities tools allow firms to configure their resources towards the attainment of sustainable competitive advantage (Teece et al., 1997; Teece, 2014; Teece et al., 2016). This process involves organisational learning, as firms need to acquire knowledge on how to develop these skills before they can actually apply them to their operational structure and subsequent marketing capabilities. This study therefore posits that the dynamic capabilities theory represents an ideal theoretical framework to delineate the process of skill development among sustainable fashion entrepreneurs through organisational learning. Furthermore, sustainable fashion entrepreneurs operating in the circular economy have need of organisational learning competencies in order to maximise sustainability performance. By implication, sustainable fashion entrepreneurs need to adopt learning strategies across their functional areas, especially as it applies to product development, waste management, client relationship and branding/promotion.

The dynamic capability theory thus helps in conceptualising the effect of sustainable entrepreneurship on organisational learning. Franco and Haase (2009) aver that mainstream entrepreneurship has established links to organisational learning, as entrepreneurs strive to adopt knowledge that can lead to transformational outcomes. Dias et al. (2024) also recently

offered some arguments in support of the theorised relationship between entrepreneurship, organisational learning and firm performance, and concluded that these three variables have effects on each other. Juxtaposing their findings to the present study, it is reasonable to argue that entrepreneurs who commit to a sustainable approach, are likely to adopt organisational learning, which further acts as a conduit to firm performance. Rowley (2000) over two decades ago propounded the concept of the “knowledge entrepreneur”, and averred that this was an individual committed to organisational learning in order to succeed in their business venture. These past studies support the arguments of this present study regarding the application of the dynamic capability theory to the proposed nexus between sustainable entrepreneurship and organisational and social media capabilities.

The theory further argues that in order for firms to respond effectively to contemporary opportunities, they need to develop competencies that can provide the firm with a competitive edge (Teece et al., 2016). Presently, Industry 4.0 and the digital revolution has made social networking sites an indispensable tool, especially for entrepreneurs (McKeown & Shearer, 2019). The marketing communications environment which erstwhile was dominated by large corporations and their advertising agencies has now been decentralised, with individual entrepreneurs able to create content to attract and grow an audience for the purpose of stimulating purchase intentions (Salem & Alanadoly, 2021; Jacobson & Harrison, 2022). Social media capabilities have therefore also emerged as an important dynamic capability, and this is one of the major arguments this study puts forward.

This study argues that in recognition of the benefits of social media, sustainable entrepreneurs develop competencies in the use of social media, and this is termed as social media capabilities. Social media capabilities are therefore dynamic capabilities that firms are using to promote their businesses and achieve firm performance (Kim & Kim, 2020; Shen, 2024). In the context of this study, the dynamic capabilities theory is used to represent the

development of social media capabilities by sustainable fashion entrepreneurs. In other words, this study posits that sustainable fashion entrepreneurs develop an inclination to harness and cultivate social media capabilities in order to promote their goods, observe their competitors and also engage customers for repeat business and brand loyalty.

In essence, this study leans on the postulations of the dynamic capabilities theory to argue that the practice of sustainable fashion entrepreneurship results in the development of organisational learning and social media capabilities, which are two important skills required for sustainable fashion entrepreneurs to achieve firm performance. These two capabilities are the result of a culture of sustainability that drives these entrepreneurs to improve their performance by embracing modern technological resources such as social media. Past studies have revealed that there are many capabilities that firms can develop depending on the opportunities and threats that arise in the business environment, and accordingly, the organisational learning and social media capabilities, add to the existing firm capabilities namely: development, marketing, innovative, operational, management and transaction capabilities (Alves et al., 2017). This study applies the theory in explaining the mediating roles of organisational learning capabilities and social media capabilities on the relationship between sustainable entrepreneurship and firm performance in the fashion industry.

4.1.1.3 Criticisms of the Dynamic Capabilities Theory and How They Impact this Study

Theories are subject to review, and over the years, the application and discourse pertaining to a theory lends itself to some scholarly criticism. The dynamic capabilities theory in itself emerged as a theory that highlighted and exposed the limitations of the Resource-Based View (RBV) (Teece et al., 1997; Teece, 2007; Teece, 2014). Proponents of the dynamic capabilities theory argued that merely acquiring resources was not enough to guarantee sustainable competitive advantage (Teece et al., 1997). A counter argument was that to achieve sustainable competitive environment in a dynamic world, businesses needed to

configure resources into skills and competencies (Teece, 2007; Teece, 2014; Teece et al., 2016). Like all theories, the dynamic capabilities theory has come in for some criticism.

One of the main criticisms of the theory is that it is difficult to measure its effects empirically (Collis & Anand, 2019). Some authors have noted that even though the theory acknowledges the needs for firms to develop skills and competencies in response to the changing environment, the theory does not delineate the operational processes leading to the development of these capabilities, thus making its implementation a bit abstract to practitioners (Arend & Bromiley, 2009; Collis & Anand, 2019). Indeed, in the past, scholars criticised the RBV for its limitation in terms of highlighting how firm processes can convert resource bundles into strategic operational competencies (Penrose, 1959). The same argument can be levied against the dynamic capability theory, as it does not explicitly propose how firms can operationalise the various adaptive, innovative and other capabilities.

Further criticisms of the theory stem from the argument that the theory propounds a limited view of the factors contributing to firm competitiveness. According to Collis and Anand (2019), there are a plethora of factors that contribute to firm competitiveness, and capabilities is just one of the many factors. Therefore, some scholars reason that it is bold for the dynamic capability theory to assume that it holds the ultimate key to ensuring sustainable competitive advantage (Arend & Bromiley, 2009; Collis & Anand, 2019). These scholars, further reason that even though the development of dynamic capabilities can provide competitive advantage, all capabilities have some inherent limitations, and this is a view that the present study concurs with. However, this present study notes that this limitation is the reason why it is important to integrate firm capabilities or develop various capabilities in order to respond to each opportunity or threat. Doing so can mitigate the perceived weaknesses of the dynamic capability theory. Newbert (2007) further argued that while dynamic capabilities (of all types and levels) can contribute to significant, they do not represent the ultimate source of sustainable competitive advantage.

Another criticism of the theory is that it does not acknowledge its own perceived limitations. Critics of the theory claim that no one theory holds the key to solving all conceptual, theoretical and practical problems (Arend & Bromiley, 2009). Therefore, it is essential to acknowledge inherent limitations, and allow for further theoretical expansion to account for these limitations. The dynamic capabilities theory has thus far not adopted that posture, thus giving off the impression that its adoption alone can contribute exclusively to firm competitive advantage (Schreyögg & Kliesch-Eberl, 2007; Arend & Bromiley, 2009). Furthermore, all firm activities including the firm structure and processes need to be aligned if the firm is to effectively implement the dynamic capability. From a practical perspective, this is not always the case, given that in spite of the choice of capability, firms are still constrained and thus pursuing a dynamic capability cannot produce an organization capable of doing everything at the same time (Schreyögg & Kliesch-Eberl, 2007; Arend & Bromiley, 2009). Thus, while dynamic capabilities offer strategic value, they share similar inherent limitations with conventional strategies in that they cannot simultaneously deliver every form of competitive advantage at the same time.

The theory has faced considerable critique, with some scholars arguing that it exhibits tautological tendencies, thereby limiting its efficacy in fostering sustainable competitive advantage (Priem & Butler, 2001; Eisenhardt & Martin, 2000). Additionally, concerns have been raised regarding the theory's lack of clarity in delineating its direct impact on firm performance (Protogerou et al., 2005; Helfat et al., 2009; Peteraf et al., 2014; Di Stefano et al., 2014; Ringov, 2017). Empirical investigations into the dynamic capabilities-performance relationship have produced mixed findings. While some studies provide evidence supporting a direct link between dynamic capabilities and firm performance (Henderson & Cockburn, 1994; Deeds et al., 2000), others suggest indirect effects, contributing to an ongoing debate regarding the precise predictive power and implications of dynamic capabilities in driving firm success (Zahra et al., 2006; Easterby-Smith & Prieto, 2007; Protogerou et al., 2011; Peteraf et al., 2014).

These challenges have prompted scholars to advocate for further research aimed at establishing a unified framework that articulates the nature, antecedents, and consequences of dynamic capabilities (Prieto et al., 2009; Hung et al., 2010). Such a framework is essential for enhancing conceptual clarity and providing actionable managerial insights (Chien & Tsai, 2012; Namada, 2017). In spite of these limitations, this study has found reasonable merit to adopt and apply the dynamic capabilities theory to explain the relationship between sustainable fashion entrepreneurship, organisational learning capabilities, social media capabilities and firm performance. The position of this study is that the dynamic capabilities theory provides enough theoretical substance to substantiate the causal effect of sustainable fashion entrepreneurship on the development of organisational learning and social media capabilities.

4.1.2 Entrepreneurial Bricolage Theory

The second theoretical framework informing this study is the Bricolage theory, which has gained prominence in entrepreneurship research (Baker & Nelson, 2005). Baker and Nelson (2005, p. 44) define bricolage as "making do by applying combinations of resources at hand to new problems and opportunities," emphasizing its relevance in entrepreneurial contexts where resource constraints necessitate innovative problem-solving. A review of the literature on entrepreneurial bricolage traces its origins to Levi-Strauss (1966), an anthropologist who introduced the concept to distinguish between the structured approach of an engineer and the adaptive practices of a "bricoleur" or handyman. Levi-Strauss (1966) observed that while engineers systematically acquire specialized tools and materials to execute a predetermined design, bricoleurs work flexibly with available resources, creatively repurposing them to suit emergent needs. In this sense, bricolage represents a dynamic process of improvisation, enabling entrepreneurs to leverage existing materials and knowledge in novel ways to generate valuable outputs.

Over time, scholars have observed that the entrepreneurial bricolage theory has been widely applied across diverse domains, extending beyond business entrepreneurship to areas such as education, legislative processes, and institutional development. Its adaptability across disciplines underscores its relevance as a framework for resourcefulness and creative problem-solving in contexts characterized by constraints and evolving challenges (Hatton, 1989; Hull, 1991; Lanzara, 1998). Traditionally, entrepreneurship researchers have adopted this theory to delineate the process of market creation, whilst further clarifying the nature of embryonic firm growth (Baker et al., 2004; Baker & Nelson, 2005). Aside from its application in the entrepreneurship context, innovation researchers have also adopted this theory to explain the process of creating robust and new designs in a volatile creative environment (Ciborra, 1996; Garud & Karnoe, 2004). This theory, therefore has multi-disciplinary application that extends beyond entrepreneurship.

Senyard, Baker, and Davidsson (2009) characterize bricolage as an action-oriented, "hands-on" approach to problem-solving, emphasizing its applicability in both organizational and individual contexts. This theoretical perspective elucidates how firms and entrepreneurs creatively navigate constraints by leveraging available resources to address challenges both within and beyond their immediate operational environment. A defining trait of bricoleurs is their resistance to the limitations imposed by existing resources (Baker & Nelson, 2005). Rather than conforming to conventional usage, bricoleurs actively seek novel applications for available materials, repurposing them in ways that diverge from their original design intent (Baker & Nelson, 2005; Phillips & Tracey, 2007). This adaptive and resourceful approach positions bricolage as a critical mechanism for fostering innovation and sustaining entrepreneurial resilience in dynamic market conditions. This is one of the hallmarks of creative entrepreneurs, and this process of resource repackaging, transposing, and recombining is described as "creative reinvention" (Rice & Rogers, 1980). These characteristics embedded within the theory of bricolage make it a relevant theoretical choice

for this study. Indeed, the early perspectives discussed in the preceding paragraphs provide optimism for the application of this theory in delineating the relationship between sustainable fashion entrepreneurship, organisational learning capabilities, social media capabilities and firm performance.

4.1.2.1 Origins and Major Assumptions of the Bricolage Theory

Levi-Strauss (1967) introduced the concept of entrepreneurial bricolage without establishing a precise definitional framework, leaving subsequent scholars to refine its theoretical scope (Baker & Nelson, 2005). A review of empirical studies examining bricolage across varied organizational contexts suggests that most firms successfully integrate and repurpose available resources to navigate challenges and capitalize on emerging opportunities (Baker & Nelson, 2005). This adaptive capability underscores bricolage's relevance as a strategic approach for firms operating in dynamic and resource-constrained environments. The cardinal assumption of the bricolage theory therefore is that firms can harness available resources to solve problems and pursue value creating opportunities.

Entrepreneurial bricolage has been conceptualised as "...the method or approach a firm takes to its resource development process" (Steffens & Senyard, 2009, p.5). Resources refer to existing internal and external tangible and intangible possessions that firms can use to create value (Steffens & Senyard, 2009). Barney (2001) classified resources according to internal and external properties. Internal resources comprise of financial capital, human capital, social capital and tangible, physical assets such as machinery, furniture, vehicles, and buildings. External resources comprise of networks and partnerships with various firms including venture capital firms, alliances with qualified professionals, educational institutions and technical consultants (Demirkan, 2018; Huggins, 2010).

The ability of bricoleurs to harness and maximise resources leans into the Resource-Based View (RBV) theory (Barney, 1991). The RBV posits that firms can achieve competitive

advantage by harnessing resources that are valuable, rare, inimitable, and non-substitutable (Barney, 1991; Teece et al., 1997). Bricoleurs operate under the assumption that they can transform existing resources into unique and commercially valuable outputs (De Klerk, 2015; Borchardt et al., 2024), therefore there is some theoretical commonality between the bricolage theory and the RBV, albeit that is not the focus of this study, nor this theoretical discourse. However, tapping into the cursory knowledge of the tenets of the RBV and characteristics of resources that lead to competitive advantage is useful for this present discourse on bricolage and its effect on sustainable entrepreneurship outcomes.

The bricolage theory also assumes that entrepreneurs are able to gain competitive advantage if they transform existing resources for market consumption (Borchardt et al., 2024). Competitive advantage has been described as the situation where firms generate additional or greater economic value than their competitors (Peteraf & Bergen, 2004). Per the assumptions of the bricolage theory, competitive advantage depends on the ability to adopt resources, transform them and present a valuable output to the market. This assumption further portrays the entrepreneur as a creative force within their industry. Entrepreneurs, per the bricolage theory are individuals who achieve competitive advantage by making do with resources at their disposal to create an output that consumers and external stakeholders have need of. According to Porter (1985), firms can achieve competitive advantage through cost advantage or differentiation. In the case of bricoleurs, adopting and maximising existing resources can achieve both conditions for competitive advantage. The creative use of resources by bricoleurs can enable them to make marginal cost savings from inputs, whilst also generating higher prices due to the uniqueness of the output created. Furthermore, bricoleurs are typically known to be creative, and this can allow them to differentiate their brand, their products and services from other competitors, thus facilitating competitive advantage.

Empirical research indicates that firms engaging in entrepreneurial bricolage actively pursue opportunities that other businesses overlook due to perceived resource constraints (Gregori et al., 2019; Borchardt et al., 2024). Garud and Karnøe (2004) further highlight that entrepreneurial bricolage provides firms with a distinct approach to resource acquisition and utilization, granting them a competitive edge over counterparts constrained by conventional resource perceptions. Moreover, proponents of bricolage theory observe that firms embracing this approach do not postpone action until the "right" resources become available; instead, they leverage existing materials and capabilities to devise innovative solutions in real-time (Sunduramurthy et al., 2016; Servantie & Rispal, 2020). This adaptability underscores the strategic relevance of bricolage in dynamic and resource-scarce business environments. Rather, they find joy in creative disruption by changing the “rules of the game” regarding what resources are, and how they should be used. Fisher (2012) describes this as “creative reinvention”.

The theory therefore postulates that entrepreneurs need creative reinvention in order to transform their existing resources into valuable, rare and inimitable resources that can be leveraged to gain competitive advantage. The theory further argues that by adopting a creative reinvention mindset, entrepreneurs can avoid the pitfall of pursuing for impossible or difficult to obtain resources, and rather focus on accessible resources that have transformational value (Sunduramurthy et al., 2016).

Prior studies have therefore concluded that the bricolage theory helps smaller businesses and firms in generating the skills and other competencies needed to maximise resources and gain new resources in the course of time (Houtbeckers, 2016). Entrepreneurship literature widely recognizes the inherent resource limitations faced by small businesses, including start-ups and SMEs. Within this context, bricolage is increasingly viewed as a viable mechanism for addressing these constraints, enabling entrepreneurs to creatively leverage available resources to sustain and grow their ventures (Dayour et al., 2020). Building on this

perspective, the present study proposes that entrepreneurial bricolage may serve as a strategic tool for sustainable fashion entrepreneurs, equipping them with the adaptability and resourcefulness necessary to achieve strong firm performance in an increasingly competitive industry.

4.1.2.2 Application of the Bricolage Theory in This Study

This study contends that the Bricolage theory provides a valuable lens for understanding the relationship between sustainable fashion entrepreneurship and its broader organizational and strategic outcomes. At its core, bricolage embodies the entrepreneurial ability to create value under resource constraints by repurposing available materials and opportunities in innovative ways (Baker & Nelson, 2005). This principle is particularly relevant to sustainable fashion entrepreneurs, who often navigate volatile market conditions and limited access to conventional resources. Fisher (2012, p. 1027) articulates the boundary conditions necessary for bricolage to be effective, emphasizing that entrepreneurs must operate within constrained environments while maintaining access to resources that enable them to “make do.” In this regard, bricolage does not merely represent improvisation, it signifies a strategic approach to problem-solving and innovation, allowing entrepreneurs to reimagine what is possible within their unique circumstances.

Fisher (2012) further argues that this theory is most applicable to entrepreneurs operating in economically challenged settings, where traditional business models may not be viable, and resourcefulness becomes a defining factor in long-term success. For sustainable fashion entrepreneurs, this perspective offers compelling implications. The industry is inherently shaped by ethical considerations, shifting consumer preferences, and environmental imperatives all of which demand agility and creativity in resource utilization. By engaging in bricolage, these entrepreneurs do not simply adapt to their constraints; they transform them into strategic advantages, fostering resilience and innovation while advancing

sustainability initiatives. Through this lens, bricolage is not only a survival mechanism but a catalyst for competitive differentiation and long-term business viability.

The Ghanaian fashion industry can be described as a penurious environment, with intense competition, limited government support, and precarity characterising the industry (Amankwah et al., 2022; Amankwah et al., 2024; Gyampoh et al., 2024). By adopting the bricolage theory, this study argues that sustainable fashion entrepreneurs can cultivate certain capabilities that can allow them to make use of available resources to satisfy and achieve desired organisational outcomes. The bricolage theory is used in this study to explain how fashion entrepreneurs in Ghana leverage on the four components of sustainable entrepreneurship posited in this study, that is, design practice, upcycling, energy conservation and waste reduction to achieve firm performance. The theory is further used to explain how the need to thrive in a circular economy and achieve sustainable entrepreneurship objectives compels these entrepreneurs to develop organisational learning and social media capabilities.

Based on these characteristics of the bricolage theory, this study adopted this theoretical framework to explain the process and concept of sustainable fashion entrepreneurship in Ghana, and highlight how fashion entrepreneurs are making use of resources in alternative ways that can generate value and offer them competitive advantage in the local industry. The theory was also used to explain how sustainable fashion entrepreneurs develop organisational learning and social media capabilities which help them to navigate the penurious environment they operate in, and achieve significant firm performance nonetheless.

4.1.2.3 Criticisms of the Bricolage Theory and How They Impacted this Study

A review of the extant literature reveals limited criticisms on the bricolage theory. This may probable be due to the fact that the theory has been pivotal in entrepreneurship studies over the years, and has helped many researchers clarify important relationships, processes and outcomes in entrepreneurship research (Senyard et al., 2009; Fisher, 2012). In this study, the theory plays a vital role in explaining how sustainable fashion entrepreneurs make do with available resources in terms of fabrics, design, and promoting their businesses through available social media resources. The theory has helped in addressing these conceptual relationships and therefore, the current study offers no criticism for the theory.

4.1.3 Integrating the Dynamic Capabilities Theory and Bricolage Theory in the Sustainable Fashion Entrepreneurship and Firm Performance Nexus

Integrating the dynamic capabilities theory and the bricolage theory has several benefits for this study. It has been established in the introduction and context chapters that most fashion entrepreneurs in Ghana are micro and small-scale enterprises (Adjabeng, 2022; Afun et al., 2023; Amankwah et al., 2024). These enterprises lack the requisite corporate strategies and capabilities larger corporations use to achieve competitive goals (Afun et al., 2023). This poses an obvious challenge to implementing sustainable fashion entrepreneurship in Ghana. The lack of skills and competency development among fashion entrepreneurs requires a theoretical integration that explains how small and micro-enterprises can develop enterprise capabilities to become profitable whilst promoting sustainability. Fusing the tenets of the dynamic capabilities and bricolage theory promotes the idea that sustainable fashion entrepreneurs must develop important capabilities such as organisational learning and social media to achieve profit and environmental objectives.

The dynamic capabilities theory explains how fashion entrepreneurs grow and adapt to their changing business over time by continuously learning from competitors, industry trends and

global developments. The dynamic capabilities theory is applied in this study to explain how sustainable fashion entrepreneurs are prone to develop organisational learning competencies due to the need to stay abreast with the latest developments in the industry to achieve maximum performance. Fusing the dynamic capabilities with the bricolage theory further explains how fashion entrepreneurs can use existing resources such as mobile phones, personal laptops, televisions and social media to learn new things that positively influence their approach to sustainability and performance within the fashion industry. Similarly, the two theories are used to explain how the use of social media accounts such as WhatsApp, Instagram, Facebook, X and Snapchat help fashion entrepreneurs communicate and interact with clients to stimulate customer attraction and retention. Social media capabilities are dynamic capabilities that allow fashion entrepreneurs to leverage social media to promote their business, acquire business intelligence and build relationships with clients.

These two theories were integrated in this study to provide a complementary lens on entrepreneurial competitiveness and resourcefulness within Ghana's fashion industry. Dynamic capabilities theory emphasizes how firms build, adapt, and reconfigure competencies to sustain competitive advantage in rapidly changing environments, highlighting the strategic role of organizational learning and capability development. In contrast, bricolage theory explains how entrepreneurs confronted with resource constraints, a phenomenon common among micro and small-scale enterprises in Ghana, creatively recombine and improvise with whatever materials, networks, and knowledge are at hand to generate innovative solutions. Taken together, these perspectives illuminate both the deliberate cultivation of dynamic capabilities and the improvisational practices of bricolage, offering a more holistic understanding of how sustainable fashion entrepreneurs navigate institutional voids, scarcity, and market turbulence to achieve resilience and growth.

Within Ghana's fashion sector, organizational learning represents the bridge through which bricolage practices evolve into dynamic capabilities. Entrepreneurs often begin with bricolage, improvising by sourcing fabrics from informal suppliers, experimenting with new designs, or mimicking competitor strategies under resource constraints. These improvised actions generate experiential knowledge that, through organizational learning, becomes codified into routines and competencies. Social media capabilities accelerate this process by providing real-time access to consumer feedback, competitor benchmarking, and trend analysis, enabling micro-entrepreneurs to transform ad-hoc improvisations into structured, adaptive strategies. In this way, bricolage supplies the creative responses to scarcity, while organizational learning, facilitated by social media, absorbs and systematizes those responses into dynamic capabilities. The interaction of these mechanisms explains how sustainable fashion entrepreneurs not only "make do" with limited resources but also build enduring competencies that enhance competitiveness and resilience in volatile markets.

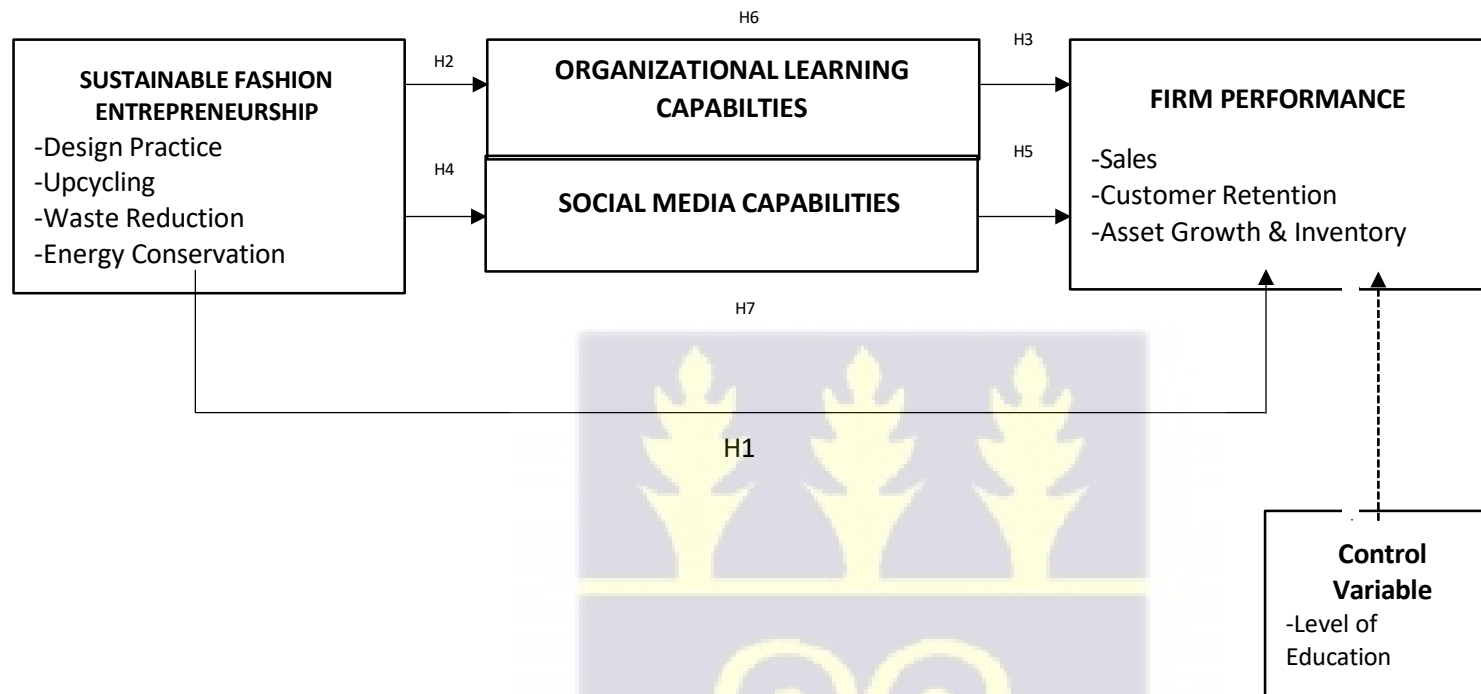
4.2 Conceptual Framework and Hypotheses

This study argues that sustainable fashion entrepreneurship can directly predict firm performance of fashion entrepreneurs, and indirectly through organisational learning and social media capabilities. The baseline relationship that this study seeks to examine is the nexus between sustainable entrepreneurship and firm performance. This relationship is further influenced by some intervening variables, notably, two mediating variables. Mediators have been defined as variables that cause the effect of a variable on another variable (Preacher et al., 2010; Woody, 2011; Sarstedt et al., 2020). In this study, mediating variables have been adopted to highlight the effect of sustainable entrepreneurship on firm performance through previously untested mediating variables in the context of the fashion industry.

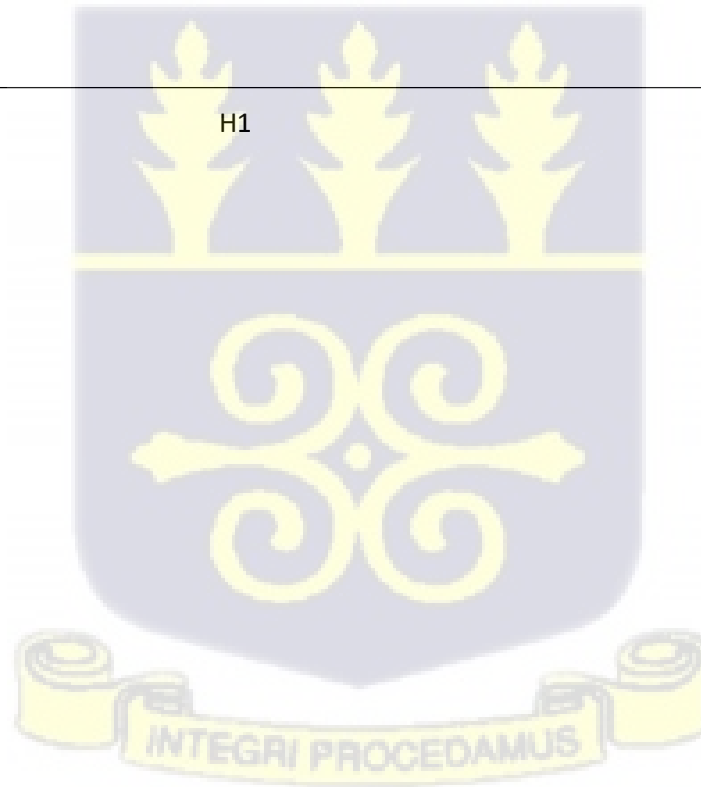
Organisational learning capabilities have been conceptualised as a mediating variable that accounts for the effect of sustainable entrepreneurship on firm performance. The framework aptly illustrates this intervening role, whilst also highlighting the second mediating variable, namely: social media capabilities. This variable is also posited to mediate the relationship between sustainable fashion entrepreneurship and firm performance. Some control variables were identified and featured in the framework, and these include: age of the firm, size of the firm and form of ownership. Figure 4.1 presents a graphical illustration of the conceptual framework underpinning this study's objectives.



Figure 4. 1: Conceptual Framework



Source: Author's Conceptualisation



4.2.1 Sustainable Entrepreneurship and Firm Performance

The mainstream entrepreneurship literature has examined the relationship between entrepreneurship and firm performance (Kaya, 2006; Mohamad et al., 2011; Lechner & Gudmundsson, 2014; Coleman, 2016; Ziyae & Sadeghi, 2020). Past studies have confirmed that entrepreneurial behaviour of firms often positively impacts firm performance and results in market growth (Kuratko et al., 2001; Sarkar et al., 2001; Basco et al., 2020). As such, empirical evidence confirms the nexus between entrepreneurship and firm performance, suggesting that the more a firm demonstrates entrepreneurial competencies in responding to opportunities in its environment, the better it would perform relative to other firms in the same industry (Basco et al., 2020; Ziyae & Sadeghi, 2020). Whilst these past studies have been useful in assessing the effect of entrepreneurial behaviour on firm performance, the focus of this study is to assess how sustainable entrepreneurship impacts on firm performance.

One of the earliest studies exploring the link between sustainable entrepreneurship and business performance was by Soto-Acosta et al. (2016). In their study, the authors found that sustainable entrepreneurship had a positive and significant effect on business performance, particularly in relation to profits. 50% of the variance in business performance was accounted for by the predictive role of sustainable entrepreneurship, thus suggesting that sustainable entrepreneurship has a positive effect on the performance of SMEs, as found in the study (Soto-Acosta et al., 2016).

Other studies that have investigated the concepts of sustainability in relation to firm performance have focused on the effect of sustainable entrepreneurship orientation (Afum et al., 2021), green entrepreneurship (Rexhepi et al., 2024), and sustainable supply chain management (Tipu & Fantazy, 2018). A recent study by Appiah et al. (2024) established that

green entrepreneurship orientation contributes to green innovative performance as well as firm performance. Their study further demonstrated that the practice of sustainable entrepreneurship can have positive performance outcomes for businesses. Similarly, Ahmad et al. (2020) explored the relationship between sustainable entrepreneurship practices and sustainable performance of SMEs. A positive effect was established between the two variables, providing further impetus for the present study's argument that sustainable fashion entrepreneurship can impact firm performance.

Empirical research on sustainable entrepreneurship has consistently demonstrated a positive relationship between sustainable entrepreneurial practices and firm performance, particularly when examined through the lens of sustainability orientation (Criado-Gomis et al., 2018; Habib et al., 2020). The prevailing consensus within this body of literature suggests that firms adopting a sustainability-driven entrepreneurial orientation are more likely to achieve favourable business outcomes, particularly in terms of sustainability performance (Soto-Acosta et al., 2016; Provasnek et al., 2017; Afum et al., 2024). The well-established link between sustainability orientation and sustainability performance provides a compelling foundation for postulating that sustainable fashion entrepreneurship can serve as a strategic driver of firm performance in the fashion industry. By integrating sustainability principles into entrepreneurial decision-making, firms in this sector can enhance their competitive positioning while contributing to broader environmental and social objectives.

Researchers have examined the effects of design practice in the fashion industry and observed that its implementation has the potential to result in improved performance among fashion entrepreneurs (Hur & Bervely, 2011; Fletcher, 2014; Nerurkar, 2016). Design forms an important part of the fashion entrepreneurs process, and can determine how well they perform in terms of brand appeal and sales (Hur & Cassidy, 2019; Claxton & Kent, 2020).

Even though the literature on sustainable fashion entrepreneurship has acknowledged the important role of design in achieving firm performance (Rahman & Gong, 2016; Kumar, 2017), few empirical studies have tested this relationship statistically. Existing studies on design practice and performance related outcomes have mostly focused on sustainability design experiences (Lawless & Medvedev, 2016), consumer perceptions (Hur & Cassidy, 2019), as well as sustainable fashion design and consumer tastes (Kam & Yoo, 2022). However, a recent study by Li et al. (2024) hints at a possible relationship between design practice and firm performance in the sustainable fashion industry.

Upcycling in the sustainable fashion industry has garnered scholarly attention over the years, as scholars have attempted to establish a link between the practice and sustainability performance outcomes (Han et al., 2017; Marques et al., 2019; Arana et al., 2020; Nayak et al., 2021). Upcycling contributes to the sustainable fashion process and has some effects on sustainability performance (Chao, 2019; Chuma et al., 2019). Even though upcycling is practiced as a form of waste management, its effect on performance outcomes especially in the fashion industry cannot be neglected, especially from a consumer perception perspective (Park & Shin, 2014; Khandual & Pradhan, 2019). Upcycled clothes often appear to be innovative and creative, and stimulate consumer interest and demand (Janigo et al., 2017). This ultimately boosts sales of the products and increases profits for fashion houses dealing in upcycled fashion products. Upcycling can therefore be construed as a manifestation of bricolage practices in sustainable fashion entrepreneurship. Therefore, it is reasonable to argue that the adoption of upcycling as a sustainable fashion entrepreneurship practice, can have a positive effect on firm performance.

Energy conservation is regarded as an important component of sustainable fashion entrepreneurship (Lorek & Lucas, 2004; Moon et al., 2014; Chaves & Villalobos, 2021). In the circular economy, sustainable entrepreneurs strive to adhere to prudent energy

conservation methods (Çay, 2018; Nayak et al., 2019). Energy conservation has been noted to have cost implications for businesses, especially in relation to lowering overhead costs (Roos et al., 2017). High overhead costs negatively impact firm profitability and contribute to low performance outcomes (Pui-Yan Ho & Choi, 2012). Energy represents an important resource that can contribute to the performance of sustainable fashion entrepreneurs, given their reliance on energy to power machines and equipment in the development of fashion products (Hasan & Leonas, 2018).

Sustainable entrepreneurs prioritize environmental preservation (Gwilt & Rissanen, 2012; Mukendi et al., 2020), and this contributes to waste management practices that minimize the effects of their business operations on the environment (Henninger et al., 2016; Papamichael et al., 2022). Some researchers have explored the practice of waste management in the context of sustainable fashion, and found that fashion entrepreneurs have the option to reuse, recycle or dispose of fashion materials and other inputs (Weber et al., 2017; Claxton & Kent, 2020). Waste management is an important part of the sustainability fashion entrepreneurship process, and from a bricolage theory perspective, fashion entrepreneurs are expected to be prudent in the management of waste generated through their activities, especially in relation to upcycling unused fabric, pieces of fabric, buttons and other excesses which would otherwise be discarded.

Nayak et al. (2021) found that fashion waste management was a problem that most fashion houses in developing countries encountered, and recommended waste management practices as a mechanism for churning fashion waste into upcycled products to boost firm performance and reduce environmental pollution. The effectiveness of waste management practices of sustainable fashion entrepreneurs also depends on their social norms and attitudes (Dewanto & Belgiawan, 2020). Nonetheless, the role of waste management in sustainable fashion has been confirmed to have an effect on the performance of fashion entrepreneurs (Todeschini

et al., 2017; Claxton & Kent, 2020; Dangui et al., 2021). The findings of all the aforementioned studies provide reasonable ground for measuring sustainable fashion entrepreneurship as a composite, first-order construct comprising items measuring design practice, upcycling, waste reduction and energy conservation. Even though a review of the extant literature reveals a paucity of studies specifically examining the direct relationship between sustainable entrepreneurship and firm performance in the fashion sector, the existing empirical studies on the concepts of sustainability, entrepreneurship and its links to firm performance have confirmed that a positive relationship is possible (Rezaei & Ort 2018; Habib et al., 2020; Soares & Perin 2020; Umrani et al., 2022; Han & Niu, 2024). On the basis of that, this study proposes the following hypotheses, anchored on the bricolage theory:

H1- Sustainable entrepreneurship has a positive effect on firm performance in the fashion industry

4.2.2 Sustainable Entrepreneurship and Organisational Learning Capabilities

Sustainable entrepreneurship promotes the concepts of sustainability and the circular economy, in a bid to minimize waste and maximise efficiency in business practices (Del Vecchio et al., 2021; Manea et al., 2021; Mondal et al., 2024). To be able to achieve these goals, businesses need to evolve by acquiring and leveraging on available knowledge resources to develop competencies that can boost performance outcomes. Organisational learning represents one of the mechanisms for firm growth, and has over the years played an important role in the entrepreneurship domain (Alerasoul et al., 2021; Agyabeng-Mensah et al., 2021; Sahubzada et al., 2024). Sustainable entrepreneurship advocates for a holistic approach to business, and prioritizes the preservation of the environment, the use of sustainable inputs and adherence to the values of the circular economy (Del Vecchio et al., 2021; Le et al., 2022; Mondal et al., 2024). Firms that practice sustainable entrepreneurship are configured to perform better through a focus on improvement that is linked to organisational learning capabilities.

The literature on sustainable entrepreneurship acknowledges the ties between the practice of sustainability and a firm's propensity to lean towards organizational learning (Brandi & Thomassen, 2021; Kummitha & Kummitha, 2021; Klapper & Fayolle, 2024). Del Vecchio et al. (2021) argued that to be able to achieve the goals of the circular economy, firms practicing sustainable entrepreneurship needed to embrace knowledge acquisition and learning through formal educational channels. Similarly, Obrecht (2016) posited that firms practicing sustainable entrepreneurship naturally sought for knowledge on skills development and other competencies required to become effectual entrepreneurs.

A recent study by Dias et al. (2024) established a relationship between organisational learning, entrepreneurship and firm performance. The aforementioned studies provide some conceptual and theoretical basis to posit that sustainable entrepreneurship can positively impact organizational learning capabilities. Additionally, Johnsen et al. (2018) asserted that organisations that practiced sustainable entrepreneurship always sought ways to disrupt their marketplace, hence supporting the notion that these firms develop learning capabilities that enable them to improve competitive processes and outcomes. Jenkins (2018) also found that entrepreneurial firms embraced organizational learning as a strategy for achieving sustainable future outcomes.

Sustainable entrepreneurs and organisations develop organizational learning capabilities that allow them to acquire new knowledge about products, consumers, competitors and new trends in branding, promotion and customer acquisition and retention (Lans et al., 2014; Brandi & Thomassen, 2021). Evidence from recent studies provides further compelling arguments that support the notion that sustainable entrepreneurship can positively impact on organizational learning capabilities (Baiocco & Panicia, 2024; Mai & Nguyen, 2024). For example, Mai and Nguyen (2024) found that organizational learning has become essential for entrepreneurs due to its positive effects on entrepreneurial success. Learning

on the postulations of the dynamic capability theory, this study proposes the following hypothesis:

H2- Sustainable entrepreneurship has a positive effect on organizational learning capabilities in the fashion industry

4.2.3 Organisational Learning Capabilities and Firm Performance

Empirical research suggests that firms adopting a learning orientation can positively influence organizational performance (Oh & Han, 2020; Do & Mai, 2022). Over time, scholars have extensively examined the relationship between organizational learning and firm success, concluding that performance outcomes are shaped by the extent to which firms engage in continuous learning and knowledge exchange (Otioma, 2024; Sahibzada et al., 2024). Numerous studies have explored the impact of organizational learning on business performance across various disciplines, highlighting its role in fostering innovation, adaptability, and competitive advantage (Schauffer & Willauer, 2004; Tajeddini et al., 2017; García-Villaverde et al., 2017; Shamim et al., 2017; Oh, 2019). By cultivating a strong learning orientation, firms enhance their ability to respond to market changes, improve operational efficiency, and sustain long-term growth.

Organizational learning gained substantial attention among scholars and practitioners from the 1970s through the 1990s, largely in response to the growing complexity and rapid pace of change within business environments (Oh, 2019). Early studies on organizational learning identified two distinct perspectives that underpin the learning process. One perspective conceptualizes learning as an ongoing, informal phenomenon, where employees acquire knowledge through routine interactions and experiential engagement within the workplace. In contrast, another school of thought views organizational learning as a structured process focused on the intentional acquisition and systematic dissemination of knowledge across various levels of the firm (Nonaka, 1994; Andrews & Delahaye, 2000). Subsequent research

has reinforced the notion that organizational learning serves as a foundation for effective knowledge management, directly influencing firm performance. This study therefore posits that the ability to acquire, process, and leverage knowledge can yield significant benefits for sustainable entrepreneurs, equipping them with the strategic agility required to navigate industry challenges. Prior empirical evidence strongly supports this assertion, demonstrating a positive link between organizational learning and enhanced firm performance (Sinkula, 1994; Santos-Vijande et al., 2012; Bartsch et al., 2014; Nieves & Haller, 2014; Liu, 2018). By fostering a robust learning orientation, sustainable entrepreneurs can refine their business models, drive innovation, and cultivate long-term competitiveness in an evolving market landscape.

Prior research has extensively examined dynamic capabilities as a mechanism for firms to integrate, adapt, and reconfigure their competencies in response to evolving market conditions (Teece et al., 1997). Building on this foundation, Eisenhardt and Martin (2000) conceptualize dynamic capabilities as strategic routines that enable organizations to effectively realign their resource configurations in an increasingly dynamic environment. Similarly, Zahra and George (2002) highlight the transformative potential of dynamic capabilities, emphasizing their role in facilitating resource reconfiguration to sustain competitive advantage. Zollo and Winter (2002) further argue that dynamic capabilities contribute to firm performance by fostering stable yet adaptive patterns of collective learning and action, reinforcing the link between organizational agility and long-term success. Based on this perspective, the present study finds merit in conceptualizing organizational learning as a core firm capability that can serve as a predictor of firm performance. As a dynamic capability, organizational learning enhances an organization's ability to continuously create, extend, and modify its resources, a process that has been empirically linked to improved business performance (Helfat et al., 2009).

In adopting and implementing organisational learning capabilities, fashion entrepreneurs are ensuring that knowledge resources on developments within the fashion industry can be leveraged into firm performance leading to competitive advantage. Sirmon et al. (2007) argue that dynamic capabilities are choices made in the structuring, bundling, and leveraging its resources. Therefore, this study's argument that sustainable fashion entrepreneurs can harness their strategic resources through organisational learning capabilities to generate positive firm performance is well grounded. Additional support for this viewpoint stems from Teece (2007), who argued that any form of dynamic capability provides firms with sensing, shaping and seizing competencies, that are the product of organisational learning, and that can impact the financial and non-financial performance of firms.

Helfat and Peteraf (2004) assert that dynamic capabilities are instrumental in sustaining competitive advantage amid turbulent environments. Building on this premise, the present study contends that organizational learning capabilities serve as a critical predictor of firm performance, even within volatile sectors such as Ghana's fashion industry. While empirical investigations exploring the specific nexus between organizational learning and firm performance within the fashion industry remain limited, existing research provides compelling grounds for asserting that organizational learning fosters business success (Easterby-Smith & Prieto, 2007; Peteraf et al., 2014). By cultivating adaptive learning mechanisms, firms can navigate industry uncertainties, enhance innovation, and sustain long-term competitiveness despite external disruptions

H3- *Organisational learning capabilities have a positive effect on firm performance in the fashion industry*

4.2.4 Sustainable Entrepreneurship and Social Media Capabilities

Sustainable entrepreneurs are deemed to be innovative and in tune with modern developments and trends in production, technology and marketing (Lüdeke-Freund, 2020;

Anand et al., 2021; Veleva, 2021). Consequently, it is unsurprising that some studies have probed the connection between sustainable entrepreneurship and social media usage (Gregori & Holzmann, 2020; Olanrewaju et al., 2020; Hussain et al., 2021). For example, the study by Marchand et al. (2021) establishes social media capabilities as competencies that allow firms to deploy social media strategies to boost firm performance.

This study advances the argument that sustainable entrepreneurship plays a crucial role in shaping and enhancing social media capabilities within business operations. Grounded in the principles of Bricolage theory, entrepreneurs are positioned as adaptive problem-solvers who improvise and develop essential competencies to navigate resource constraints and drive business success (Secundo et al., 2021). Expanding on established strategic frameworks (e.g., Morgan, Whitler, Feng, & Chari, 2019), social media strategy is conceptualized as a structured approach that defines clear objectives for digital engagement. It outlines how firms can collaborate with their customers to achieve strategic goals and foster long-term value co-creation. Moreover, it delineates the distinct functionalities of various social media platforms (e.g., Facebook, Instagram, and YouTube) and clarifies how these channels should be integrated to optimize overall strategic effectiveness (Andzulis et al., 2012; Kaplan & Haenlein, 2012; Kumar et al., 2014). By leveraging a bricolage-driven approach, sustainable entrepreneurs can harness social media as an innovative tool for growth, engagement, and competitive advantage, particularly in dynamic market environments.

A well-developed social media strategy involves intentional decision-making regarding platform selection, hashtag utilization, search engine optimization, engagement with trending topics, and content marketing initiatives (Andzulis et al., 2012; Kumar et al., 2014). Additionally, it requires the establishment of clear protocols for handling negative feedback and addressing disruptive online behaviors, such as trolling, to protect brand reputation and maintain constructive digital interactions. This study conceptualizes social media

capabilities as the extent to which a firm systematically defines and documents its social media objectives, ensuring alignment with overarching organizational or business unit goals. Rather than focusing on the static components of a strategy, this study emphasizes the degree of strategic development, positioning social media as a dynamic capability that evolves in response to shifting market demands and digital engagement trends. The study further argues based on existing literature that sustainable fashion entrepreneurs are more likely to adopt social media networks and develop competencies to achieve optimum firm performance (McKeown & Shearer, 2019; Salem & Alanadoly, 2021). Thus, the following hypothesis is proposed:

H4- Sustainable entrepreneurship has a positive effect on social media capabilities in the fashion industry

4.2.5 Social Media Capabilities and Firm Performance

Research has consistently highlighted the positive impact of social media adoption on business and firm performance (Tarsakoo & Charoensukmongkol, 2020; Tajvidi & Karami, 2021). Platforms such as Facebook, Instagram, TikTok, and Snapchat have emerged as critical tools for driving sales, expanding market access, and facilitating business growth (Chatterjee & Kar, 2020; Zhang et al., 2020). Given its strategic significance, the development of social media capabilities has been identified as a key determinant of firm success (Garg et al., 2020; Tajvidi & Karami, 2021). Existing literature suggests that the adoption and strategic use of social media can provide firms with a competitive advantage, enabling them to enhance brand visibility, customer engagement, and overall performance outcomes (Qalati et al., 2021; Ye et al., 2022). Additionally, several studies have examined social media within the framework of dynamic capabilities theory, affirming that social media usage constitutes a dynamic capability that equips firms with essential skills and competencies to thrive in the digital landscape (Trainor, 2012; Ye et al., 2022; Marchand et al., 2021). By leveraging social media as a transformative resource, firms can strengthen their adaptability and long-term market positioning.

The strategic integration of dynamic capabilities is increasingly acknowledged as a means to enhance managerial flexibility and optimize resource allocation, particularly within complex environments involving multiple stakeholders and collaborative networks (Haarhaus & Lienen, 2020). Digital platforms, particularly social media, have emerged as crucial facilitators in this process, enabling organizations to navigate external ecosystems while fostering interaction, knowledge exchange, and information flow across organizational boundaries. Consequently, social media is receiving heightened attention and investment from leadership teams, reflecting its growing significance in corporate strategy. Notably, industry forecasts suggest that business leaders anticipate a minimum 50% increase in social media marketing budgets in the near future, underscoring the perception that these platforms have become fundamental components of modern business intelligence (Drenik, 2021). In response to the escalating demand for real-time market insights, social media has evolved into a strategic asset that translates external data into actionable internal capabilities, ultimately supporting informed decision-making and enhancing competitive advantage.

Social media operates as a dynamic capability that enables firms to sense market changes, acquire new insights, and continuously reconfigure their digital resources to optimize marketing and branding outcomes (Gelhard et al., 2016). Scholars have highlighted that various capabilities contribute to a firm's dynamic capabilities, with social media playing a crucial role in fostering social networking, interactivity, and integrative digital strategies (Li & Liu, 2014; Vrontis et al., 2020). The diverse range of capabilities that define dynamism suggests that firms with varying profiles require different essential competencies to navigate the evolving digital business environment. In light of increasing external uncertainties and the interactive nature of stakeholder engagement, this study argues that developing strong social media capabilities is integral to enhancing firm performance. Specifically, adaptability and agility emerge as key characteristics of social media as a dynamic capability, enabling firms to respond swiftly, flexibly, and effectively to customer interactions and evolving market conditions (Weber & Tarba, 2014; Eckstein et al., 2015; Ye et al., 2022).

Social media encompasses digital tools that enable users to create and share content instantaneously with a broad audience, significantly extending the reach of businesses across diverse communities (Dellarocas, 2004). The widespread adoption of social media has driven substantial transformations in communication, collaboration, content creation, and economic activities within society (Appel et al., 2020). These platforms facilitate social connectivity, fostering deeper interaction within digital environments (Burke, Marlow, & Lento, 2010; Akhtar et al., 2018). Beyond its role as a communication medium, social media serves as a strategic resource for firms, enabling them to identify emerging opportunities and potential risks within their operational landscape. To fully integrate social media as a dynamic capability, firms must not only incorporate these platforms into their business practices but also commit to sustained investment in digital engagement. Within this study, social media capabilities are conceptualized as the extent to which firms leverage social media for real-time information acquisition, mutual communication, value co-creation, stakeholder interaction, and competitor monitoring (Foroudi et al., 2019; Parsons & Lepkowska-White, 2018). Strengthening these capabilities can enhance firms' adaptability, market intelligence, and long-term competitiveness in an increasingly digital business environment. The application of social media can function as a transformative dynamic capability that can improve the performance of firms in the fashion industry, thus leading to the formulation of the following hypothesis:

H5- *Social media capabilities have a positive effect on firm performance in the fashion industry*

4.2.6 Mediating Role of Organisational Learning Capabilities

Firms need to adapt to environments which are constantly changing due to technological advancement, globalisation and the competitive nature of industries (Teece, 2007; Teece, 2014; Teece et al., 2016). Owing to this, firms need to acquire new knowledge to facilitate the development of internal and external competencies to achieve optimum firm

performance. Organisational learning capabilities have been touted as an important firm-level capability that can facilitate the attainment of firm performance (Hooi, 2019; Do et al., 2022). This study aligns with existing research that is founded on the core assumption that learning occurs not only at the individual level but also within organizations as collective entities (Argyris & Schon, 1996; Senge, 2006; Wang & Ahmed, 2004). Organizational learning is viewed as a dynamic process that enables firms to acquire, adapt, and apply knowledge to enhance decision-making, improve efficiency, and sustain competitive advantage in evolving business environments.

Organizational learning takes place when individual members acquire knowledge on behalf of the organization, resulting in collective learning that exceeds the mere sum of individual contributions (Argyris & Schon, 1996). Argote et al. (2020) support this perspective, emphasizing that organizational learning transcends the aggregation of individual knowledge. However, an alternative viewpoint argues that organizational learning is entirely dependent on individual learning, positioning it as a direct extension of personal knowledge acquisition (Wang & Ahmed, 2004). Organizational learning is defined as “a process through which experience performing a task is converted into knowledge, which, in turn, changes the organization and affects its future performance” (Argote et al., 2020, p.4). This transformation is reflected in structural modifications within the organization, including the establishment of routines, rules, standards, and job descriptions, which collectively reinforce learning and adaptation (Wang & Ahmed, 2004).

Knowledge transfer is a fundamental aspect of organizational learning, encompassing the ability to apply insights gained in one context to another. At the individual level, this process enables employees to leverage prior experiences to enhance performance across different tasks. On an organizational scale, knowledge transfer is defined as "the process through which one unit (e.g., group, department, or division) is affected by the experience of another" (Argote & Ingram, 2000, p.151). Various mechanisms support effective knowledge transfer,

including employee training, open communication channels, personnel mobility, and technological advancements (Argote et al., 2000). However, a substantial portion of organizational knowledge remains tacit, making it difficult to articulate, formalize, or systematically transfer across teams (Argote & Ingram, 2000). Beyond structural approaches, social processes play a critical role in higher-level knowledge transfer, involving activities such as knowledge sharing, interpretation, integration, and retention within organizational networks (Argote et al., 2000). Empirical research has also linked organizational learning to sustainable entrepreneurship within regional contexts, further reinforcing the proposition that knowledge transfer contributes to business adaptability and competitive advantage (Perez Nuñez & Musteen, 2020). This evidence supports the theoretical basis for hypothesizing that organizational learning enhances entrepreneurial sustainability and performance. The following hypothesis is proposed:

H6- *Organisational learning capabilities mediate the relationship between sustainable fashion entrepreneurship and firm performance*

4.2.7 Mediating Role of Social Media Capabilities

Industry 4.0 and the digital revolution have transformed the way individuals communicate with each other (Dwivedi et al., 2021; Choi et al., 2022; Grover et al., 2022). The effect of the digital age has been profoundly felt by organisations, and this has led to the development of skills and competencies to respond to the emerging opportunities and threats that digital media usage and consumption poses to businesses and their customers (Amirul et al., 2021; Merten et al., 2022). Social media capabilities have therefore emerged as an important dynamic capability that is responsible for equipping firms with the strategic know-how in relation to the adoption and use of social media tools to communicate, respond to customer needs and promote business interests (Zheng, 2014; Mention et al., 2019; Marchand et al., 2021). Social media capabilities have become non-negotiable essentials in the marketing

communications skillset of firms (L'Écuyer & Pelletier, 2019; Tseng et al., 2019; Le & Chakrabarti, 2024). Marchand et al. (2021) claim that this is due to the realization that social media has become an important technological resource which can be used to achieve business goals and gain competitive advantage.

Social media resources and capabilities are vital components that reflect the nature of today's dynamic business environment, and its effect spans across various industries including the fashion industry (Marchand et al., 2021). Earlier studies highlighted the potential of social media technology and capabilities on firm performance (Trainor, 2012; Kargaran et al., 2017; Irbo & Mohammed, 2020). These studies argue that firms need to develop internal social media competencies to respond to the growing social media engagement demands of customers. Furthermore, various scholars have argued that whilst traditional media retains its relevance in the marketing communications environment, social media is currently disrupting the communications environment, compelling firms to as a matter of urgency develop social media capabilities to achieve firm outcomes (Malthouse et al., 2014; Weinberg et al., 2014; Marchand et al., 2021).

Some studies have adopted social media capabilities as a mediating variable. Oyewobi et al. (2021) examined the relationship between social media adoption and business performance. In their study, Oyewobi et al. (2021) found that the use of social media had positive effects on business performance. Data is conceptualized as "an objective, external, codified, static 'resource'" that serves as the foundation for generating information, which in turn leads to the development of knowledge defined as "an internal, subjective 'capacity to behave'" (Sutton, 2001, p.84). Nonaka and Takeuchi (1995, p.58) further describe knowledge as "a dynamic human process of justifying personal beliefs toward the 'truth'," highlighting its evolving and interpretative nature. Building on this perspective, Sutton (2001) asserts that

knowledge transfer occurs through the flow of information, underscoring the pivotal role of communication in the dissemination and application of knowledge. In contemporary digital landscapes, social media has emerged as a key facilitator of this process, reshaping the communication industry and equipping individuals and firms with the tools necessary for content creation and strategic influence (Mangolds & Faulds, 2009; Keller, 2009). The integration of social media into business practices has not only enhanced information sharing but has also contributed to the development of digital competencies that drive engagement and organizational impact.

This study argues that the relationship between sustainable entrepreneurship in the fashion industry and firm performance is mediated by social media capabilities. Justification for this position stems from the application and impact of social media in business operations (Wang & Kim, 2017; Tarsakoo & Charoensukmongkol, 2020). Scholars have found a compelling argument that supports the notion that the development of social media capabilities can account for other outcomes in performance and related variables (Trainor, 2012; Irbo & Mohammed, 2020; Marchand et al., 2021).

Social media capabilities play an important intervening role in various firm-level relationships. According to Ye et al. (2022), although existing studies have argued about different benefits of firms' adoption of social media, such as improved customer relationships (Haenlein, 2017), brand promotion (Pentina et al., 2014), marketing channel integration (Chae et al., 2017), and electronic word of mouth (Ladhari & Michaud, 2015), the influence of social media application on firms' dynamic capabilities remain largely unexplored. This study therefore proposes the following hypothesis:

H7- Social media capabilities mediate the relationship between sustainable fashion entrepreneurship and firm performance

4.3 Chapter Summary

This chapter provided a narrative of the theoretical framework underpinning this study on sustainable entrepreneurship and firm performance. The introductory part of this chapter highlighted the relevance of theoretical frameworks in research, before proceeding to specify the two theories underpinning this study. Consequently, the dynamic capabilities and bricolage theories were introduced and discussed. Respective sections were devoted to the two theories, and their origins, major assumptions, components, application and criticisms were discussed. The theoretical review presented in this chapter crucially highlighted how the dynamic capabilities and bricolage theories are applied in the development of the conceptual framework highlighting the relationship between sustainable entrepreneurship, organisational learning capabilities, social media capabilities and firm performance in the fashion sector. The dynamic capabilities theory was applied to predict the effect of sustainable entrepreneurship on the development of competencies which can aid the quest for firm performance.

Specifically, the dynamic capabilities theory is used to conjecture the link between sustainable entrepreneurship and the development of organisational learning capabilities and social media capabilities. This study argues that these two capabilities are likely to be developed by fashion entrepreneurs engaged in the practice of sustainable entrepreneurship. The dynamic capabilities theory amplifies the notion that firms exist in a competitive business environment which necessitates the development of dynamic competencies to respond to emerging opportunities and threats. As a result, juxtaposing this perspective to the present study, the theory was used to establish the nexus between sustainable entrepreneurship and organisational learning capabilities, and also sustainable entrepreneurship and social media capabilities.

The bricolage theory, on the other hand, was also applied to explain the effect of sustainable entrepreneurship on firm performance through the mediating role of organisational learning. In other words, sustainable entrepreneurs based on their adoption of bricolage tendencies are predisposed to learn new ways of doing things, and developing sustainable fashion products that contribute to the bottom line whilst also have positive environmental impact. The bricolage theory was applied to symbolize the process of sustainable entrepreneurship and its combined effect on how fashion entrepreneurs develop certain capabilities to improve their business performance. In the context of this study, the organisational learning capabilities and social media learning capabilities were the selected firm-level capabilities under investigation.

This chapter outlined the conceptual framework, emphasizing the hypothesized relationships central to the study. Specifically, it explored the foundational influence of sustainable entrepreneurship on firm performance, alongside the mediating roles of organizational learning capabilities and social media capabilities. The theoretical rationale for these hypothesized connections was thoroughly examined, demonstrating their relevance in shaping the study's analytical approach. By establishing a structured framework that aligns with the study's objectives, this chapter contributes to the overall research by providing a cohesive theoretical foundation. The subsequent chapter builds upon this by reviewing existing literature, systematically examining key concepts related to sustainable entrepreneurship, and tracing dominant themes, methodologies, and theoretical perspectives that inform and contextualize the present study.

CHAPTER FIVE

METHODOLOGY

5.0 Introduction

The previous chapter reviewed the literature on sustainable entrepreneurship within the fashion domain and provided insight into the state of the literature. In this chapter, the methodology of the study is discussed. This chapter provides an overview and justification of selected research methods that are meant to ensure the attainment of the study's research aim and objectives. Within this chapter, the research philosophy, research approach and design are discussed. This ensures that the underpinning methodology of the study is informed by a philosophical paradigm that guides the selection of other methods. The population of the study is profile, which further leads to the selection of a sample and sampling technique that facilitated the selection of respondents. The chapter additionally clarifies the source of data to be collected and outlines the nature of the data collection instruments that were used. Techniques for data analysis are also discussed, before a final section on the ethical principles guiding the conduct of this study and interaction with respondents.

5.1 Research Philosophy

This study adopts a methodological design that is influenced by the Pragmatism research philosophy. This study adopts a pragmatic research philosophy, enabling the integration of both qualitative and quantitative methods to investigate the relationship between sustainable fashion entrepreneurship and firm performance, with particular attention to the mediating roles of social media and organizational learning capabilities. Research philosophy represents the overarching worldview that researchers are confronted with which shape their perception of reality (Tamminen & Poucher, 2020; Ryan, 2022). There are a number of research philosophies, with each paradigm having its own unique epistemology, ontology and axiology, which determines the kind of methods and approach a researcher will adopt in

the conduct of their research (Ryan, 2018; Irshaidat, 2022; Sanchez et al., 2022). Some of the popular research philosophies include Positivism, Interpretivism, Pragmatism and Realism (Saunders et al., 2009; Ryan, 2018). Based on the purpose and objectives of this study, the pragmatic paradigm was adopted. However, prior to the delineation of the reasons underpinning the choice of pragmatism, a discussion of some of the other philosophies was provided to further enhance understanding of the various options available to researchers. Further, clarifying the nature of the other paradigms ensures that the justification for the choice of pragmatism has considered the effect of other approaches.

5.1.1 Positivism

Positivism is a research paradigm rooted in the principles of natural science, founded on the belief that scientific inquiry offers the most reliable means of uncovering truth and understanding the world. Its ultimate goal is to facilitate prediction and control, enabling systematic advancements in knowledge (Guba & Lincoln, 1994; Creswell & Creswell, 2018; Ryan, 2018). Researchers who adhere to a positivist approach typically embrace objectivism, conducting inquiries without interfering in the process. This paradigm operates on the assumption that science provides the only pathway to acquiring factual knowledge, allowing researchers to analyze phenomena with impartiality and precision (Guba & Lincoln, 1994; Creswell & Creswell, 2018; Ryan, 2018). By focusing on empirical observation and measurable outcomes, positivism remains a cornerstone of scientific exploration and methodological rigor. In positivism, reality exists independently of human perception, and knowledge is gained through systematic, unbiased observation (Guba & Lincoln, 1994; Ryan, 2018). Researchers use theoretical frameworks to explain concepts and relationships between variables (Ryan, 2018; Ryan, 2022). Positivists rely on statistical methods and theory-based approaches to analyse data and produce objective, measurable results.

5.1.2 Post-Positivism

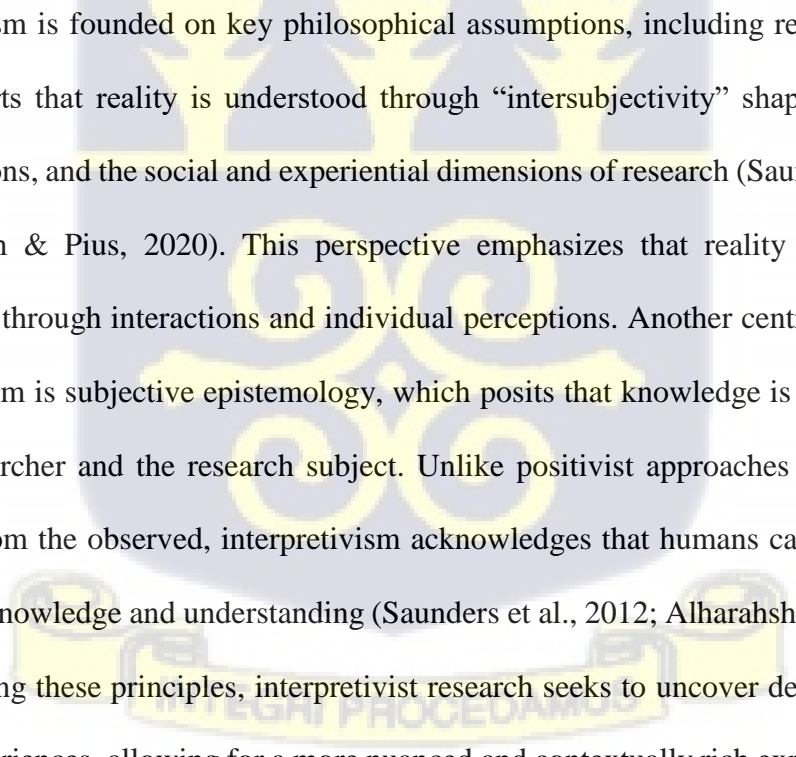
Post-positivism advocates methodological pluralism, emphasizing that research methods should be chosen based on the specific question being investigated rather than adhering to a single rigid approach (Clark, 1998; Saunders et al., 2012; Ryan, 2018). This philosophy challenges the notion that scientists merely observe natural laws, instead arguing that they actively construct knowledge through inquiry and interpretation (Crotty, 1998). Proponents of post-positivism contend that research outcomes, despite adherence to scientific methods, are never entirely objective or absolutely certain (Crotty, 1998, p. 40). While post-positivism remains rooted in the belief that an objective reality exists beyond human perception, it presents a more flexible perspective compared to strict positivism, recognizing the influence of interpretation and contextual understanding in scientific inquiry (Hammersley, 2019).

5.1.3 Interpretivism

Interpretivism emerged as a response to positivism, advocating for a more subjective approach to research (Saunders et al., 2009; Saunders et al., 2012). This philosophy emphasizes the significance of context, meaning, and human experience in shaping knowledge. Unlike physical phenomena, individuals actively interpret and assign meaning to their actions and surroundings, making their experiences inherently different from measurable scientific observations (Gray, 2013; Ryan, 2018). Given these distinctions, interpretivism asserts that research in the social sciences should not simply replicate the methodologies used in natural sciences. Instead, it should recognize cultural, temporal, and situational factors that influence diverse social realities, ensuring a more nuanced and contextually relevant understanding of human behavior.

Interpretivism differs from positivism in that it prioritizes the exploration of rich, nuanced insights that capture the complexity of human experiences, rather than seeking universal laws and generalizable findings (Myers, 2008; Saunders et al., 2012; Bhattacharjee, 2012).

Scholars have identified several variations within interpretivist thought, drawing from the contributions of John and Foss (2009). These include Hermeneutics, Phenomenology, and Symbolic Interactionism. Hermeneutics is rooted in the philosophy of interpretation and understanding, often drawing from biblical texts and wisdom literature to uncover deeper meanings. Phenomenology, on the other hand, emphasizes direct experience, focusing on how individuals perceive and engage with the world around them. Meanwhile, Symbolic Interactionism examines the role of symbols as shared social constructs that shape interactions and convey meaning (Saunders et al., 2009; Thanh & Thanh, 2015). These symbols are believed to influence the construction of reality, reinforcing the interpretivism perspective that human understanding is shaped by context, interaction, and personal experience.

The image shows a large, semi-transparent watermark of the University of Ghana crest in the background. The crest features three golden trees at the top, a central shield with a golden scroll, and a banner at the bottom with the motto 'INTEGRITY PROCEDERE'.

Interpretivism is founded on key philosophical assumptions, including relativist ontology, which asserts that reality is understood through “intersubjectivity” shaped by meanings, interpretations, and the social and experiential dimensions of research (Saunders et al., 2012; Alharahsheh & Pius, 2020). This perspective emphasizes that reality is not fixed but constructed through interactions and individual perceptions. Another central assumption of interpretivism is subjective epistemology, which posits that knowledge is inherently linked to the researcher and the research subject. Unlike positivist approaches that separate the observer from the observed, interpretivism acknowledges that humans cannot be detached from their knowledge and understanding (Saunders et al., 2012; Alharahsheh & Pius, 2020). By embracing these principles, interpretivist research seeks to uncover deeper insights into human experiences, allowing for a more nuanced and contextually rich exploration of social phenomena.

5.1.4 Realism

Realism, as a philosophical stance, asserts that an objective reality exists independently of human perception or representation. It distinguishes between two fundamental dimensions: the intransitive dimension, which refers to reality as it exists, and the transitive dimension, which encompasses interpretations and representations of that reality (Searle, 1995). From a realist perspective, methodological approaches should prioritize the intransitive dimension, aiming to uncover the underlying mechanisms and structures that drive observable phenomena. Even when these mechanisms are not immediately visible or fully understood, realism maintains that scientific inquiry should seek to explain the deeper causal forces shaping events.

Critical realism asserts that observation is inherently value-laden, recognizing that knowledge is shaped by social conditioning and cannot be fully understood apart from the individuals involved in its construction (Norris, 1999). While acknowledging that human interpretation plays a crucial role in knowledge formation, critical realism rejects the idea that reality itself is merely a product of this process. Instead, it maintains that an objective reality exists independently of human perception, even though our understanding of it is influenced by subjective experiences. Saunders et al. (2009) and Gray (2013) emphasize that critical realism distinguishes between two fundamental dimensions. The intransitive dimension refers to the existence of real objects that endure regardless of human thought, while the transitive dimension represents the dynamic nature of knowledge, shaped by social, historical, and cultural contexts. This dual perspective allows critical realism to bridge objective reality with human interpretation, providing a nuanced approach to understanding complex phenomena.

A key strength of the critical realist perspective lies in its dual approach; it not only examines the nature and behavior of phenomena under investigation but also provides a structured

framework for studying them effectively. This philosophy serves as an essential foundation for social inquiry, helping to “clear the ground a little...removing some of the rubbish that lies in the way of knowledge” (Locke, 1894, p. 14). Critical realism acknowledges the limitations of observation, recognizing that empirical findings are inherently subject to error and may evolve over time (Trochim, 2002). From this standpoint, reality cannot be fully known with absolute certainty, as observations are influenced by pre-existing theoretical perspectives and the observer’s worldview (Saunders et al., 2009; Gray, 2013). This approach reinforces the need for ongoing reflection and refinement in scientific inquiry.

5.1.5 Pragmatism

A pragmatic research philosophy has been introduced and focuses on the use of mixed-method approaches to applied research questions. Various scholars including Dewey (1931), James (1907) and subsequently Pierce (1884) are credited with the origins of Pragmatism. Rorty (1991) further advanced the cause of pragmatism by emphasizing its usefulness in unearthing the practical challenges experienced by people, the research questions postulated, and the outcomes of inquiry. At its core, pragmatism is a paradigm that finds merit in the adoption of multiple methods to define reality. Several scholars have thrown their weight behind this philosophy and have called for the use of multiple methods and acceptance of alternative paradigms in the research process (Dewar & Horn, 1992; Brustad, 2002; Biddleet al., 2001). The pragmatic research philosophy argues that to find merit in research, multiple methods need to be adopted to discover the various nuances underpinning or influencing a research phenomenon.

Scholars have long recognized the value of using multiple research methods to address complex questions. Brustad (2002, p.34) notes that “it is possible to use multi-method approaches to address any research question,” while Hardy et al. (1996, p.259) argue that the choice between qualitative and quantitative methods depends on the research context. Given

that both approaches have unique strengths and limitations, they suggest that integrating the two may often be the most effective strategy. In recent years, researchers have increasingly embraced pragmatism for its methodological flexibility, allowing them to adapt and combine research techniques to best achieve their study's objectives (Saunders et al., 2012; Gray, 2013). Pragmatism fundamentally challenges the idea of a singular, objective reality. Instead of pursuing absolute truths, pragmatists contend that no single theory can definitively capture reality more accurately than another (Morgan, 2014). As a result, this philosophical stance encourages open dialogue and values diverse forms of knowledge that enable individuals to navigate, adapt to, and thrive within their specific environments (Rorty, 1990).

Pragmatism is distinguished by its emphasis on selecting methods and theories that are most effective within specific contexts, enabling researchers to address practical problems directly (Allemang et al., 2022). This approach prioritizes the collection of data that contributes to real-world problem-solving rather than being solely concerned with abstract notions of reality (Marouf, 2019). Unlike positivists and realists, who argue that an objective understanding of the world can be attained without the influence of cultural context or subjective biases (Rorty, 1990, p.2), pragmatists challenge this idea, contending that such a perspective is “irrelevant to our needs and our practices” (Rorty, 1990, p.2) as it fails to account for the complexities of human experience (Williams, 1985). Furthermore, pragmatism acknowledges that scientific inquiry is inherently contextual, shaped by historical, social, and political conditions that continuously influence the research process (Dewey, 1931).

5.1.6 Selected Paradigm

In this study, pragmatism is adopted to facilitate the use of both qualitative and quantitative methods to unearth the link between sustainable fashion entrepreneurship and performance considering the roles of social media and organisational learning capabilities. Choosing the

pragmatic philosophy ensured that a mixed methods approach can be adopted which facilitated the benefit of drawing on the strengths of the qualitative and also quantitative approach. Furthermore, pragmatism allows for theoretical integration of the Dynamic Capabilities Theory and the Entrepreneurial Theory of Bricolage in explaining the effects of sustainable entrepreneurship on firm performance amongst fashion entrepreneurs.

The adoption of the pragmatic paradigm enabled the researcher to choose methodological flexibility as opposed to rigidity in establishing how the proposed variables predict firm performance. By combining the two approaches (qualitative and quantitative), the pragmatic paradigm facilitates data triangulation which allows for a more informed view of the effects of sustainable fashion entrepreneurship within the Ghanaian context. Given that this context has limited research on the subject matter, the choice of this philosophy aids in the contribution to knowledge.

5.2 Research Approach

Researchers in line with their adopted research philosophy have to choose which research approach to use in the attainment of their research objectives. Three prominent research approaches exist, and they are: qualitative, quantitative and mixed methods research (Creswell & Creswell, 2017; Chih-Pei & Chang, 2017; Strijker et al., 2020). Qualitative research is often considered to be an approach to research that seeks to facilitate the use of methods that allow researchers to have a close interaction with respondents in their natural environment (Aspers & Corte, 2019). Qualitative research often entails the use of methods such as interviews, focus group discussions and observations (Allan, 2020).

Quantitative research refers to the approach that is influenced by the positivist paradigm and that prioritizes the use of statistical techniques in measuring and interpreting a research phenomenon (Saunders et al., 2009; McDaniel & Gates, 2018). In quantitative research, the

focus is to test for causality amongst variables, and to see how certain variables predict and influence hypothesised outcomes (Malhotra et al., 2017). Quantitative methods often adopt a survey strategy that focuses on collecting large data from a sample for rigorous statistical analysis (Saunders et al., 2009). In quantitative studies analytical approaches such as correlation, regression and structural equation modelling are often used in analysing data (Pallant, 2016; Hair et al., 2016).

The mixed methods approach is considered to be a holistic research approach with an upper hand over both qualitative and quantitative methods (Creswell & Creswell, 2017). This is because mixed methods involve the triangulation of data from multiple sources, and focuses on collecting qualitative as well as quantitative data (Timans et al., 2019). The merits of mixed methods in research is the collection of diverse data which can be interested using both qualitative and quantitative techniques, to arrive at a more holistic conclusion regarding a research phenomenon (Creswell & Creswell, 2017; Timans et al., 2019).

Considering the objectives of this study and the research purpose, the mixed methods approach is considered to be ideal and represents the chosen research approach underpinning this empirical investigation of sustainable entrepreneurship and firm performance. Mixed methods study combine qualitative and quantitative techniques to collect data from multiple sources that present an informed perspective of a phenomenon (Creswell & Creswell, 2017; Hirose & Creswell, 2023). The sequential mixed methods approach further facilitates a systematic triangulation of data by collecting qualitative data first to analyse and determine patterns that can guide the quantitative survey (Haynes-Brown, 2023). Due to the nature of sustainability and the paucity of literature examining its application within the Ghanaian fashion industry, the sequential mixed methods approach was chosen to enable the researcher conduct a qualitative study through interviews to explore the understanding of sustainability from the perspective of fashion entrepreneurs in Ghana. The insights from the qualitative

study were then applied to guide the development of the instrument for the survey. The questions were framed in a way respondents could relate to and understand based on feedback from the qualitative study.

The choice of mixed methods is predicated on the pragmatist paradigm which advocates for methodological pluralism and the selection of multiple methods that aid in the attainment of research objectives (Hirose & Creswell, 2023). The major goal of this study is to determine the effect of sustainable entrepreneurship on three outcome variables whilst simultaneously estimating the mediating effects of two of the variables on the baseline relationship (sustainable entrepreneurship → firm performance), the mixed methods approach is deemed to be appropriate to ensure that both qualitative and quantitative techniques can be leveraged to provide a better understanding of sustainable fashion entrepreneurship in Ghana.

5.3 Research Design

Research design represents an important methodological consideration in research (Gangeness & Yurkovich, 2006). Researchers often have the option of choosing between Exploratory, Descriptive and Causal (Explanatory) research designs (Taguchi, 2018; Casula et al., 2021). In this study, the descriptive and causal research designs were adopted. These research designs are chosen because this study seeks to investigate the effects of sustainable entrepreneurship on firm performance, and the descriptive research design facilitates the qualitative exploration of the dimensions of sustainable entrepreneurship, social media capabilities and organisational learning capabilities, whilst the causal research design provides the framework for hypothesis testing and the statistical determination of results and findings.

Siedlecki (2020) explains that the primary aim of descriptive studies is to observe and document individuals, events, or conditions as they naturally occur. This approach does not

involve manipulating variables; instead, the researcher focuses solely on describing the sample and relevant factors. While descriptive research can examine multiple variables, it is unique in its ability to study a single variable in depth. Additionally, descriptive studies serve various purposes, including analyzing population characteristics, identifying challenges within organizations or societal units, and comparing variations in practices across institutions or countries. Notably, this research design accommodates any number of variables, including just one, making it particularly valuable for examining sustainable entrepreneurship within Ghana's fashion industry (Siedlecki, 2020)

5.4 Population of the Study

The study's population consists of fashion entrepreneurs within the creative arts sector who actively engage in sustainable entrepreneurship practices. Population in research refers to the large group of individuals or elements from which a sample is selected for research (Malhotra et al., 2017; McDaniel & Gates, 2018). The population therefore comprises of all elements that share a common feature either by geography or by other demographic features. Population is considered to be an essential part of the research process as it is the starting point for the estimation and selection of a sample. The population for this study is defined as fashion entrepreneurs in the creative arts sector of Ghana based in Accra and Kumasi. These are two big cities in Ghana and are home to many fashion entrepreneurs.

5.5 Sample Size and Selection Technique

A sample refers to the selection of individuals from a population to answer research questions and fulfil research objectives (McDaniel & Gates, 2018). Individuals who are selected from the population are referred to as the sample. In this study, the sample comprises a selection of fashion entrepreneurs in the creative arts sector based in Accra and Kumasi. Several considerations were made prior to selecting the sample size to ensure sampling adequacy. For the qualitative sample size, there are divergent perspectives in the extant

literature (Hennink & Kaiser, 2022). One school of thought argues that qualitative samples can range from 6-12, whilst others mention 6-25 per case (Staller, 2021; Mthuli et al., 2022). Another school of thought argues that qualitative samples should not be determined a priori, but rather data collection must end when data saturation is observed (Sharma et al., 2024). The consensus among qualitative scholars however is that a sample ranging from 6-30 participants is adequate (Mthuli et al., 2022). In view of this, thirty (30) respondents were selected for the qualitative study which featured fifteen (15) respondents per city; that is Accra and Kumasi.

For quantitative samples, various parameters can be applied especially in relation to studies involving advanced statistical modelling such as Structural Equation Modelling (SEM). However, Cochran's sampling formula provides a guide for selecting samples from unknown populations. Per this formula, a 5% precision level and a 95% confidence interval results in the computation of a sample of three hundred and eighty-five (385) respondents.

Due to the need to ensure representation of fashion entrepreneurs in Accra and Kumasi, two of Ghana's cosmopolitan cities largely regarded as fashion hubs (Amankwah et al., 2022; Agyenim-Boateng et al., 2023; Appiah et al., 2023), a sample of six hundred (600) respondents was selected. Three hundred (300) respondents were selected from Accra, and three hundred (300) respondents from Kumasi. The justification for the choice of sample size lies in the threshold for quantitative data collection proposed by Hair et al. (2016). According to Hair et al. (2016) for quantitative studies a sample of 200 and above is suitable, although the authors also mention that often larger sample sizes are preferred in quantitative studies depending on the number of items in a questionnaire. The questionnaire administered contained variables measuring sustainable fashion entrepreneurship and its dimensions, as well as organisational learning capabilities, social media capabilities and firm performance.

This study employed purposive and snowball sampling techniques to select respondents. Broadly, sampling methods are categorized into two main types: probability and non-probability sampling (Etikan et al., 2016; McDaniel & Gates, 2018). Probability sampling ensures that each member of the population has an equal chance of being selected, making it a widely recognized approach for minimizing selection bias (Etikan et al., 2016). Common probability sampling techniques include simple random sampling, systematic sampling, cluster sampling, and stratified sampling (McDaniel & Gates, 2018). Non-probability sampling relies on the researcher's judgment and discretion in selecting respondents (Malhotra et al., 2017; McDaniel & Gates, 2018). Unlike probability sampling, this approach does not provide every individual in the population with an equal chance of selection. Instead, it focuses on identifying participants who meet specific criteria relevant to the research and are both willing and able to contribute (Taherdoost, 2016; Sharma, 2017). Researchers using non-probability sampling can choose from various techniques, including convenience sampling, purposive (judgmental) sampling, quota sampling, and snowball sampling, depending on the study's objectives and context (Taherdoost, 2016).

Having considered all the options available, this research opted for the purposive and snowball sampling techniques. To be able to facilitate the selection of respondents using this approach, the researcher selected fashion entrepreneurs who practice sustainability in the form of upcycling, waste reduction, energy conservation and design practice. This was the inclusion criteria used in purposively selecting respondents. This study employed purposive sampling, which is appropriate for exploratory and early-stage research seeking to capture rich, context-specific insights (Saunders et al., 2009; McDaniel & Gates, 2018). However, it is acknowledged that purposive sampling limits the generalizability of findings beyond the selected participants. To mitigate this limitation, deliberate steps were taken to ensure diversity and representation across gender, firm size, and product category.

In the qualitative phase, 30 interviewees were selected based on clear criteria: active engagement in Ghana's fashion sector, demonstrated use of social media for business purposes, and involvement in sustainability practices such as fabric reuse or ethical sourcing. Care was taken to include both male and female entrepreneurs, micro and small-scale firms to capture varied perspectives. The snowball sampling technique was also used to leverage existing networks with initial respondents to obtain referrals to other fashion entrepreneurs practicing sustainability within the Ghanaian context. Snowball sampling was used to access sustainable fashion entrepreneurs through recommendation from industry stakeholders. The snowball effect was helpful in reaching sampling adequacy (Parker et al., 2019; Raifman et al., 2022).

5.6 Source of Data Collection

There are two (2) main sources of data that researchers can acquire for the purpose of achieving research objectives or purpose; these are primary and secondary data sources (Nicholson & Bennett, 2009). Primary sources of data refer to the original sources of data collected based on new research objectives (McDaniel & Gates, 2018). Secondary data sources refer to existing data which was collected by researchers, research agencies or government institutions, and can be used for further analysis or research on a similar or related issue (Church, 2002; Smith, 2008; Clark, 2013).

In this study, primary data was collected using a structured questionnaire designed with a Likert scale ranging from 1-5 with indicators Strongly Disagree (1) to Strongly Agree (5), and measuring the variables: sustainable fashion entrepreneurship, organisational learning capability, social media capability and firm performance. The items for measuring sustainable fashion entrepreneurship comprised a collection of questions reflecting the nature of sustainable fashion entrepreneurship represented by the elements of design practice, upcycling, waste reduction and energy conservation. The scales for measuring the variables were adopted from existing studies as indicated in Table 5.1.

Table 5. 1 : Source of Scales

No.	Variable	Number of Items	Source
<i>Sustainable Fashion Entrepreneurship (Predictor)</i>			
1.	Design practice	2	Fung et al. (2021); Zhang (2023); Li et al. (2024);
2.	Upcycling	3	Aus et al. (2021); Shi et al. (2022)
3.	Waste Reduction	4	Minelgaitė & Liobikienė (2019)
4.	Energy Conservation	3	Ntona et al. (2015)
<i>Mediating Variables</i>			
5.	Organisational Learning Capabilities	5	1-3 from Camisón and Villar-López (2011); [Match] Limpibuntern & Johri (2009) [Match]
6.	Social Media Capabilities	7	Trainor et al. (2014) [Match]
<i>Dependent Variable</i>			
7.	Firm Performance	9	Junaid et al. (2023) [Match]
TOTAL		33	

NB: Control Variables = Educational level

5.7 Data Analysis Techniques

5.7.1 Thematic Analysis

This study adopts a mixed methods approach underpinned by the pragmatic research philosophy, ensuring methodological flexibility in addressing complex research questions. To analyze qualitative data, the study employs Thematic Analysis (TA), a rigorous technique for identifying, interpreting, and synthesizing patterns of meaning within textual data (Braun & Clarke, 2012). Unlike conventional qualitative methodologies, TA functions as an adaptable analytic method rather than a strictly defined framework, allowing researchers to apply it across diverse theoretical paradigms (Terry et al., 2017). TA is not inherently bound to any epistemological stance, nor is it exclusively aligned with realist or essentialist perspectives. Instead, it provides a systematic yet flexible approach that accommodates varying philosophical positions (Braun & Clarke, 2006; 2012). Within (post)positivist traditions, specific adaptations of TA emphasize coding reliability and replicability, reinforcing the methodological rigor required in empirical research (Boyatzis, 1998; Guest, MacQueen & Namey, 2012). Given the positivist influence on disciplines such as positive

psychology, structured applications of TA are often preferred to enhance consistency and analytical precision (Friedman, 2008). Researchers within this domain frequently adopt reliability-focused approaches to ensure methodological validity, as reflected in the empirical works of Selvam and Collicutt (2013).

Certain variations of thematic analysis have been specifically developed for qualitative research paradigms, emphasizing a flexible and interpretive approach to data analysis (Braun & Clarke, 2006, 2013). These methods allow coding and theme development to emerge organically, with researchers playing an active, reflexive role throughout the analytical process. This adaptability has contributed to the growing appeal of thematic analysis among qualitative researchers, including those in positive psychology (Holmqvist & Frisé, 2012). Aligning with this perspective, the present study employs thematic analysis as the primary method for examining the qualitative data collected, ensuring a nuanced exploration of patterns and meanings within the dataset.

Specifically, six (6) steps proposed by Braun and Clarke (2006) were used in the process of coding, theme generation and data analysis. These six steps are:

1. Data familiarisation: Once the qualitative data was collected through interviews, they were transcribed into scripts. The scripts were separated based on interviews conducted in Accra and Kumasi respectively. These scripts were examined to provide an initial overview of the nature of responses. The data familiarisation process entailed editing grammatical errors in the transcripts and ensuring coherence in the structure of the transcripts. All these processes were engaged in as recommended by Braun and Clarke (2006). Essentially, this stage of the analysis entailed poring over the data to gain some perspective on the nature of answers provided.
2. Data coding: After the data familiarisation stage, the next process that was

followed in accordance with Braun and Clarke's (2006) framework was data coding. This entailed identifying patterns and grouping the data into noticeable themes. The responses that pertained to the nature and elements of sustainable entrepreneurship practiced by fashion entrepreneurs in Accra and Kumasi were grouped. The codes that were generated aided in grouping the data. This process involved labelling statements that represent a group of thoughts or responses on the dimensions of sustainable fashion entrepreneurship such as upcycling, waste reduction, design practice and energy conservation. Statements that connoted saving electricity and power were coded with tags, whilst those that pertained to waste reduction had their separate tags. This aided in segmenting the data to ensure that all statements were classified and labelled accordingly.

3. Theme development: The codes were used to identify suitable themes to further categorize the data. Due to the nature of the responses, three dominant themes emerged. The three themes were related to the practices of sustainable fashion entrepreneurship, waste reduction, and energy conservation.
4. Theme review: After identifying the initial themes, the themes were reviewed to ensure direct coherence with the data collected. During this process, the final themes were selected and defined.
5. Theme definition: The three defined themes underpinning this study were: Theme 1: Sustainable entrepreneurship practices, Theme 2: Waste reduction practices and Theme 3: Energy conservation practices. These three themes were used to analyse the data based on responses from the transcribed interviews with fashion entrepreneurs from Accra and Kumasi.
6. Writing the final analysis: After defining and extracting all the themes, the statements from the transcripts were analysed according to the identified three dominant themes. After defining the themes, it became evident that even though the study conceptualised sustainable fashion entrepreneurship as a variable

comprising four elements (design practice, energy conservation, upcycling and waste reduction), after examining the data, developing and defining the themes, it was clear that respondents did not associate much with design practice. The responses largely reflected the general practice of sustainable entrepreneurship and the elements of waste reduction, and energy conservation. The final analysis therefore entailed associating the responses with these three themes to the coded statements from the interviews.

5.7.2 Data Coding, Entry and Cleaning

The first step after the collection of data was data coding in the Statistical Package for Social Sciences (SPSS). According to Pallant (2016), data coding and entry are essential steps in preparing data for further statistical analysis. After these first two processes have been accomplished, data cleaning was conducted which entailed screening the data for outliers and assessing whether there are input errors that need to be corrected, or cases of missing data that need to be accounted for (Pallant, 2016; Lee & Shi, 2021). Skewed and inconsistent results were identified through pattern detection and large portions of missing data from the dataset (Pallant, 2016; Lee & Shi, 2021). After the questionnaire was coded and entered into the data analysis software (SPSS), several quality assurance checks revealed that some of the responses had irregular patterns and large sections of missing data that implied the respondents did not take time to complete the questionnaire. These outliers posed a threat to data integrity and were thus excluded.

In the quantitative phase, the study relied on self-reported survey data, which introduces the possibility of response bias. This limitation is acknowledged, as respondents may overstate positive behaviours or underreport challenges due to social desirability, recall errors, or perceptions of what constitutes “successful” entrepreneurship. To minimize these risks, several steps were taken. First, the survey was designed with neutral wording and pre-tested

to reduce leading questions. Second, anonymity was assured to encourage honest responses and reduce social desirability bias. Third, the sample was diversified across gender, firm size, and level of education to balance perspectives and mitigate systematic bias. Finally, triangulation with qualitative interview data provided an additional validity check, allowing inconsistencies between self-reported survey responses and interview narratives to be identified and contextualized. These activities were performed before proceeding on to other statistical approaches.

5.7.3 Structural Equation Modelling

This study employs Structural Equation Modeling (SEM) as its primary analytical technique, leveraging its strengths in understanding complex causal relationships. The appeal of SEM, as highlighted in the literature, is threefold. First, SEM is particularly effective in examining causal effects, such as how antecedent and intervening variables shape an outcome of interest (Mueller & Hancock, 2018). Additionally, SEM offers significant flexibility in research design, allowing variables to be measured at different time points across various components of the model. Even in cross-sectional studies, SEM facilitates the assessment of both direct effects and indirect influences mediated through other variables (Yuan & Bentler, 2006).

A practical example of SEM's application can be found in Leahey's (2006, 2007) research, which investigated whether specialization among scientists, proposed as an explanatory mechanism, accounts for gender disparities in research productivity and income. This demonstrates SEM's capacity to uncover intricate relationships within empirical data (Hair et al., 2014). The second rationale for employing Structural Equation Modeling (SEM) in this study is its unique ability to integrate both measurement models and structural/causal models within a single estimable framework (Ullman & Bentler, 2012). This approach allows for a comprehensive analysis, facilitating the simultaneous examination of sustainable fashion entrepreneurship, social media capabilities, organizational learning capabilities, and firm performance within a unified model.

Additionally, SEM addresses measurement limitations by eliminating the assumption that key variables must be perfectly measured. Instead, it accommodates the inclusion of measurement error within the estimation of causal effects, enhancing analytical precision (Hair et al., 2021). A practical example of this can be found in Bollen and Paxton's (1998) study on bias in subjective ratings, where SEM was instrumental in modeling and correcting measurement inconsistencies. Beyond these advantages, SEM offers the flexibility to analyze multiple dependent variables concurrently, including reciprocal effects, further strengthening its applicability in complex research designs (Hair et al., 2021). This capability makes SEM a powerful tool for examining interdependent relationships within empirical data.

Structural Equation Models (SEM), given a sufficient number of observed variables, can integrate multiple analytical functions within a single equation, including modeling causal mechanisms, decomposing total effects into direct and indirect influences, assessing multiple outcomes, and accounting for reciprocal effects (Lei & Wu, 2007; Hair et al., 2021). These capabilities have made SEM a foundational method for examining hypothesized causal relationships in the social sciences (Kline, 2023). One of the foremost advocates of SEM, Bollen (1989), has extensively contributed to the development of its components, particularly path analysis and factor analysis. Bollen (1989) further underscores the importance of theory in model construction, reinforcing SEM's inherently deductive and confirmatory approach, an aspect that is central to the methodology employed in this study.

In view of the choice of research philosophy and approach, the quantitative data was analysed using the Structural Equation Modelling (SEM) technique. This facilitated the testing of dimensionality amongst the latent variables, whilst testing for the hypothesised relationships in the structural model. A mediation analysis was conducted in SEM to establish whether the two proposed mediators, Organisational Learning Capabilities (OLC) and Social Media Capabilities (SMC) achieve a partial or full mediation effect.

According to researchers, mediation occurs when a third mediator variable intervenes between two other related constructs (Hair et al., 2021). Mediation can be described as the process where an intermediate variable, called the mediator, helps explain how or why an independent variable influences an outcome (Sarstedt et al., 2020). Scholars have opined that in full mediation, a mediator fully explains the relationship between the independent and dependent variable: without the mediator in the model, there is no relationship (Hayes, 2009; Woody, 2011; Collier, 2020).

5.7.4 Control Variables

This study used control variables to isolate the effect of sustainable fashion entrepreneurship on firm performance. Control variables are defined as variables used to account for the extraneous effects that may influence the impact of an independent variable on a dependent variable (Shiau et al., 2024). Control variables are statistical mechanisms used to limit nuisances that may influence how an independent variable relates with a dependent variable (Bernerth & Aguinis, 2016). Scholars have argued that control variables should not be used for the sake of it, but must have some theoretical relevance (Schjoedt et al., 2025). This study used the educational level of sustainable fashion entrepreneurs as a control variable to determine how they influence the effect of sustainable fashion entrepreneurship on firm performance. The degree of education that a fashion entrepreneur has been exposed to can impact the extent to which they embrace sustainability as a business strategy in their fashion enterprise (Lang & Liu, 2019). Educational level therefore provides reasonable theoretical grounds for testing its effect on the nexus between sustainable fashion entrepreneurship and firm performance.

5.8 Ethical Principles and Processes

This study abides by recommended ethical principles in order to safeguard the integrity of the findings of this study and ensure that the right ethical procedures were followed in the design of the research instrument and the collection and analysis of data. Scholars have noted that social science research as a matter of principle needs to ensure that the appropriate ethical principles are adhered to in order to protect respondents (Bull & Lindegger, 2011). In this study, the ethical principles of consent seeking, disclosure of research purpose and confidentiality were adopted. These three principles represent important ethical considerations that researchers are required to have (Lind et al., 2003; Kumar et al., 2018).

Consent seeking entails the process of seeking for permission from respondents prior to the collection of data (Sin, 2005; Hutton et al., 2008; Khan et al., 2018). This research prioritises informed consent, and as such, an introductory letter was obtained from the Department of Marketing and Entrepreneurship to facilitate the data collection process and introduce the researcher and the purpose of the research to respondents. Disclosure of purpose refers to the act of informing respondents about the nature and purpose of the research, and the potential contributions the outcomes of the research stand to offer to society (Cobia & Boes, 2000; Carter et al., 2013). Confidentiality is another important ethical principle that was adopted in this research. Respondents were assured that all data provided was only going to be used solely for research purposes (Kaiser, 2012; Turcotte-Tremblay & Sween-Cadieux, 2018).

To ensure adherence to ethical research standards, formal approval was obtained from the University of Ghana Ethics Committee prior to data collection. This process was integral to maintaining the integrity of the study, safeguarding participant rights, and ensuring compliance with established ethical guidelines. The researcher submitted all protocols as well as the proposal which details the objectives, methodology and intended outcomes of the research. The data collection instrument was vetted by the UG Ethics Committee, and

recommendations were offered to improve the instruments and facilitate the practice of sound ethical processes during the data collection process. In taking these steps, the researcher demonstrates significant commitment to abiding by ethical principles.



CHAPTER SIX

DATA ANALYSIS AND RESULTS

6.0 Chapter Overview

The previous chapter provided insight into the research methodology anchoring this study. Important research methods were clarified and formed the basis for the empirical study that collected qualitative and quantitative data. This chapter provides evidence of the results from the analysis of empirical data collected. The chapter commences with the results from the qualitative study, before discussing the results from the quantitative study. The chapter provides an overview of the processes and outcomes of the data analysis process conducted to obtain answers to the research questions outlined in the first chapter of this study. The chapter concludes by providing a summary of the results.

6.1 Qualitative Study

A qualitative study was conducted with sustainable fashion entrepreneurs to ascertain how sustainability is practised within the Ghanaian fashion industry. Face-to-face interviews were conducted with sampled fashion entrepreneurs in Accra and Kumasi. Fifteen (15) respondents were sampled from each city, making thirty (30) respondents for the interviews. Table 6.1 provides an overview of the respondents' profiles.

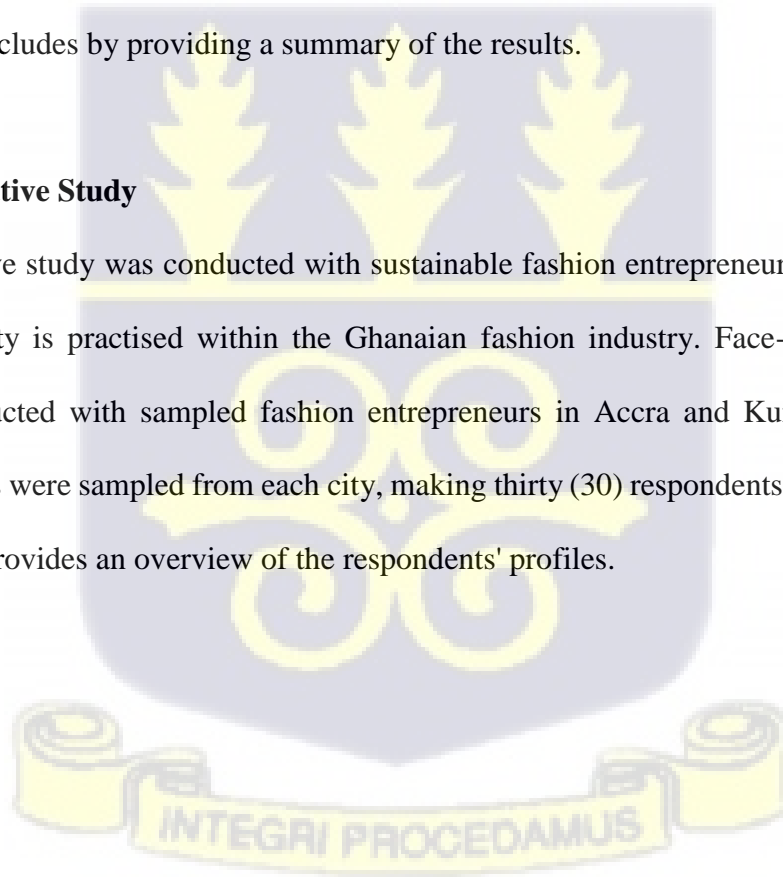


Table 6. 1: Profile of sample for qualitative study

City	Gender of Respondents	Age Range	Number of Years in Business	Number of Staff
Accra				
Respondent 1	Male	31-40	4-6 years	3
Respondent 2	Female	31-40	4-6 years	4
Respondent 3	Male	31-40	4-6 years	3
Respondent 4	Male	41-50	7-10 years	4
Respondent 5	Female	25-30	4-6 years	3
Respondent 6	Female	31-40	4-6 years	3
Respondent 7	Male	31-40	4-6 years	3
Respondent 8	Female	31-40	4-6 years	4
Respondent 9	Male	25-30	4-6 years	2
Respondent 10	Female	31-40	4-6 years	3
Respondent 11	Female	31-40	4-6 years	2
Respondent 12	Female	31-40	4-6 years	3
Respondent 13	Male	41-50	7-10 years	4
Respondent 14	Male	41-50	7-10 years	5
Respondent 15	Male	31-40	4-6 years	3
Kumasi				
Respondent 1	Female	31-40	4-6 years	3
Respondent 2	Female	31-40	4-6 years	3
Respondent 3	Male	31-40	4-6 years	3
Respondent 4	Female	31-40	4-6 years	4
Respondent 5	Female	31-40	4-6 years	4
Respondent 6	Male	31-40	4-6 years	3
Respondent 7	Female	31-40	4-6 years	3
Respondent 8	Female	31-40	4-6 years	4
Respondent 9	Male	31-40	4-6 years	3
Respondent 10	Male	31-40	4-6 years	4
Respondent 11	Male	31-40	4-6 years	3
Respondent 12	Female	31-40	4-6 years	3
Respondent 13	Female	31-40	4-6 years	2
Respondent 14	Male	31-40	4-6 years	3
Respondent 15	Female	31-40	4-6 years	2

Source: Field Data (2024)

From Table 6.1, respondents selected from Accra and Kumasi are profiled. The study made a conscious effort to ensure gender parity, and out of the thirty (30) respondents, sixteen (16) were females, whilst fourteen (14) were males. Most interviewees had been in business for a period ranging from 4-6 years, and the majority were aged between 31-40 years. The thematic analysis was underpinned by Braun and Clarke's (2006) technique. Part of the

technique entailed developing codes from the data. Table 6.2 contains the codes and themes used to analyse the qualitative data.

Table 6. 2: Coding and themes for qualitative study

Code	Themes
Nature of sustainable entrepreneurship	Sustainable entrepreneurship practices
Fabric management and waste reduction	Waste reduction practices
Energy saving and electricity management	Energy conservation behaviour

Theme 1: Sustainable entrepreneurship practices

The first theme sought to explore responses about sustainable entrepreneurship practices within the fashion sector. Respondents from Accra and Kumasi were interviewed and their responses were triangulated to establish the nature and dimensions of sustainable fashion entrepreneurship. Respondents were asked various questions to determine their knowledge of sustainable fashion entrepreneurship practices such as design practice, upcycling, waste reduction and energy conservation. Because some of these terms sounded sophisticated to some of the respondents, the researcher as much as possible tried to translate and explain some of the terms in the local dialect (Twi and Ga mostly) to facilitate better understanding among participants.

The results of the analysis revealed that most respondents from both Accra and Kumasi practised waste reduction and energy conservation more than the other two sustainability elements namely upcycling and design practice. Some of the quotes that reflect these perspectives are presented below:

“...For me when it comes to sustainability in my line of work I think about savings and management. How can I save fabrics, buttons, and even electricity? I sketch and take measurements before cutting because that is how I avoid waste. Everything in this shop is planned for and calculated for; I don't like wasting things because our materials and other stuff cost money to buy...” R1ACC.

The response above provides insight into how some of the respondents thought about the practice of sustainability. The reduction of waste and management of electricity was a

priority for the respondents. This view was mirrored by almost all the other interviewees.

Another view that reflects the nature of sustainable fashion entrepreneurship is provided below:

“What I know and practice when it comes to this business is to buy quality fabrics the clients will trust, and make sure the fabrics are used well. I do the cutting myself because the apprentices always waste fabric when they are cutting. Also, I save electricity because I make sure any machine we are not using is shut down or turned off, especially the iron. The upcycling thing you mentioned, honestly, I am not familiar with it, and as for design, you know people bring a picture and show you what they want and we also do it for them...” **R5KMS**

From this view, the practice of fabric management is highlighted as a waste-reduction technique in the fashion industry. Also, there is a conscious effort to manage energy or conserve it by shutting down machines and equipment that are not in use. This highlights the practice of waste reduction and energy conservation as dimensions of sustainable fashion entrepreneurship. Other responses that provide insight into the nature of sustainable fashion entrepreneurship among respondents include the following quotes:

“In my business fabric management is a key priority. I have taught them to consider first the fabric, the patterns in the fabric and the client’s measurement before they consider cutting the material. Because if you do not consider the measurement of the client before you cut you will end up wasting the fabric. I also teach them to cut with brown paper so they do not waste the fabric. Everything we do here is to maximize fabric and avoid waste, so I would say that is how we practice sustainability. Also, here I use AC, but at the moment the AC is off. When I’m not around the AC is turned off, and when the weather is cold we turn off 2 out of the 3 ACs. We only turn on all the 3 ACs when the weather is extremely warm but when the heat comes down then we turn it off. When the iron is not in use we turn it off...so far that is how we do it.”
R7ACC

Theme 2: Waste reduction practices

The second theme sought to examine responses about waste reduction practices among sustainable fashion entrepreneurs. The conclusion from the analysis of the data was that sustainable fashion entrepreneurs in Ghana are conscious of waste management and implement several sustainable practices to avoid wasting fabric. This includes training

apprentices, demonstrating waste management practices and warning employees about the cost of fabric. Some quotes highlighting this practice are presented below:

“...In training, my madam taught us how to cut fabrics or manage the fabrics. Because if you waste the material or you spoil it, you will be made to pay for it. For that reason, you have to pay attention to the task at hand, because if you spoil the fabric you will be made to pay for it. When you spoil the material there is nothing you can do about it, it is spoilt and it cannot be remedied. Therefore, yes, I try to be careful when cutting the fabric and also managing the pieces that are left as they can be used for other clothing items.” **R9KMS**

The response above was from an apprentice at one of the shops we visited. The individual claimed that they had received training from the shop owner on how to avoid waste especially when it comes to the use of materials (fabric). Another quote highlighting the practice of waste reduction in the fashion industry is provided below:

“...me de3 I do not waste fabrics. When there are some fabrics that I have no use for, I gather together such fabrics...I have a sack full of such materials at home. If we need a fabric for something, we quickly go through the sack to see if we would find a fabric useful for what we intend to do. Also, when am sewing for a client and the client’s fabric is not enough, there may be similar fabrics in the sack that I can easily add to what I am currently working on. My workers always find similar fabrics from the sack and it goes a long way to help.” **R14KMS**

Another response typifying the prevalence of waste reduction among fashion entrepreneurs is provided below:

“Avoiding waste is important to me because there are some materials that you have to manage given the style chosen by the client. If you end up wasting fabric in the process, you won’t get the outcome that you want, and the fabric may also be difficult and expensive to buy again.” **R7ACC**

These responses mirror the general sentiments echoed by other respondents interviewed and demonstrate that waste reduction is the prevailing sustainability practice among fashion entrepreneurs in Ghana.

Theme 3: Energy conservation practices

The third and final theme pertains to energy conservation practices. The consensus among respondents indicates that electricity conservation is achieved by turning off machines when not in use and managing the consumption of energy from equipment such as sewing machines, irons and air conditioners. The responses indicate that owners/managers of fashion enterprises teach and educate their staff on best practices regarding energy conservation. This is reflected in the following quotes.

“As for electricity de3...I will say that the knitting machines, over-lock machines consume a lot of energy. The iron too consumes electricity...but we all know we will get demands for our customers and we will still need to buy electricity and we can still make our monies if we manage the electricity well.” **R11KMS**

“An example is the light issue, sometimes when you are using an iron and you are done with what you are doing, you must turn off the light. I tell my staff this repeatedly. For the machines too when you turn it on and you need to do something at the table, you must turn it off...then when you come back to the table, you turn it on. This would help you conserve electricity.” **R4ACC**

Another response captures the phenomenon and describes the various sustainability measures that reflect energy conservation in the fashion industry:

“The only thing I do is...when you close, then everything goes off or when they go out on break then we turn off the gadgets. That is when we turn off the items...normally the iron...I am always saying that when they are done with the iron they should turn it off but they won't. So, I have asked them to reduce it rather so that when they need to iron, they would just turn it on. Normally, I have been checking. I am the one paying the bills so I have to put measures in place. So, when I see that they are done ironing and there is nothing to be ironed I just put the switch off.” **R10ACC**

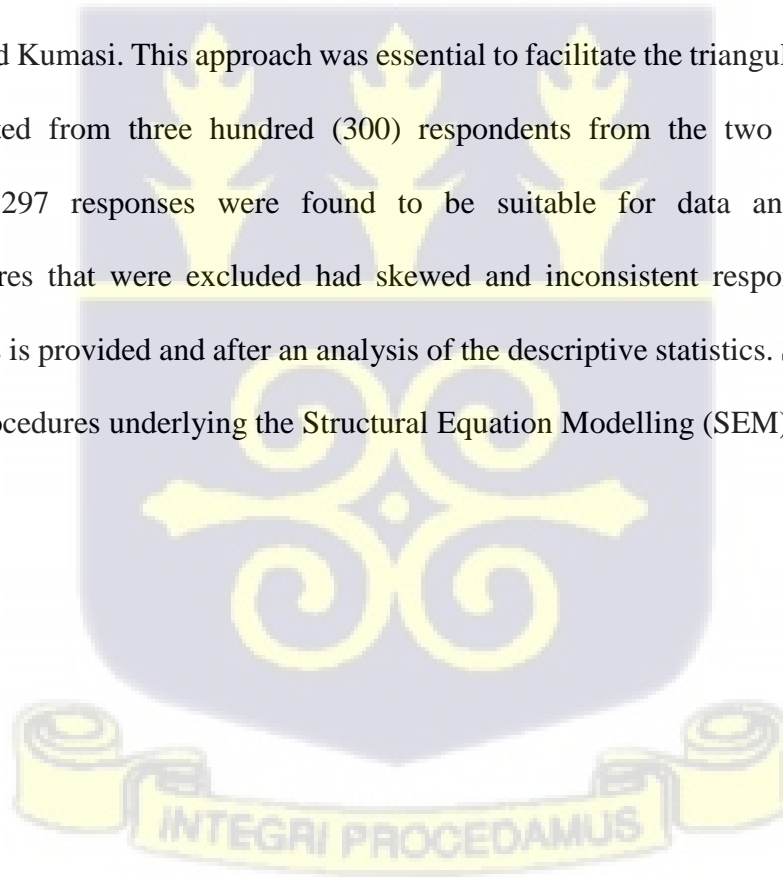
Also, some respondents were particular about energy conservation behaviours, especially among staff. The following response for instance indicates that the owner of the shop consistently reminds staff about their duty to conserve and manage energy.

“Yes I have been telling them but because they are not the ones paying, they always turn to forget. During the day we do not use light. I am the only one who uses light because they work outside and inside there is light on every machine. But the main light we do not use it, we use the light on the machines during the day.” R2ACC

The responses are selected from a large pool obtained after transcribing the interviews and developing codes and themes from the data. They reflect the general sentiment among respondents and provide insight into the nature and dimensions of sustainable fashion entrepreneurship in Ghana, and the waste reduction and energy-saving practices that constitute the widely implemented dimensions of sustainable fashion entrepreneurship.

6.2 Quantitative Study

The second phase entailed a quantitative survey to collect data from fashion entrepreneurs in Accra and Kumasi. This approach was essential to facilitate the triangulation of data. Data was collected from three hundred (300) respondents from the two cities. After data screening, 297 responses were found to be suitable for data analysis. The three questionnaires that were excluded had skewed and inconsistent responses. A profile of respondents is provided and after an analysis of the descriptive statistics. Subsequently, data analysis procedures underlying the Structural Equation Modelling (SEM) are presented and discussed.



6.2.1 Respondent Profile

Table 6. 3: Respondent profile

Demographic	Frequency (N=297)	Percentage (%)
Gender		
Male	145	48.8
Female	152	51.2
Age		
25-30 years	53	17.8
31-40 years	233	78.5
41-50 years	11	3.7
Number of Years in Operations		
4-6 years	182	61.3
10 years	115	38.7
Religion		
Christian	255	85.9
Muslim	42	14.1
Nature of Ownership		
Sole Proprietorship	292	98.3
Partnership	5	1.7
Source of Funds		
Bootstrapping	153	51.5
Loan	144	48.5
Social Media Platforms Used		
Facebook, Instagram & WhatsApp	124	41.8
Facebook, Tik-Tok & WhatsApp	76	25.6
Facebook, Instagram, Tik-Tok, X(Twitter) & WhatsApp	97	32.6

Source: Field Data (2024)

Table 6.3 provides an overview of the respondent profile according to the demographic, enterprise characteristics and social media usage behaviour. The majority of respondents were females (N=152, 51.2%), whilst males represented 48.8% of the respondents. Most respondents were aged between 31-40 years (N= 233, 78.5%) and had been in business for 4-6 years (N=182, 61.3%). The study's sample was predominantly Christians (N= 255, 85.9%), with a minority Muslim representation (N= 42, 14.1%). In terms of ownership, most respondents operated sole proprietorships (N=292, 98.3%), whilst a minority were operating under partnership agreements (N= 5, 1.7%). Respondents were profiled for the source of business funds, and it was established that most respondents obtained financing from their savings and resources (N=153, 51.5%) whilst the minority had obtained loans as the source of their capital (N= 148, 48.8%). Respondents were asked to state which social media platforms they used, and most respondents (N=124, 41.8%) used a combination of Facebook, Instagram and WhatsApp as their major social media platforms. This was followed by 32.6% of respondents who claimed they used a combination of Facebook, Instagram, Tik-Tok, X(Twitter) and WhatsApp.

6.2.2 Descriptive Statistics

Descriptive statistics analysis was performed on the final dataset comprising 297 responses from fashion entrepreneurs sampled from Accra and Kumasi. This was done to assess the data and gain insight into its nature. Descriptive statistics such as means, standard deviation, skewness and kurtosis were all analysed. The results of these analyses are presented in Table 6.4.



Table 6. 4: Descriptive statistics

Items	Mean	SD	Skewness	Kurtosis
Sustainable Fashion Entrepreneurship (SFE)	4.15	1.27	-1.45	.873
SFEN1- I design clothes that optimize the fabrics at my disposal				
SFEN2- I recommend fabrics to my clients that are suitable for the climate we live in	3.77	1.25	-.89	-.19
SFEN3- - In my design, I prioritise enhancing the client’s appearance whilst minimising excess fabric use	3.73	1.33	-.76	-.63
SFEN4- I use old garments to recreate new designs	3.76	1.37	-.89	-.45
SFEN5- I transform old clothes into new fashion for my clients	3.78	1.32	-.92	-.33
SFEN6- Sometimes I redesign old clothes to make new ones for sale				
SFEN7- I make a conscious effort to avoid wasting resources	3.58	1.33	-.61	-.77
SFEN8- Every item of material has a use in my shop and does not go to waste	3.99	1.27	-1.17	.26
SFEN9- I gather material pieces and other elements and store them for reuse to avoid waste and environmental pollution				
SFEN10- I ensure that all the fabric we buy are used efficiently to avoid waste	3.88	1.28	-1.07	.123
SFEN11- I consistently turn off machines when they are not in use during non-working hours	4.13	1.16	-1.41	1.18
SFEN12- I turn off the lights in the shop after work	4.00	1.21	-1.15	.38
	4.01	1.25	-1.19	.35
	4.15	1.17	-1.47	1.32
Organisational Learning Capabilities (OLC)	3.95	1.16	-1.06	.44
OLC1- I experiment and learn new things as a way of improving my fashion outputs	3.88	1.11	-.90	.40
OLC2- I follow what other designers in the industry are doing				
OLC3- I adopt useful practices and techniques that I believe to be useful	3.96	1.11	-1.18	.91
OLC4- I appreciate different ideas and opinions	4.09	1.20	-1.37	1.03
OLC5- I try to improve my ways of thinking and working	3.98	1.11	-1.15	.79
Social Media Capabilities (SMC)				
SMC1- I use social media to share posts on my fashion products	4.03	1.12	-1.23	.92
SMC2- I use social media to detect fundamental shifts in the fashion industry	3.78	1.05	-.70	.08
SMC3- I use social media to understand changes in consumer’s fashion preferences	3.91	1.09	-.96	.47
SMC4- I use social media to conduct market research on my industry of operations	3.95	1.17	-1.12	.57
SMC5- I use social media to identify designs for my customers	4.03	1.18	-1.28	.84
SMC6- Using social media helps me to attract new customers				
SMC7- I use social media to enhance my relationship with my customers	4.08	1.12	-1.41	1.44
	4.04	1.13	-1.34	1.23
Firm Performance (FP)	3.67	1.23	-.78	-.27
FPER1- I have observed an increase in sales over the past two years	3.92	1.20	-1.12	.42
FPER2- I have observed an increase in profit growth over the past two years	4.08	1.12	-1.33	1.21
FPER3- I have observed that more of our customers keep coming back to place new orders	4.32	1.01	-1.81	3.09
FPER4- I have observed that our customers continue to purchase from us	4.38	1.04	-1.96	3.31
FPER5- The business has been able to retain most of its customers	4.38	1.03	-1.96	3.32
FPER6- The business has been able to acquire new equipment over the past two years	4.37	1.07	-1.95	3.14
FPER7- The business is now able to acquire more materials and inventory than at any point in our history	4.22	1.14	-1.50	1.38
FPER8- The business has grown to employ more apprentices	4.04	1.18	-1.23	.67
FPER9- Staff strength has increased over the past two years				

Source: Field Data (2024)

The study of the descriptive statistics revealed no anomalous trends or outliers. The mean values were strong indicating a strong degree of agreement among respondents, whilst the standard deviation, skewness and kurtosis all had values falling within acceptable thresholds confirming the normality of data (Pallant, 2016; 2020). Having satisfied this condition, the next step in the data analysis is presented in the next section.

6.2.3 Exploratory Factor Analysis

An Exploratory Factor Analysis (EFA) was performed to examine the underlying factor structure for the proposed scale items (Guan et al., 2020; Chang et al., 2021; Fernandes et al., 2022). Various scholars recommend using EFA to screen measurement items and determine their robustness before further scale refinement and purification (Jokiniemi et al., 2021; Dabbagh et al., 2023). Even though this study's objectives did not include scale development, sustainable fashion entrepreneurship is still a relatively unknown construct with limited empirically validated scales, requiring this study to adapt scales. Consequently, following recommended statistical methods (Schreiber, 2021; Watkins, 2021; Howard & Henderson, 2023), this study opted to conduct an exploratory factor analysis to refine the scale items before going back to the field to collect a second round of data for subsequent confirmatory analysis. The first set of quantitative data collection entailed the collection of a dataset comprising two hundred and ninety-seven (297) final responses from fashion entrepreneurs in Accra and Kumasi after data screening. This data was subjected to an EFA analysis and the results are presented in the ensuing sections. Before the factor analysis, the KMO and Bartlett's Test of Sphericity were undertaken to determine if the data was factorable. The results in Table 6.5 indicate that significance was achieved and the KMO value was above the required threshold, thus making the data suitable for factor analysis (Williams et al., 2010; Pallant, 2016; Shrestha, 2021).

Table 6. 5: KMO and Bartlett’s Test of Sphericity

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.960
Bartlett's Test of Sphericity	Approx. Chi-Square	10121.670
	df	630
	Sig.	.000

The results from the exploratory factor analysis revealed that the four (4) factors of the study namely: sustainable fashion entrepreneurship, organisational learning capabilities, social media capabilities and firm performance accounted for 69.15% of the variance in the dataset. The factor items were constrained to 0.60 meaning that all items that did not meet this criterion were eliminated from the rotated component matrix. Some items dropped as a result, and the questionnaire was redesigned for the second stage of the quantitative data collection process. Four (4) items dropped from the construct sustainable fashion entrepreneurship, whilst two (2) dropped from the organisational learning capabilities construct. Social media capabilities retained all its seven (7) items, whilst one (1) item dropped from firm performance. In all, seven (7) items dropped due to factor loadings being below the 0.60 cut-off point. Table 6.6 provides the results from the EFA and indicates the items and their respective factor loadings.

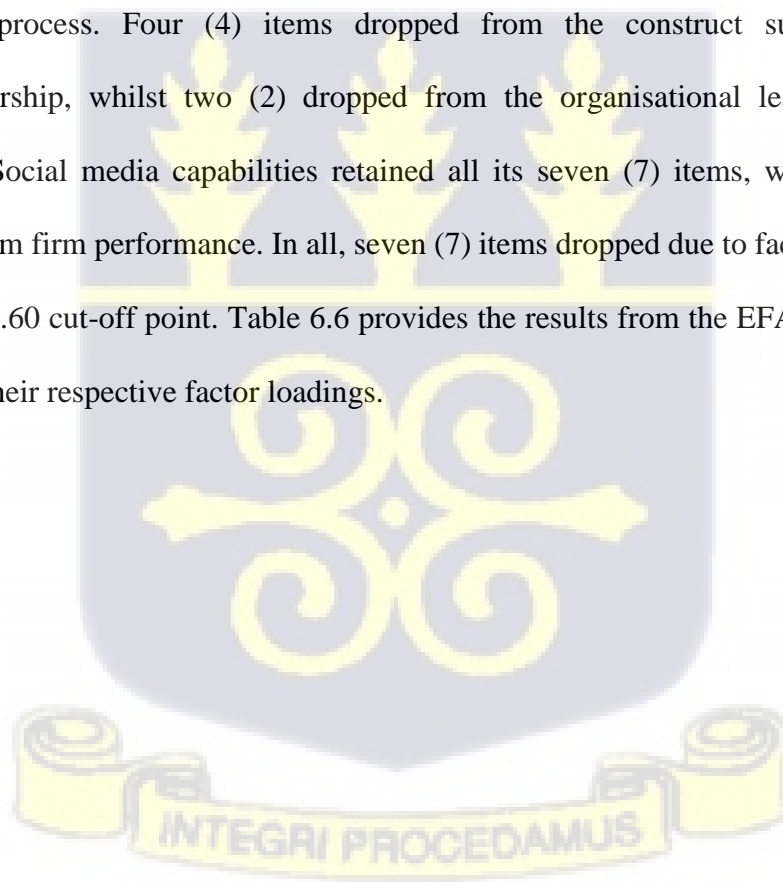


Table 6. 6: Results from exploratory factor analysis

Items	Factor Loadings
Sustainable Fashion Entrepreneurship	
SFEN1- I design clothes that optimize the fabrics at my disposal	.704
SFEN3- In my design, I consider how best to make the client look good without excess fabric consumption	.749
SFEN4- I use old garments to recreate new designs	.716
SFEN5- I transform old clothes into new fashion for my clients	.745
SFEN6- I don't allow old clothes to go to waste; I always find something valuable to make from them	.752
SFEN7- I make a conscious effort to avoid wasting resources	.703
SFEN8- Every item of material has a use in my shop and does not go to waste	.743
SFEN9- I gather material pieces and other elements and store them for reuse to	.802
SFEN10- I ensure that all the fabric we buy is used efficiently to avoid waste	.827
SFEN11- I consistently turn off machines when they are not in use during non-working hours	.782
SFEN12- I turn off the lights in the shop after work	.730
Organisational Learning Capabilities	
OLC1- I experiment and learn new things as a way of improving my fashion outputs	.718
OLC2- I follow what other designers in the industry are doing	.604
OLC3- I adopt useful practices and techniques that I believe to be useful	.660
OLC5- I try to improve my ways of thinking and working	.737
Social Media Capabilities	
SMC1- I use social media to share posts on my fashion products	.750
SMC2- I use social media to detect fundamental shifts in the fashion industry	.791
SMC3- I use social media to understand changes in consumer's fashion preferences	.721
SMC4- I use social media to conduct market research on my industry of operations	.745
SMC5- I use social media to identify designs for my customers	.757
SMC6- Using social media helps me to attract new customers	.786
SMC7- I use social media to enhance the relationship with my customers	.735
Firm Performance	
FPER1- I have observed an increase in sales over the past two years	.692
FPER2- I have observed an increase in profit growth over the past two years	.652
FPER3- I have observed that more of our customers keep coming back to place new orders	.702
FPER4- I have observed that our customers continue to purchase from us	.756
FPER5- The business has been able to retain most of its customers	.782
FPER6- The business has been able to acquire new equipment over the past two years	.795
FPER7- The business is now able to acquire more materials and inventory than at any point in our history	.771
FPER8- The business has grown to employ more apprentices	.719

Source: Field Data (2024)

6.2.4 Confirmatory Factor Analysis

Confirmatory factor analysis (CFA) was performed to examine the unidimensionality of the research model (Brown & Moore, 2012; Kline, 2013; Hox, 2021). Researchers (See DiStefano & Hess, 2005; Schreiber, 2022) have argued that the purpose of conducting a confirmatory factor analysis is to determine whether the factor structure matches the theory to the data collected. In other words, CFA is an analytical process that establishes conformity and alignment between a hypothesised model and actual data collected (Schreiber, 2017; Schreiber, 2022). In this study, Amos version 23 was used to analyse the measurement model to assess the convergent and discriminant validity of the scale items used in measuring the four constructs namely: Sustainable fashion entrepreneurship (SFE), Social media capabilities (SMC), Organisational learning capabilities (OLC) and Firm performance (FP). Confirmatory factor analysis is performed when researchers have strong theoretical foundations for the conceptual model they have developed (Hox, 2021; Luong & Flake, 2023). In this study, the entrepreneurial bricolage and dynamic capabilities theory were used to anchor the relationships between sustainable fashion entrepreneurship and the other variables mentioned earlier. Accordingly, CFA was performed using the Maximum Likelihood estimation technique in Amos. The final data for the CFA comprised of 292 responses extracted from data gathered from 300 fashion entrepreneurs in Accra and Kumasi. 8 responses were discarded due to incomplete and inconsistent responses.

An initial thirty-one (31) items were modelled in Amos 23 representing items measuring the four (4) constructs of the study. Eleven (11) items were used in measuring sustainable fashion entrepreneurship, whilst seven (7) items were used in measuring social media capabilities. Organisational learning capabilities were represented by five (5) items, whilst firm performance was represented by eight (8) items. After various iterations, the final measurement model that attained model fitness comprised of four (4) constructs represented by sixteen (16) items. The final model is illustrated in Figure 6.1.

Figure 6. 1: Final Measurement Model

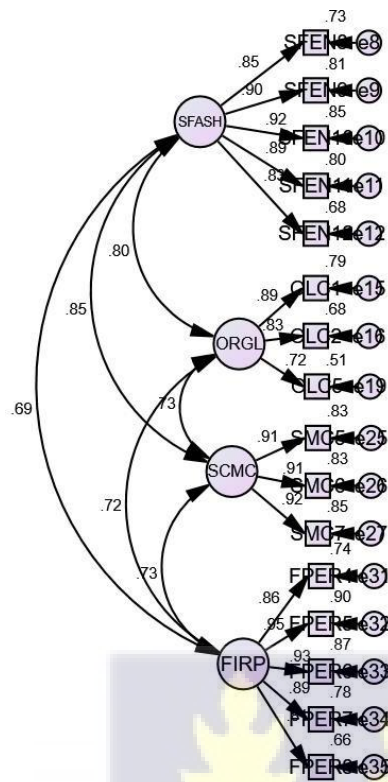


Table 6. 7: Model Fitness

Model Fit Indices	Required Threshold	Final Model Results
χ^2/Df	$\geq .90$	2.310
CFI	$\geq .90$.974
TLI	$\geq .90$.969
NFI	$\geq .90$.956
RMSEA	$\geq .06-.08$.066

Table 6.7 provides an overview of the results from the model fitness checks. Based on the required thresholds, the fit indices obtained for the Chi-square degree of freedom, Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Normalized Fit Index (NFI) and Root Mean Square Error of Approximation (RMSEA) all fell within the acceptable range, thus confirming that the model fit the data. Model fitness was thus achieved, implying that the final model portrayed a symbiosis between the theorised model and the actual data collected (Carter, 2016; Schreiber, 2017). It is however worth noting that some items dropped from the initial model after various iterations. These iterations are part of the CFA

process and result in the process of establishing the model that best fits the data (Hair et al., 2017; Schreiber, 2022).

Sustainable fashion entrepreneurship maintained five (5) items out of the twelve (12) initial items, whilst social media capabilities retained three (3) out of seven (7) items. Organisational learning capabilities retained three (3) out of five (5) items, whilst firm performance retained five (5) out of eight (8) items. Items dropping during the CFA process indicate several things including low factor loadings, poor model fitness, and data issues (Hair Jr et al., 2017; Schreiber, 2022). This study notes that the concept of sustainable fashion entrepreneurship is still in its embryonic stages in the Ghanaian fashion industry as confirmed in the qualitative interviews. Thus, some of the items dropped based on the fact that respondents were not familiar with them or did not reflect the nature of sustainable fashion entrepreneurship and the associated variables in the Ghanaian context. Such occurrences have been identified in past studies and are therefore logical conclusions as to why some items dropped from the measurement model (Cheung & Rensvold, 2002; Steenkamp & Baumgartner, 1998; DeVellis, 2017). Table 6.8 presents the results from the measurement model analysis and provides insight into the validity and reliability of the measurement items. The table includes results for the factor loadings, t-value, p-value, Cronbach alpha, composite reliability (CR) and average variance extracted (AVE).



Table 6. 8: Measurement model results

Item	Factor Loadings	t-value	p-value	CA	CR	AVE
Sustainable Fashion	.85	Fixed	***	.86	0.94	0.77
Entrepreneurship						
SFEN8- Every item of material has a use in my shop and does not go to waste	.90	21.62				
SFEN9- I gather material pieces and other elements and store them for reuse to	.92	22.44				
SFEN10- I ensure that all the fabric we buy are used efficiently to avoid waste	.89	21.15				
SFEN11- I consistently turn off machines when they are not in use during non-working hours	.83	18.43				
SFEN12- I turn off the lights in the shop after work						
Social Media Capabilities	.91	Fixed	***	.92	0.94	0.84
SMC5- I use social media to identify designs for my customers	.91	25.53				
SMC6- Using social media helps me to attract new customers	.92	26.18				
SMC7- I use social media to enhance the relationship with my customers						
Organisational Learning Capabilities			***	.90	0.85	0.66
OLC1- I experiment and learn new things as a way of improving my fashion outputs	.89	Fixed				
OLC2- I follow what other designers in the industry are doing	.83	17.68				
OLC5- I try to improve my ways of thinking and working	.72	14.30				
Firm Performance			***	.94	0.95	0.79
FPER4- I have observed that our customers continue to purchase from us	.86	Fixed				
FPER5- The business has been able to retain most of its customers	.95	24.63				
FPER6- The business has been able to acquire new equipment over the past two years	.94	23.80				
FPER7- The business is now able to acquire more materials and inventory than at any point in our history	.89	21.30				
FPER8- The business has grown to employ more apprentices	.81	18.10				

Note: ***p< .001; **p<.01; *p<0.5

The results from the CFA provide the basis for assessing convergent and discriminant validity. Convergent validity was assessed using factor loadings, average variance extracted and composite reliability (Hair Jr et al., 2017; Schreiber, 2022). Over time, scholars have emphasised the important role of the AVE and factor loadings as important measures of convergent validity (Schreiber et al., 2006). The AVE values represent an important litmus test to ascertain whether convergent validity was achieved or not (Schreiber, 2022). The factor loadings provide a relevant measure, as factor loadings need to exceed a threshold of 0.60 (Hair et al., 2014; Schreiber, 2022). Thus, factor loadings ranging from 0.60 or in some cases 0.70 are recommended as robust measures of convergent validity (Chin, 1998). The results from Table 6.8 indicate that the highest factor loading was 0.95 representing the item “**FPER5**- The business has been able to retain most of its customers”. The lowest factor loading was 0.72 representing “**OLC5**- I try to improve my ways of thinking and working”. This indicates that the factor loadings obtained were above 0.70, thus confirming convergent validity.

The Average Variance Extracted (AVE) is considered an important check for convergent validity. From Table 6.8, the highest AVE value was 0.84 for social media capabilities, and the lowest was 0.66 for organisational learning capabilities. These values were above the 0.60 threshold and thus confirm that convergent validity was achieved (Fornell & Lacker, 1981; dos Santos & Cirillo, 2023; Cheung et al., 2024). These results imply that the items measure the variables they were intended to, thus confirming validity. Additional tests were performed in Amos to check for the robustness of scale items. The Composite Reliability (CR) measure was assessed. Scholars such as Nunnally (1978) and Cheung et al. (2024) claim that CR values above 0.70 are a good indication that the items achieved reliability status and measured the constructs they were designed for. From Table 6.8, the CR results obtained were all above 0.80 and confirm that the items were reliable.

In testing for discriminant validity, scholars have recommended checking the inter-item correlation among the constructs (Hair et al., 2014; Hair Jr et al., 2017; Schreiber, 2022). Based on that, Fornell and Larcker (1989) and Anderson and Gerbing (1988) claim that to check discriminant validity, the square root of each AVE must be greater than any correlation among any pair of latent constructs. This has been confirmed by Fornell and Lacker (1981). The results in Table 6.8 confirm that this threshold was achieved, thus confirming discriminant validity. Based on these results, reliability, convergent and discriminant validity were achieved in the final measurement model. These results are displayed in Table 6.9.

Table 6. 9: Inter-Item Correlation for Validity Testing

	CR	AVE	MSV	MaxR(H)	SFASH	ORGL	SCMC	FIRP
SFASH	0.944	0.773	0.722	0.949	0.879			
ORGL	0.853	0.661	0.643	0.874	0.802***	0.813		
SCMC	0.938	0.835	0.722	0.938	0.850***	0.727***	0.914	
FIRP	0.950	0.791	0.538	0.961	0.690***	0.716***	0.734***	0.889

6.2.5 Path Analysis

Structural model analysis was conducted to determine the relationships and effects among the various hypothesised paths. Path analysis entails an analysis of the hypothesised relationships among constructs (Hair Jr et al., 2017; Hair Jr et al., 2021). The first five hypotheses examined the relationships among the various constructs. Hypothesis 1-5 were thus analysed through the path analysis. The path analysis sought to test the strength and direction of the relationships among the constructs (Schreiber, 2022). The integrity of the structural model was assessed using the model fitness parameters. The results of the path analysis are displayed in Table 6.10.

Table 6. 10: Results from path analysis

Hypothesised Relationships	β Estimate	S.E.	t-value	p-value
H1: SFE→FP	0.67	0.05	7.44	***
H2: SFE→OLC	0.71	0.04	17.55	***
H3: OLC→FP	0.34	0.06	5.96	***
H4: SFE→SMC	0.80	0.03	23.27	***
H5: SMC→FP	0.45	0.05	4.66	***
Control Variable: EDU→FP	0.50	0.46	1.26	.208

Note: ***p< .001; **p<.01; *p<0.5

Table 6.10 reveals that sustainable fashion entrepreneurship, measured as a first-order construct had a positive and significant effect on firm performance ($\beta= 0.67$, $p<0.001$). SFE positively and significantly predicted organisational learning capabilities ($\beta= 0.71$, $p<0.001$), whilst organisational learning capabilities (OLC) had a positive and significant effect on firm performance ($\beta= 0.34$, $p<0.001$). SFE positively predicted social media capabilities (SMC) with $\beta= 0.80$, and $p<0.001$. Finally, SMC had a positive and significant effect on firm performance ($\beta= 0.45$, $p<0.001$). Hypotheses 1-5 were all supported as the hypothesised relationships were positive and significant. Table 6.11 provides proof of the integrity of the structural model as the various thresholds were satisfied and within the acceptable range as prescribed.

Table 6. 11: Indices for Structural Model

Fit Indices	Recommended Threshold	Results
X ² /DF		2.84
RMSEA	$\leq 2/3$	0.07
TLI	<.06 to .08	0.97
CFI	>.90	0.99
GFI	>.90	0.99

6.2.6 Mediation Analysis

The study conceptualised social media and organisational learning capabilities as mediators of the relationship between sustainable fashion entrepreneurship and firm performance. A mediation analysis was performed in Amos 23 using Preacher and Hayes' (2004) Bootstrapping technique. A bootstrap sample of 5,000 and a bias-corrected confidence interval of 95% was used in the analysis. The results of the mediation analysis are presented in Table 6.12.

Table 6. 12: Mediation Analysis

Relationship	Hypothesis	Direct without Mediator (p-value)	Direct with Mediator (p-value)	Indirect Effect	Mediation Type
SFE→OLC→FP	H6	0.67(***)	0.43(***)	0.24***	Partial Mediation
SFE→SMC→FP	H7	0.67(***)	0.31(***)	0.36***	Partial Mediation

Note: *** $p < .001$; ** $p < .01$; * $p < 0.5$

The first mediation analysis tested organisational learning capabilities as the mediating variable. The results revealed that organisational learning capabilities partially mediated the nexus between sustainable fashion entrepreneurship and firm performance. An indirect effect was achieved (0.24, $p < 0.001$), thereby confirming that OLC mediates the relationship between SFE and FP. Upon the introduction of OLC as a mediator, the original relationship between SFE and FP remained positive and statistically significant, thereby confirming that a partial mediation effect was achieved (Preacher & Hayes, 2004; Hayes & Preacher, 2010; Igartua & Hayes, 2021; Hair Jr et al., 2021).

The second mediation analysis was performed using social media capabilities as a mediating variable. The results indicate that an indirect effect was achieved (0.36, $p < 0.001$) and social media capabilities partially mediated the relationship between sustainable fashion entrepreneurship and firm performance. Before the introduction of social media capabilities, the relationship between sustainable fashion entrepreneurship and firm performance was positive and significant ($\beta = 0.67$, $p < 0.001$). Upon its introduction, this same relationship remained positive and statistically significant ($\beta = 0.31$, $p < 0.001$) thereby confirming a partial mediation effect (Hayes & Preacher, 2010; Hayes, 2018). The results in Table 6.12 thereby indicate that both organisational learning and social media capabilities partially mediate the relationship between sustainable fashion entrepreneurship and firm performance.

6.3 Summary of Results

After conducting the various analytical processes, the key results obtained are highlighted in Table 6.13 and form the basis for the discussion of results in the next chapter.

Table 6. 13: Summary of Results

Hypothesised Relationships	β Estimate	Outcome
H1: Sustainable Fashion Entrepreneurship → Firm Performance	0.67	Accepted
H2: Sustainable Fashion Entrepreneurship → Organisational Learning Capabilities	0.71	Accepted
H3: Organisational Learning Capabilities → Firm Performance	0.34	Accepted
H4: Sustainable Fashion Entrepreneurship → Social Media Capabilities	0.80	Accepted
H5: Social Media Capabilities → Firm Performance	0.45	Accepted
H6: Mediating Role of Organisational Learning Capabilities	Partial	Accepted
H7: Mediating Role of Social Media Capabilities	Partial	Accepted

6.4 Chapter Summary

This chapter has provided insight into the various data analysis techniques adopted in analysing the data collected from respondents. The chapter commenced by exploring the qualitative data through the thematic analysis technique. This was useful in making meaning out of the data collected. An analysis of the quantitative data followed after. The chapter analysed the respondent profile and descriptive statistics to provide insight into the nature and profile of the study's sample. The descriptive statistics offered insight into the nature of the data and its suitability for further analysis. Other quantitative data analysis procedures included exploratory factor analysis, confirmatory factor analysis, structural model analysis, and mediation analysis. The various thresholds required to confirm the soundness of the analysis results were obtained. This chapter has therefore succeeded in discussing the several data analysis processes to facilitate a discussion of the findings in the next chapter.



CHAPTER SEVEN

DISCUSSION OF FINDINGS

7.0 Chapter Overview

The preceding chapter played its role in highlighting the key results from the data analysis process. Those results led to the identification of key findings, and form the basis for discussion in this chapter. In this final chapter, the study's findings are discussed in alignment with the research objectives. This is done to establish the relationship between the study's purpose and its findings. The findings are discussed by comparing the results with previous studies in the same field to establish parity or differences in results and perspectives.

7.1 Overview of the study

This study set out with the aim of examining the relationship between sustainable fashion entrepreneurship and firm performance through the indirect effects of organisational learning capabilities and social media capabilities. The study was underpinned by an overarching purpose of demystifying the nature of sustainable entrepreneurship within the context of the fashion industry in a developing economy, in Ghana. To achieve this aim, a mixed methods approach was embraced to facilitate the use of qualitative and quantitative methods of data collection and analysis. This choice was predicated on the need to triangulate data to confirm the practice of sustainable fashion entrepreneurship in the Ghanaian context. Accordingly, face-to-face interviews with fashion entrepreneurs based in Accra and Kumasi were conducted. The results from those interviews were analysed thematically and yielded some important findings. Further, a survey was conducted among fashion entrepreneurs in Accra and Kumasi through the administration of a structured

questionnaire containing questions related to sustainable fashion entrepreneurship, organisational learning capabilities, and social media learning capabilities.

7.2 Discussion of findings

The results of the data analysis conducted in the previous chapter form the basis of discussion in this section. The research objectives underpinning this study were: to explore the nature and dimensions of sustainable fashion entrepreneurship in Ghana, to determine the impact of sustainable entrepreneurship on firm performance amongst fashion entrepreneurs in Ghana, to ascertain the effect of organisational learning capabilities on firm performance amongst fashion entrepreneurs in Ghana and to determine the effect of social media capabilities on firm performance amongst fashion entrepreneurs in Ghana. The other research objectives were: to test the mediating role of organisational learning capability on the relationship between sustainable entrepreneurship and firm performance amongst fashion entrepreneurs in Ghana and to examine the mediating role of social media capabilities on the relationship between sustainable entrepreneurship and firm performance amongst fashion entrepreneurs in Ghana. These objectives are used in the ensuing sections to discuss the findings of the study.

7.2.1 The nature and dimensions of sustainable fashion entrepreneurship in Ghana

The first objective of this study was qualitative. It sought to explore the nature of sustainable fashion entrepreneurship due to the lack of studies outlining variables that constitute sustainable fashion entrepreneurship. The findings of the study reveal that among fashion entrepreneurs in Ghana, specifically the sampled respondents from Accra and Kumasi, it was evident that sustainability meant the conservative and prudent use of firm resources. The responses from the thematic analysis indicate that most respondents considered sustainable fashion entrepreneurship to comprise the careful management of fabric,

preservation of excess pieces and material, and prudent conservation of electricity. Even though some of the responses alluded to design practice and some elements of upcycling, it was evident that waste reduction and energy conservation were the dominant elements of sustainability that were underpinning their business practices and operations.

Exploring these two dimensions further, the study found that Ghanaian fashion entrepreneurs were trained with a focus on maximising fabric potential and minimising waste. This constitutes an important part of sustainable business practices as evident from past studies (Shirvanimoghaddam et al., 2020; Wong & Ngai, 2021; Ikram, 2022). Material waste management is deemed an important activity that can contribute to the attainment of sustainable development goals (Akter et al., 2022).

The fashion industry is increasingly recognised as a critical sector in advancing the Sustainable Development Goals (SDGs), given its substantial environmental footprint and the challenges posed by fast fashion (Cai & Choi, 2020; Gardetti & Muthu, 2020; Thakker & Sun, 2023; de Oliveira Neto et al., 2019). In response, the integration of waste management practices into sustainable fashion entrepreneurship has emerged as a strategic imperative for aligning business operations with global sustainability targets (Da Giau et al., 2020). Findings from the qualitative data affirm that Ghanaian fashion entrepreneurs are consciously adopting waste minimization practices particularly in the use of materials, fabrics, and production resources. This aligns with existing literature that positions waste reduction as a core pillar of sustainable fashion business models (Patti et al., 2020; Brydges, 2021; Colucci & Vecchi, 2021; Islam et al., 2021; Mishra et al., 2021).

The quantitative analysis revealed that, within the Ghanaian context, sustainable fashion entrepreneurship is best conceptualized as a first-order construct comprising primarily waste reduction and, to a lesser extent, energy conservation. Design practice and upcycling, though present in the qualitative narratives did not meet the statistical thresholds for inclusion in the final measurement model due to poor model fit. When

juxtaposed with the qualitative findings, it becomes evident that sustainable fashion entrepreneurship in Ghana is predominantly operationalized through material efficiency, with limited institutionalization of more advanced sustainability practices. This underscores the need for context-specific models that reflect the realities of resource-constrained entrepreneurial ecosystems.

This study's findings diverge significantly from prior literature that conceptualises sustainable fashion entrepreneurship through broad, often Western-centric frameworks. For instance, Thorisdottir et al. (2024) adopt the traditional triple-bottom-line model social, environmental, and economic dimensions without contextual adaptation, a framing that contrasts with the more practice-oriented indicators identified in this study. Similarly, Heinze (2020) emphasises pro-social motives, entrepreneurial risk, and ethical self-management as defining features, which do not align with the Ghanaian context where waste reduction, energy conservation, design practice and upcycling emerged as more salient though the latter two were not deeply embedded in practice.

Notably, Elf et al. (2022) position design practice and upcycling as central to circular fashion entrepreneurship, yet these elements were not statistically significant in this study's final measurement model. This suggests that, contrary to global narratives, such practices are not yet institutionalized within Ghana's sustainable fashion ecosystem. Likewise, Daukantien (2023) presents a multidimensional classification encompassing design methods, sustainable materials, and advanced clothing technologies, dimensions largely absent in the Ghanaian context. Collectively, these contrasts underscore a critical insight: sustainable fashion entrepreneurship in Ghana reflects a more emergent, resource-constrained model that challenges dominant theoretical assumptions and highlights the need for context-specific frameworks

7.2.2 Impact of sustainable entrepreneurship on firm performance of fashion entrepreneurs

The second objective underpinning this study was to examine the impact of sustainable entrepreneurship on the firm performance of fashion entrepreneurs. The study's results confirm a positive and significant relationship between the two constructs ($\beta = 0.67$, $p < 0.001$). This indicates that the practice of sustainable fashion entrepreneurship has positive effects on the enterprise performance of fashion entrepreneurs in Ghana. By implication, fashion entrepreneurs who practice sustainable fashion entrepreneurship will experience positive performance outcomes. Comparing these results to evidence from the extant literature, it is apparent that the strategic application of sustainability in business operations contributes to enterprise performance (Habib et al., 2020; Amin et al., 2024). Past studies have generally noted the positive impact of sustainable entrepreneurship on firm performance (Abbate et al., 2024; Xie et al., 2024) and have concluded that enterprises that adopt sustainable practices are likely to witness positive effects in terms of sales and other dimensions of firm performance. Interestingly, in this study, firm performance was measured using items that measured the sales and profitability of the enterprise as well as customer retention and loyalty, employee recruitment and inventory growth. These items capture the essence of growth within a fashion enterprise. The findings of this study therefore reinforce existing notions of the positive effect of sustainable entrepreneurship on firm performance (Abbate et al., 2023; Chen et al., 2023).

The findings correspond with the results obtained by Soto-Acosta et al. (2016) who found that sustainable entrepreneurship accounted for a large percentage of variance in business performance, especially the people and profit dimensions. Thus, this study's findings establish that enterprises engaging in sustainability will experience positive effects on profit and employee retention. Other studies confirming the positive effects of sustainable entrepreneurship on business firm performance include the study by Terán- Yépez, et al.

(2020) who reviewed the literature on sustainable entrepreneurship and found significant evidence validating the positive effect of sustainable entrepreneurship on firm performance. Additionally, Ahmad et al. (2022) found evidence proving the positive impact of sustainable entrepreneurship on the performance of SMEs. Transposing the findings of Ahmad et al. (2022) to the present study, it is evident that even though not all fashion entrepreneurs can be considered SMEs, they are still business enterprises. Thus, Ahmad et al.'s (2022) findings further validate the findings of this study. It can therefore be concluded that sustainable entrepreneurship leads to enterprise performance. Even though there are limited studies examining the connection between sustainable entrepreneurship, other researchers have established a link between firms practising sustainable entrepreneurial orientation and business performance (Criado-Gomis et al., 2018; Afum et al., 2023; Egieya et al., 2023). These studies resonate with the findings of this study from sustainable fashion entrepreneurs in Ghana.

This study uniquely evaluates the impact of sustainable fashion entrepreneurship characteristics on firm performance in Ghana. The study initially conceptualised sustainable fashion entrepreneurship as a variable representing four elements: design practice, upcycling, energy conservation and waste reduction. The study's findings indicated that the construct of sustainable fashion entrepreneurship was comprised of only waste reduction and energy conservation, out of the four dimensions in the final measurement model. Indeed, the five items that reflected the construct in the model were: "SFEN8- Every item of material has a use in my shop and does not go to waste, SFEN9- I gather material pieces and other elements and store them for reuse, SFEN10- I ensure that all the fabric we buy is used efficiently to avoid waste, SFEN11- I consistently turn off machines when they are not in use during non-working hours, and SFEN12- I turn off the lights in the shop after work". These five items prove that from the context of the Ghanaian fashion entrepreneur, sustainable fashion mostly comprises waste reduction and energy conservation.

This is unsurprising as the dynamics of the Ghanaian fashion industry are different from industries in countries in the Global North where strong policy and established fashion houses with strong management practices and a sustainability-driven consumer culture facilitate a more comprehensive approach to sustainable fashion entrepreneurship (Atik & Ozdamar Ertekin, 2023; Li & Zhao, 2023). In foreign contexts, it is evident that design practice and upcycling are integral elements of sustainable fashion (Monyaki & Cilliers, 2023; Roster, 2024), however, in the Ghanaian context, these elements do not appear to be well embedded in the sustainability practices of fashion entrepreneurs. Notwithstanding, there is strong empirical evidence that supports the dimensions of waste reduction and energy conservation as important elements of sustainable fashion entrepreneurship (Abbate et al., 2024; Srivastava et al., 2024). For example, the study by Patti et al. (2020) highlights waste recovery as an important element of sustainability in the ecosystem of fashion houses. Other studies by scholars such as Mason et al. (2022) note the role of waste management and reduction among other strategies such as recycling as being key to the fight against fast fashion. There is further evidence from Claxton and Kent (2020) acknowledging the role of waste reduction as a strategy for sustainable fashion enterprises in the circular economy. These studies therefore offer empirical support to the findings of this study and confirm that waste reduction especially is a vital component of sustainable fashion entrepreneurship.

7.2.3 Effect of organisational learning capabilities on firm performance of fashion entrepreneurs

This study sought to determine the effect of organisational learning capabilities on the firm performance of sustainable fashion entrepreneurs in Ghana. The results ($\beta = 0.34, p < 0.001$) indicate that organisational capabilities positively and significantly affect the firm performance of fashion entrepreneurs in the fashion industry. The conclusive measuring model indicated that three measurement items encapsulated organisational learning capacities within the fashion business. These items were “OLC1- I experiment and learn new

things as a way of improving my fashion outputs, OLC2- I follow what other designers in the industry are doing, and OLC5- I try to improve my ways of thinking and working”. Based on these items, it is evident that fashion entrepreneurs who constantly experiment and try to adopt new practices with the view of improving their fashion products are likely to perform better than competitors who do not adopt these same practices. Further, organisational learning in the fashion industry entailed benchmarking what competitors were doing and incorporating those practices within the business enterprise. Lastly, organisational learning comprises the relentless ability to improve the nature and outcome of work in the fashion enterprise. These results indicate that a sustainable fashion enterprise that develops organisational learning capabilities is going to perform better through dynamic, innovative and benchmarking processes.

Consistent with previous research, this study found that organisational learning capabilities positively impacted company performance (Tippins & Sohi, 2003; Goh et al., 2012; Giniuniene & Jurksiene 2015; Chen & Lin, 2021). In previous studies, organisational learning capabilities were found to positively impact firm performance directly (Akgün et al., 2014; Tu & Wu, 2021; Aboytes et al., 2022). This shares commonality with the findings of the present study as organisational learning capability positively and significantly impacted firm performance, once again demonstrating that irrespective of the industry of operations, the quest to acquire and utilize knowledge to improve business performance is a capability that improves a firm’s performance. The finding of this study therefore confirms that fashion entrepreneurs adopting and implementing organisational learning capabilities perform well and achieve their business goals, especially in terms of acquiring and retaining customers. This demonstrates that the fashion industry and especially fashion entrepreneurs stand to benefit significantly by building and developing organisational learning capabilities. Interestingly, organisational learning capabilities have erstwhile mostly been considered a capability for large firms and manufacturing organisations (Tortorella et al., 2020; Zhang et

al., 2020; Alerasoul et al., 2022) but the results and findings of this study prove that even micro-enterprises such as fashion entrepreneurs can find benefits and merit in the adoption and implementation of organisational learning capabilities.

7.2.4 Effect of social media capabilities on firm performance of fashion entrepreneurs

The effect of social media capabilities on the firm performance of sustainable fashion entrepreneurs was assessed. The results ($\beta = 0.45$, $P < 0.001$) indicated that social media capabilities positively and significantly predict the firm performance of fashion entrepreneurs in Ghana. This implies that fashion entrepreneurs who adopt social media and use it to post their products, acquire customers, identify current trends in the fashion industry and study competitor's designs are going to perform positively. Past studies have indicated that the adoption of social media capabilities positively contributes to firm performance (Wang & Kim, 2017; Foltean et al., 2019; Tajvidi & Karami, 2021; Ye et al., 2022). The study by Wang and Kim (2017) for instance found that social media marketing improves enterprise performance through the development of customer relationship capabilities. This finding corresponds to the findings of this study as it further confirms that social media capabilities are useful in developing building and maintaining relationships with customers as demonstrated by the results of this study. Further, the findings of Wang and Kim (2017) share similarities with the findings of this study as both indicate that social media positively influences firm performance.

Other studies have corroborated the positive impact of social media on firm performance. In the study by Tajvidi and Karami (2021), a positive relationship was found between social media use and the performance of hotels. This is comparable with the findings of this study, albeit from the context of fashion entrepreneurs and not hotels. Further, Foltean et al. (2019) investigated the link between customer relationship management capabilities, social media and firm performance, and found that social media technology had a positive effect on firm

performance directly, and indirectly through the mediating role of customer relationship management capabilities. These studies, not only highlight the potency of social media as a powerful predictor of firm performance but substantiate the results and findings of this study by demonstrating that social media positively impacts firm performance, irrespective of the industry of operations.

This study's results indicate that fashion entrepreneurs who adopt, build and implement social media capabilities are likely to experience positive and significant firm performance, compared to their peers who do not use this technology nor build these competencies. Evidence from the extant literature provides additional backing to these findings as revealed by the study of Ye et al. (2022) who found that social media was a strategic tool that was critical in establishing a firm's dynamic capabilities, and consequently impacting positively on firm performance. This finding not only shares a correlation with the results of this study but also reinforces the value of social media as a dynamic firm capability with the potential to transform enterprise fortunes through growth and firm performance. Reviewing the extant literature, it is clear that the role of social media as an enabler and not a hindrance to firm performance has been established (Paniagua & Sapena, 2014; Wang et al., 2016; Braojos et al., 2019; Odoom & Mensah, 2019). There is no contrary evidence to suggest that adopting and building social media capabilities hurts firm performance (Marchand et al., 2021; Le & Chakrabarti, 2023). Therefore, the results of this study prove that the adoption of social media capabilities by fashion entrepreneurs positively impacts their firm performance.

7.2.5 Mediating role of organizational learning capabilities

The mediating effect of organizational learning capabilities on the nexus between sustainable fashion entrepreneurship and firm performance was examined in this study. This was to determine whether organizational learning indirectly facilitated the effect of sustainable fashion entrepreneurship on the business performance of fashion entrepreneurs in Ghana. After the analysis, it was revealed that upon the introduction of the mediator, organizational

learning capabilities still rendered the baseline relationship between sustainable fashion entrepreneurship and firm performance positive and significant. This implies that a partial mediation effect was achieved. Further, the indirect effect was analysed and found to be significant, thereby confirming that organizational learning capabilities facilitated an indirect effect of sustainable fashion entrepreneurship on firm performance among fashion entrepreneurs. The implication of these results are that fashion entrepreneurs can achieve firm performance through their sustainable practices, namely, waste reduction and energy conservation. However, they can also achieve firm performance through the presence of organizational learning capabilities. Therefore, organizational learning capacity acts as a bridge that facilitates the effect of sustainable fashion entrepreneurship on firm performance. Impliedly, fashion entrepreneurs who develop and implement organizational learning capabilities will have positive performance outcomes. Organisational learning capabilities are therefore vital for fashion entrepreneurs as they create a pathway to firm performance.

Previous studies in the extant literature have similarly heralded the role of organizational learning capabilities as a mediating variable (Oyewobi et al., 2021). In an earlier study by Hsu and Fang (2009), organizational learning capabilities mediated the relationship between intellectual capital and new product development performance. Also, Kalmuk & Acar (2015) examined the mediating role of organizational learning capability on the relationship between innovation and a firm's performance, and it was proven that organizational learning capabilities mediate the relationship between different types of innovation and firm performance. Similarly, Aragón et al. (2014) found that organizational learning capabilities can mediate the relationship between training and performance. These studies have all demonstrated the critical role that organizational learning plays as a facilitator of connections between firm strategy and performance. The development of firm capabilities such as organizational learning is vital to ensuring that enterprise strategies result in optimum performance. Transposing these findings to the present study, it is evident that the adoption

and development of organizational learning capabilities among fashion entrepreneurs contributes effectively to the nexus between sustainable fashion entrepreneurs and firm performance. Even though these prior studies tested the mediating effect of organizational learning in other contexts and not the fashion sector, the findings of this study confirm that even within this sector, organizational learning is pivotal in ensuring firm performance.

7.2.6 Mediating role of social media capabilities

This study found that social media learning capabilities partially mediate the relationship between sustainable fashion entrepreneurship and firm performance. The results of the analysis indicate that sustainable fashion entrepreneurship had an indirect effect on firm performance through social media capabilities. Social media capabilities mediated the nexus between sustainable fashion entrepreneurship and firm performance, albeit through a partial mediation effect. This means that sustainable fashion practices can directly lead to firm performance, but also through social media capabilities. This finding is not dissimilar to previous studies on the mediating role of social media capabilities. Indeed, the findings of this study share commonality with other past studies (Freixanet et al., 2021; Pekkala & van Zoonen 2022; Fang et al., 2022; Tajpour et al., 2022; Al Halbasi et al., 2024) where the role of social media as a mediator was confirmed. This implies that the adoption of social media, and the development of social media capabilities by fashion entrepreneurs represent a significant competency that can ensure that sustainable fashion practices indirectly results in enterprise performance. Distilling this finding further, this study argues that social media is an indispensable tool for micro-enterprises especially as it provides them with an opportunity to engage in cost-effective marketing communications and customer relationship management (Chuang, 2020; Migdadi, 2020; Khan et al., 2022). These are all embedded within the development of social media capabilities, and unsurprisingly, the study found that a mediation effect was achieved with social media partially mediating the relationship between sustainable fashion entrepreneurship and firm performance in the Ghanaian fashion industry. Per this finding, Ghanaian fashion entrepreneurs who leverage social media will

achieve positive and significant performance outcomes. Vladimirova et al. (2024) confirmed the important role of social media in facilitating sustainable consumption and argued that the nature and effects of social media are such that it is a viable tool for shaping sustainable behaviour. Therefore, its mediating role in this study is verified, confirmed and supported by extant studies.

7.3 Chapter Summary

This chapter is the final part of this study and provides a recap of the study's aims and objectives whilst discussing the findings in conjunction with the objectives to ensure an alignment between the two. The chapter provided a discussion of the findings and offered justification for the findings by comparing them with past studies to determine similarities or differences in research findings.



CHAPTER EIGHT

SUMMARY, CONCLUSIONS AND CONTRIBUTIONS

8.0 Chapter Overview

In this chapter, a conclusion encapsulating the major outcomes of this study is provided, as a basis for establishing the achievement of the research objectives and its connotations. The study's theoretical, managerial, and policy contributions are also expounded. The chapter further provides input on the implications of the findings contributing to recommendations to relevant stakeholders in the fashion industry in Ghana. Finally, the study's limitations are divulged with directions for future research on sustainable fashion entrepreneurship and its related outcomes.

8.1 Summary of the Study

This study sought to determine the impact of sustainable entrepreneurship on the firm performance of fashion entrepreneurs in Ghana. This aim led to the development of a conceptual framework that was tested and validated with empirical data. The data from respondents was analysed leading to some key findings which have been discussed in the previous chapter. Essentially, this study found that even though the scope and extent of sustainable fashion entrepreneurship in Ghana differs from the established practice in the Global North, there is evidence that points to elements of sustainability within Ghana's fashion industry. Through the mixed methods approach, this study triangulated qualitative data from interviews and quantitative data from the survey to establish the nature and composition of sustainable fashion entrepreneurship in the Ghanaian context. The use of the thematic analysis and structural equation modelling facilitated an understanding of the role of waste reduction and energy conservation as the prevailing sustainability practices within Ghana's fashion industry. The study's findings reveal that these two elements are understood and practiced by Ghanaian fashion entrepreneurs, leading to a positive effect on firm

performance. Furthermore, the practice of sustainable fashion entrepreneurship positively influences organisational learning capabilities and social media capabilities, further showcasing how sustainable fashion entrepreneurs are driven to acquire knowledge and expertise in social media to promote their business interests. In the next section, the conclusions of the study are presented and provide insight into the findings and its key connotations.

8.2 Conclusions of the study

Sustainable fashion entrepreneurship is still an emerging discourse in the sustainable entrepreneurship literature. This study sought to investigate its practice and effect on the firm performance of fashion entrepreneurs in Ghana. The results confirm that sustainable fashion entrepreneurship positively influences firm performance. Waste reduction and energy conservation were found to be two key elements embedded in the practice of sustainable fashion entrepreneurship among Ghanaian fashion entrepreneurs. Impliedly, among the sampled Ghanaian fashion entrepreneurs, these two sustainability practices were the dominant practices that demonstrated how they were striving to achieve sustainability status in their enterprises. The findings further hint that within the Ghanaian fashion ecosystem, design practice and upcycling are not deeply entrenched, requiring further education and policy initiatives. That being said, this study has established that a positive and significant relationship exists between sustainable fashion practices and firm performance. This leads to the conclusion that sustainability practices do not negatively impact the performance of fashion entrepreneurs, but can rather positively improve them. Worth noting is the role of the two mediators in facilitating the nexus between sustainable fashion entrepreneurship and firm performance. This study found that social media and organisational learning capabilities partially mediate the relationship between sustainable

fashion entrepreneurship and firm performance. Impliedly, fashion entrepreneurs who develop the ability to use social media to acquire customers, study competitor designs, and build relationships with customers are likely to perform well.

Also, the development of organisational learning capabilities by fashion entrepreneurs is crucial to ensuring that they identify competitor best practices to benchmark and develop ideas to improve upon their business practices. Taking these findings into consideration, this study concludes that the practice of sustainable fashion entrepreneurship is beneficial to the fashion industry in Ghana as it has the potential to have a triple-bottom effect on the environment through waste reduction and energy conservation, as well as on the financial and economic fortunes of fashion enterprises in Ghana. Therefore, this study concludes that sustainable fashion entrepreneurship is being practiced within the Ghanaian fashion ecosystem, and has the potential to transform the sector even further if implemented extensively among fashion entrepreneurs.

8.3 Contributions of the Study

The study's findings and conclusions provide convincing evidence highlighting its major contributions to theory, practice, and policy. This section therefore expounds on the various contributions of the study.

8.3.1 Theoretical contributions

This study makes a significant theoretical contribution by challenging the prevailing multidimensional frameworks of sustainable fashion entrepreneurship, which often assume the universal applicability of constructs such as upcycling, design innovation, and circularity. Drawing on both qualitative insights and a validated measurement model, the study demonstrates that in resource-constrained contexts like Ghana, sustainable fashion

entrepreneurship is more narrowly defined anchored primarily in waste reduction and energy conservation.

By revealing that widely cited dimensions such as upcycling and design practice do not hold empirical weight in this setting, the study underscores the limitations of applying Western-centric sustainability models without contextual adaptation. These findings advance theory by proposing a more grounded, context-sensitive conceptualization of sustainable fashion entrepreneurship one that reflects the pragmatic sustainability strategies employed by entrepreneurs operating under infrastructural and financial constraints.

Moreover, the study contributes to the literature by empirically validating a first-order construct of sustainable fashion entrepreneurship, offering a foundational model for future research in similar emerging market contexts. It calls for a rethinking of sustainability metrics in fashion entrepreneurship, emphasizing the need to account for local realities, institutional maturity, and resource availability when theorizing sustainability in the Global South.

This study contributes to the sustainability literature and the entrepreneurship literature by examining the fusion of both concepts within the fashion industry in a developing economy context. The study found that sustainable fashion entrepreneurship is a practice that leverages waste reduction and energy conservation to improve firm performance. Past studies on sustainable entrepreneurship had not conceptualised the concept based on the elements of waste reduction, energy conservation, design practice and upcycling (Claxton & Kent, 2020; Gazzola et al., 2020; Patti et al., 2020; Islam et al., 2021; Mason et al., 2022). This study contributes theoretically by testing these dimensions within a developing economy. The findings of the study contribute to the literature by highlighting the core practices among sustainable fashion entrepreneurs in Ghana. The findings revealed that

sustainable fashion entrepreneurship was best represented by five items reflecting the concepts of waste reduction and energy conservation. Thus, unlike the extant literature suggests (Goworek et al., 2020; Islam et al., 2021; Adamkiewicz et al., 2022), sustainable fashion entrepreneurship means different things in different contexts.

In developed and emerging markets, sustainable fashion entrepreneurship is reflected in the elements of design practice, upcycling, waste reduction and energy conservation. (Li & Zhao, 2023; Xiaoyi et al., 2023; Abbate et al., 2024). In the Ghanaian and developing economy context, this was not found to be the case. Rather, it was found that individuals engaged in sustainable fashion practices mostly exhibit the elements of waste reduction and energy conservation. The study's results indicate that significant efforts are made by Ghanaian fashion entrepreneurs to manage fabric and reduce waste, whilst also conserving energy through efficient practices such as turning off the light and machines after work. These findings position sustainable fashion entrepreneurship in a developing context differently from what pertains to foreign contexts, thus representing a unique contribution to knowledge.

Further, the use of the bricolage and dynamic capabilities theory perfectly encapsulated the core thrust of the study as both theories provided the basis to argue and test the relationship between sustainable fashion entrepreneurship and firm performance. The two theories helped in conceptualising organisational and social media capabilities as pivotal firm-level competencies that are crucial for ensuring that sustainable fashion entrepreneurs perform well and achieve enterprise goals. In the present digital age, social media capabilities are undeniably essential for fashion entrepreneurs to connect with their customers, acquire trade designs and build effective relationships with customers and other stakeholders. This was amply demonstrated through the adoption of the dynamic capabilities and bricolage theories.

Further, organisational learning capabilities were found to be just as essential in facilitating

the link between sustainable fashion entrepreneurship and enterprise performance. Thus, the combination of the bricolage and dynamic capabilities theory has proven that sustainable fashion entrepreneurship positively impacts the development of social media and organisational learning capabilities implying that deploying both capabilities is a catalyst for improving enterprise performance.

The study's contribution to knowledge also extends to the validation of scale items that can be used to measure sustainable fashion entrepreneurship. Even though the final measurement model eliminated some of the items developed in the questionnaire due to poor fit, they represent a contribution as future studies can adopt these measures/questionnaires and test them in other contexts, especially other developing and emerging contexts to ascertain whether similar or divergent findings will be obtained. By undergoing an initial exploratory factor analysis complemented by a subsequent confirmatory factor analysis through two rounds of data collection, this study has provided theoretical and empirical refinement of measurement items that reflect the dimensions of waste reduction, energy conservation, design practice and upcycling encapsulating the concept of sustainable fashion entrepreneurship.

8.3.2 Managerial contributions

From a managerial and practice-based perspective, this study offers unique insights into how fashion entrepreneurs can leverage sustainability practices to achieve positive firm performance. The findings of this study indicate that sustainable fashion entrepreneurship positively influences firm performance. This offers a great incentive for fashion entrepreneurs operating in Ghana to adopt sustainability practices knowing that it will not hinder firm performance, but rather improve it. The findings of this study offer impetus to fashion entrepreneurs and encourage them to adopt the strategies of upcycling, design practice, waste reduction and energy conservation to optimise their business performance.

Specifically, this study provides insight to fashion entrepreneurs in Ghana on how to commence the journey into sustainable fashion entrepreneurship. As the findings revealed, waste reduction and energy conservation are two vital elements that reflect the practice of sustainability within the fashion industry, especially in the Ghanaian context. Therefore, managers and owners of fashion enterprises need to orient and train their staff on how to minimise waste through fabric conservation and efficiency, whilst also managing energy resources such as electricity or any other alternative power source. In so doing, enterprise performance can be improved through these sustainable fashion practices.

To strengthen the sustainability orientation of Ghana's fashion industry, it is recommended that Ghanaian fashion entrepreneurs should actively pursue strategic partnerships with textile recyclers, eco-design consultants, and sustainability-focused NGOs. Collaborating with textile recyclers can reduce waste along the supply chain and create opportunities for circular value creation. Engaging eco-design consultants enables firms to integrate environmentally conscious design principles into product development, thereby enhancing both market appeal and compliance with global sustainability standards. Partnering with NGOs focused on sustainability provides access to advocacy networks, training programs, and consumer awareness campaigns that can amplify the legitimacy of fashion enterprises. Collectively, these partnerships not only mitigate environmental impact but also enhance firm performance by aligning entrepreneurial practices with the dual imperatives of innovation and sustainability.

From a strategic point of view, this study contributes to the practice of sustainability within the fashion sub-sector of Ghana's creative arts industry by amplifying calls for the recognition of the benefits of the circular economy and the practice of sustainability in fashion. This study demonstrates that the practice of sustainability within the Ghanaian fashion industry can improve business performance. However, the study also advises

managers of fashion enterprises to take note of the two capabilities required to thrive in the practice of sustainable fashion entrepreneurship. These capabilities are organisational learning and social media. In the current digital age, this study has found that developing social media capabilities has a tremendous impact on the performance of fashion entrepreneurs as it provides an efficient and effective channel to communicate with customers, build relationships, and learn about new designs and practices among fashion entrepreneurs. To enhance the development of social media and organizational learning capabilities in Ghana's fashion industry, entrepreneurs should be supported through targeted digital literacy programs that build strategic online engagement skills, industry benchmarking initiatives that allow firms to compare and adopt best practices, and collaborative platforms that foster knowledge sharing and co-creation with peers, consultants, and sustainability-focused organizations. These interventions not only strengthen individual entrepreneurial capacity but also contribute to a more resilient and sustainable fashion ecosystem in the Global South.

Ultimately, this study's contribution to managerial practice is to highlight the importance of waste reduction and energy conservation as sustainable fashion entrepreneurship elements that can result in positive firm performance. This study proves that practicing sustainability will not result in any form of loss, but rather has benefits for fashion entrepreneurs. Also, the study offers great hope to fashion entrepreneurs concerning the adoption and use of social media as it was found to be an important mediator of the relationship between sustainable fashion entrepreneurship and firm performance. Finally, this study demystifies the concept of organisational learning capabilities within the fashion sector and proves that fashion entrepreneurs need to learn how to develop capabilities to acquire knowledge on competitor activities for benchmarking, whilst also striving for personal development and adoption of new ideas and methods that will result in enterprise growth and performance.

8.3.3 Policy contributions

The fashion industry in Ghana is one of the important sub-sectors within the creative arts sector. The industry employs many individuals who through their business enterprises contribute to the development of the country through the fulfilment of their tax obligations. The findings of this study offer pertinent policy contributions by first of all highlighting the need for the state to be more mindful of the existence and contributions of fashion entrepreneurs to the economy. The major policy contribution of this study is to recognize the role of sustainable fashion entrepreneurs in reducing and minimising waste and environmental pollution through their emphasis on upcycling, waste reduction, energy conservation and design practice. These underlying elements of sustainable fashion entrepreneurship play a significant role in the formulation of government policy to assist fashion entrepreneurs. Specifically, the government must examine and consider providing sustainable energy sources for fashion entrepreneurs including grants for solar energy, whilst also organising workshops and training opportunities for sustainable fashion entrepreneurs on waste reduction, upcycling, and design practice.

Formulating sustainability-minded policies for the fashion sector can contribute significantly to positioning Ghana's fashion industry as one of the best in Africa that is contributing towards the achievement of the Sustainable Development Goal (SDG) number 7 (Clean Energy), Goal number 8 (Decent work and economic growth), and Goal number 9 (Industry, innovation and infrastructure). This study therefore offers insights to policymakers in Ghana's fashion industry by providing empirical research to back the postulation that sustainable fashion entrepreneurship can lead to significant and positive performance among fashion entrepreneurs thereby contributing to environmental preservation, economic growth and prudent energy conservation practices.

To institutionalize sustainability within Ghana's fashion industry, this study recommends that policymakers and industry associations consider developing a national framework or certification scheme for sustainable fashion enterprises. Such a framework would establish clear standards for responsible production, waste reduction, and ethical practices, while certification would incentivize entrepreneurs to adopt and demonstrate compliance with these standards. Beyond signalling credibility to consumers and investors, a national certification system would align local enterprises with global sustainability benchmarks, enhance competitiveness in international markets, and provide a structured basis for policy support and funding. By embedding sustainability into formal recognition mechanisms, Ghana can foster innovation, accountability, and long-term resilience in its fashion sector.

8.4 Limitations of the study and directions for future research

This study, whilst achieving its objectives still contains some inherent limitations that can spur future research. The use of non-probability sampling techniques, namely purposive sampling restricts the generalisability of the study's findings. Future studies can address this limitation by using probability sampling techniques to select respondents from sixteen (16) regions in Ghana. Cluster sampling, for example, can be useful in conducting a nationwide survey on sustainable entrepreneurship and its effects. Using probability sampling techniques in the future can enhance the ability to generalise findings, as does the extension of data collection to other regions in Ghana.

Secondly, this study examined the impact of sustainable fashion entrepreneurship on firm performance through the mediating variables of social media and organisational learning capabilities. Whilst this has provided useful insights, there is room for further contribution by identifying other possible intervening variables and how they can improve the relationship between sustainable entrepreneurship and firm performance. Other intervening variables such as government policy, enterprise sustainability values, customer sustainability

orientation, and perceived value can be tested to determine how they influence the relationship. Also, future studies can consider the role of cultural factors and how they affect the adoption of sustainable fashion entrepreneurship in developing economies such as Ghana. Furthermore, other avenues exist for exploring antecedents of sustainable fashion entrepreneurship, especially from the perspective of clients. Future studies can also consider the impact of fast fashion on sustainable fashion entrepreneurship especially in the context of clothing made with local textiles. These are all feasible research areas that were not considered in this study.

Further, the bricolage theory and dynamic capabilities theories provided a suitable theoretical anchor for this study. These theories explain how sustainable entrepreneurship depends on building firm-level capabilities such as organisational learning and social media. That leaves a gap in terms of the institutional factors enabling the practice of sustainable entrepreneurship in a developing economy setting. For a country like Ghana, many factors impact the adoption of sustainability practices in the fashion industry. Consequently, future studies need to adopt theories such as the institutional theory to examine the isomorphic pressures that can influence the adoption of sustainable fashion entrepreneurship, whilst tracking its effect on enterprise performance. This is an area that this study did not examine but that represents an interesting prospect for future studies. The use of the institutional theory and other related theories can bring added clarity to the macro factors impacting sustainable fashion entrepreneurship in Ghana.

8.5 Chapter Summary

This chapter is the final part of this study and provides a recap of the study's aims and objectives whilst discussing the findings in conjunction with the objectives to ensure an alignment between the two. The chapter provided a discussion of the findings and offered justification for the findings by comparing them with past studies to determine similarities

or differences in research findings. Conclusions were drawn further illuminating the findings and output of this study before offering practical recommendations for fashion entrepreneurs and future researchers. The contributions of the study were delineated according to theoretical, managerial and policy classifications. Finally, the chapter highlighted the limitations of the study and charted a path towards future research studies by indicating how the study's weaknesses could be a catalyst for future research on sustainable fashion entrepreneurship. As the final chapter of this study, the aim has been achieved and the findings, conclusions, contributions and limitations have all been discussed succinctly, yet with strong theoretical grounding.



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APPENDICES

Appendix A: Interview Guide



University of Ghana Business School

DEPARTMENT OF MARKETING & ENTREPRENEURSHIP

**SUSTAINABLE ENTREPRENEURSHIP AND FIRM PERFORMANCE AMONG
FASHION ENTREPRENEURS IN GHANA: THE MEDIATING ROLES OF
ORGANIZATIONAL LEARNING AND SOCIAL MEDIA CAPABILITIES**

INTERVIEW GUIDE

Demographic Information

Name of Shop: Anonymity Option [] Disclosure: _____

Location of Shop: _____

Kindly state your age range (E.g., between 20-30 years, 31-40 years etc.) _____

Kindly indicate your gender: _____

How many years have you been in the fashion business? _____

How many employees do you have? _____

How many shops do you have/manage? _____

Part 1: Awareness of the concept of sustainability

1. Are you familiar with the term “sustainability”? (If yes, what have you heard about it?)
2. How did you get to know about the concept of sustainability?
3. In what ways did your training (to be a fashion entrepreneur) equip you to practice sustainability?
4. Would you say there is a deficiency in sustainability awareness and training in the fashion space in Ghana? (Explain your answer)
5. Can you mention some things which show that a fashion entrepreneur is practicing sustainability? (Suggest an example to aid comprehension of question)

Part 2: Practice of sustainability

1. In what ways do you practice sustainability at your fashion outfit?
2. What is your opinion on waste reduction and how do you ensure you reduce waste during the process of creating clothes for your customers?
3. What do you do to the materials that you don't use after making a design or item of clothing for a customer?
4. Do you discard “pieces” of fabric that are too tiny or small to be used to make whole items of clothing? (If no, what do you do with them?)
5. In what ways do you ensure that your business does not pollute the environment?
6. Are you mindful of energy conservation in your business operations? (If yes, in what ways do you strive to conserve energy?)
7. Do you orient employees/apprentices on energy conservation practices (If yes, when and how?)

8. What do you do with old clothes that are not purchased?
9. Do you use old clothes to create new designs and new items of clothing?
10. Why do you use old clothes to create new ones?
11. What factors inform how you design clothes for your customers?
12. What role does waste reduction, energy saving and upcycling (using old clothes to make new ones) play in your design process?

Part 3: Rewards of Sustainability Entrepreneurship

1. How has the practice of sustainability positively impacted your business performance?
2. In what ways has sustainability led to customer retention and business growth?
3. From your records and experience, does the practice of sustainability result in increased profitability?
4. How has the practice of sustainability led to increasing your workforce capacity?
5. Overall, do you think it is worth it for Ghanaian fashion entrepreneurs to practice sustainability?
6. Do you believe funding for sustainable fashion entrepreneurs can go a long way to combat the effects of fast fashion and the influx of second hand clothing in Ghana?

Closing Remarks: Thank you for your time and for agreeing to participate in this research process.



Appendix B: Questionnaire



DEPARTMENT OF MARKETING & ENTREPRENEURSHIP

SUSTAINABLE ENTREPRENEURSHIP AND FIRM PERFORMANCE AMONG FASHION ENTREPRENEURS IN GHANA: THE MEDIATING ROLES OF ORGANIZATIONAL LEARNING AND SOCIAL MEDIA CAPABILITIES

QUESTIONNAIRE

This questionnaire has been developed by a PhD candidate at the above-mentioned university. The purpose is to obtain data pertaining to the practice of sustainable entrepreneurship among fashion entrepreneurs in Ghana. The data collected will solely be used for research purposes, and this process is part of the requirements leading to the award of a PhD in marketing. As a result, I would be grateful if you can spare a few minutes to complete this questionnaire.

Section A: Demographic Profile of Respondents

Category									
Age	20-30 years		31-40 years		41-50 years		51-60 years		Above 60 years
Gender	Male				Female				
Religion	Christianity		Muslim		Traditional		Other(s)		
Location of Business									
Number of Years in Operations	Under a year		1-3 years		4-6 years		7-10 years		Over 10 years
Nature of Ownership	Sole Proprietorship		Partnership		Limited Liability Company		Other(s)		
Source of Funds	Bootstrapping		Government Grants		NGO Grants		Private Sector		Donor Agency
Staff Strength	<i>How many employees do you have?</i>								
	<i>How many of your employees are apprentices?</i>								
Social Media Platforms Used	WhatsApp								
	Instagram								
	Snapchat								
	Tik Tok								
	X (Twitter)								
	LinkedIn								

	Facebook	
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SECTION B

On a Likert Scale of 1 to 5, please indicate the extent to which you agree or disagree with the following statements. **Tick or circle the appropriate number on the Likert Scale, with 1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly Agree.**

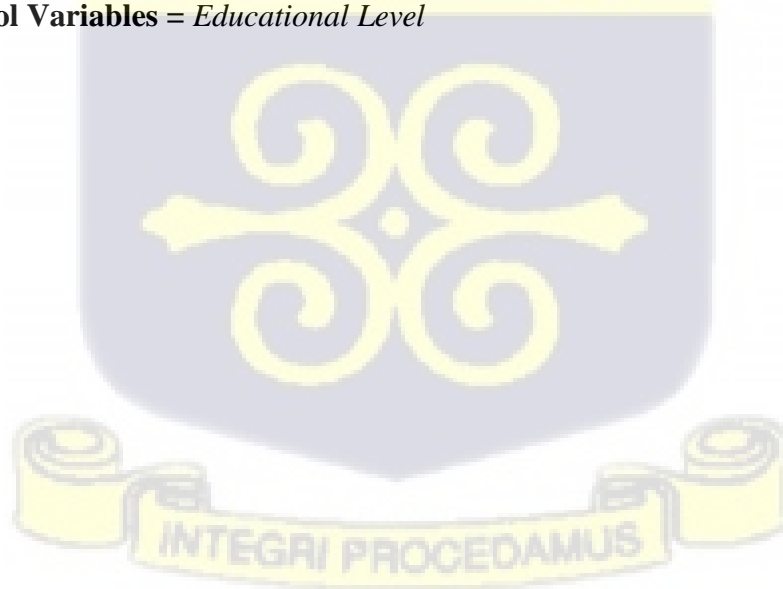
SUSTAINABLE ENTREPRENEURSHIP		Likert Scale	2	3	4	5
1	I design clothes that optimize the fabrics at my disposal					
2	I focus on ethical fashion designs that make good use of the local fabrics					
3	In my design, I prioritise enhancing the client’s appearance whilst minimising excess fabric use					
4	I use old garments to recreate new designs					
5	I transform old clothes into new fashion for my clients					
6	Sometimes I redesign old clothes to make new ones for sale					
7	I make a conscious effort to avoid wasting resources					
8	Every item of material has a use in my shop and does not go to waste					
9	I gather material pieces and other elements and store them for reuse to avoid waste and environmental pollution					
10	I ensure that all the fabric we buy is used efficiently to avoid waste					
11	I consistently turn off machines when they are not in use during non-working hours					
12	I turn off the lights in the shop after work					
ORGANIZATIONAL LEARNING CAPABILITIES						
13	I experiment and learn new things as a way of improving my fashion outputs					
14	I follow what other designers in the industry are doing					
15	I adopt useful practices and techniques that I believe to be useful					
16	I appreciate different ideas and opinions					
17	I try to improve my ways of thinking and working					
SOCIAL MEDIA CAPABILITIES						
18	I use social media to share posts on my fashion products					
19	I use social media to detect fundamental shifts in the fashion industry					
20	I use social media to understand changes in consumer’s fashion preferences					
21	I use social media to conduct market research on my industry operations					
22	I use social media to identify designs for my customers					
23	Using social media helps me attract new customers					
24	I use social media to enhance my relationship with my customers					
FIRM PERFORMANCE						
25	I have observed an increase in sales over the past two years					
26	I have observed an increase in profit growth over the past two years					
27	I have observed that more of our customers keep coming back to place new orders					
28	I have observed that our customers continue to purchase from us					
29	The business has been able to retain most of its customers					

30	The business has been able to acquire new equipment over the past two years					
31	The business is now able to acquire more materials and inventory than at any point in our history					
32	The business has grown to employ more apprentices					
33	Staff strength has increased over the past two years					

Source of Scales

No.	Variable	Number of Items	Source
<i>Sustainable Entrepreneurship (Predictor)</i>			
1.	Design practice	2	Fung et al. (2021); Zhang (2023); Li et al. (2024);
2.	Upcycling	3	Aus et al. (2021); Shi et al. (2022)
3.	Waste Reduction	4	Minelgaitė & Liobikienė (2019)
4.	Energy Conservation	3	Ntona et al. (2015)
<i>Mediating Variables</i>			
5.	Organisational Learning Capabilities	5	1-3 from Camisón and Villar-López (2011); [Match] Limpibuntern & Johri (2009) [Match]
6.	Social Media Capabilities	7	Trainor et al. (2014) [Match]
<i>Dependent Variable</i>			
7.	Firm Performance	9	Junaid et al. (2023) [Match]
TOTAL		33	

NB: Control Variables = Educational Level



Appendix C: Ethical Clearance



UNIVERSITY OF GHANA
ETHICS COMMITTEE FOR THE HUMANITIES (ECH)

P. O. Box LG 74, Legon, Accra, Ghana

My Ref. No: *ECH 024/ 24-25*

September 11, 2024

Martin Agyei
Dept. of Marketing and Entrepreneurship
University of Ghana Business School
Legon

ETHICAL CLEARANCE
(ECH 024/ 24-25)

The Ethics Committee for the Humanities (ECH) conducted an expedited review and approved your protocol titled:

**SUSTAINABLE ENTREPRENEURSHIP AND FIRM PERFORMANCE IN GHANA: THE
MEDIATING ROLES OF ORGANIZATIONAL LEARNING AND SOCIAL MEDIA
CAPABILITIES**

PRINCIPAL INVESTIGATOR: **MARTIN AGYEI**

Please note that the final review report must be submitted to the Committee at the completion of the study. Your research records may be audited at any time during or after the implementation. Any modification of this research project must be submitted to ECH for review and approval prior to implementation.

Please report all serious adverse events related to this study to ECH within seven (7) days verbally and in writing within fourteen (14) days.

This certificate is valid until September 10, 2025. You are required to submit annual reports for continuing review.

Please accept my congratulations.

Yours Sincerely,

Professor C. Charles Mate-Kole
ECH Chair

Cc: Professor E. Y. Tweneboah-Koduah, Dept. of Marketing and Entrepreneurship, UG
Professor Mahama Braimah, Dept. of Marketing and Entrepreneurship, UG
Professor Bedman Narteh, Dept. of Marketing and Entrepreneurship, UG
Professor Mahmoud Abdulai Mahmoud, Dept. of Marketing and Entrepreneurship, UG

Tel: +233-303933866

Email: ech@ug.edu.gh

INTEGRI PROCEDAMUS



UNIVERSITY OF GHANA

Official Use Only

Protocol number
ECH 024 24-25

OFFICE OF RESEARCH, INNOVATION AND DEVELOPMENT
Ethics Committee for the Humanities (ECH)

PROTOCOL CONSENT FORM

Section A- BACKGROUND INFORMATION

Title of Study:	SUSTAINABLE ENTREPRENEURSHIP AND FIRM PERFORMANCE IN GHANA: THE MEDIATING ROLES OF ORGANIZATIONAL LEARNING AND SOCIAL MEDIA CAPABILITIES
Principal Investigator:	Martin Agyei
Certified Protocol Number	ECH 024 24-25

Section B- CONSENT TO PARTICIPATE IN RESEARCH

General Information about Research

This research intends to examine the concept of sustainable entrepreneurship and its effect on firm performance from the perspective of fashion entrepreneurs in Ghana. The study intends to ascertain the role of organizational learning and social media capabilities on facilitating the nexus between sustainable entrepreneurship and firm performance.

For the interviews, each participant will be expected to spend a duration not less than thirty (30) minutes, but not more than forty-five (45) minutes. The questionnaire will require a minimum duration of 30 minutes to complete, depending on language proficiency and whether the researcher needs to translate or explain the questions to the respondents.

The methods to be followed prior to the collection of data will be to identify respondents, provide them with introductory letters and consent forms, and solicit their time and participation through an agreed upon date. The participants are required to provide honest and unbiased answers without fear of repercussions due to the confidential nature of this research.

Benefits/Risks of the study

There are no direct benefits to respondents. There are no risks identified for participants in this study.

Revised – October 2023



Confidentiality

The data collected will solely be used for research purposes and will be stored on a laptop with the researcher being the only person having access to it. The data will also be backed up on the cloud with password protection to prevent unauthorized access. Respondent name and business names will be excluded from the research report to alleviate any concerns. The only persons that will have access to the data will be the researcher and research assistants who may be recruited to assist in the data collection process.

Compensation

Compensation in the form of a gift package containing bottled water, soft drink and a biscuit/snack will be made available to each respondent. This would serve as a token of thanks to respondents for participating in this study. This research is not funded therefore all the gifts will be funded directly by the researcher.

Withdrawal from Study

The participant is free at any point in time to withdraw from the study without fear of repercussions or penalty. The participant will not suffer harm in any way or form should they decide to withdraw from the study. However, clear reasons must be provided for withdrawing from the study.

Contact for Additional Information

In case of any enquiries, you may contact Martin Agyei, the principal investigator on 0242535151, or via email on tino664@yahoo.com.

If you have any questions about your rights as a research participant in this study you may contact the Administrator of the Ethics Committee for Humanities, ISSER, University of Ghana at ech@ug.edu.gh or 00233- 303-294-0531.

Section C- PARTICIPANT AGREEMENT

"I have read or have had someone read all of the above, asked questions, received answers regarding participation in this study, and am willing to give consent for me, my child/ward to participate in this study. I will not have waived any of my rights by signing this consent form. Upon signing this consent form, I will receive a copy for my personal records."

Name of Participant

Signature or mark of Participant

Date

Revised – October 2023



If participant can neither read nor understand the form themselves, a witness must sign here:

I was present while the benefits, risks, and procedures were read to the volunteer. All questions were answered and the volunteer has agreed to take part in the research.

Name of witness

Signature of witness/ Mark

Date

I certify that the nature and purpose, the potential benefits, and possible risks associated with participating in this research have been explained to the above individual.

Name of Person who Obtained Consent

Signature of Person Who Obtained Consent

Date





DEPARTMENT OF MARKETING & ENTREPRENEURSHIP
SUSTAINABLE ENTREPRENEURSHIP AND FIRM PERFORMANCE
IN GHANA: THE MEDIATING ROLES OF
ORGANIZATIONAL LEARNING AND SOCIAL MEDIA CAPABILITIES

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How many shops do you have/manage? _____

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4. Would you say there is a deficiency in sustainability awareness and training in the fashion space in Ghana? (Explain your answer)
5. Can you mention some things which show that a fashion entrepreneur is practicing sustainability? (Suggest an example to aid comprehension of question)

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1. In what ways do you practice sustainability at your fashion outfit?
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3. What do you do to the materials that you don't use after making a design or item of clothing for a customer?
4. Do you discard "pieces" of fabric that are too tiny or small to be used to make whole items of clothing? (If no, what do you do with them?)
5. In what ways do you ensure that your business does not pollute the environment?
6. Are you mindful of energy conservation in your business operations? (If yes, in what ways do you strive to conserve energy?)
7. Do you orient employees/apprentices on energy conservation practices (If yes, when and how?)
8. What do you do with old clothes that are not purchased?



9. Do you use old clothes to create new designs and new items of clothing?
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6. Do you believe funding for sustainable fashion entrepreneurs can go a long way to combat the effects of fast fashion and the influx of second hand clothing in Ghana?

Closing Remarks: Thank you for your time and for agreeing to participate in this research process.





DEPARTMENT OF MARKETING & ENTREPRENEURSHIP
**SUSTAINABLE ENTREPRENEURSHIP AND FIRM PERFORMANCE
 IN GHANA: THE MEDIATING ROLES OF
 ORGANIZATIONAL LEARNING AND SOCIAL MEDIA CAPABILITIES**

QUESTIONNAIRE

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Section A: Demographic Profile of Respondents

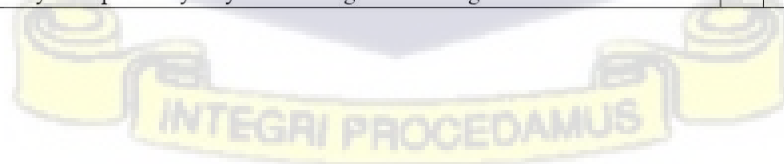
Category					
Age	20-30 years	31-40 years	41-50 years	51-60 years	Above 60 years
Gender	Male		Female		
Religion	Christianity	Muslim	Traditional	Other(s)	
Location of Business					
Number of Years in Operations	Under a year	1-3 years	4-6 years	7-10 years	Over 10 years
Nature of Ownership	Sole Proprietorship	Partnership	Limited Liability Company	Other(s)	
Source of Funds	Bootstrapping	Government Grants	NGO Grants	Private Sector	Donor Agency
Staff Strength	<i>How many employees do you have?</i>				
Media Platforms Used	<i>How many of your employees are apprentices?</i>				
	WhatsApp				
	Instagram				
	Snapchat				
	Tik Tok				
	X (Twitter)				
	LinkedIn				
	Facebook				



SECTION B

On a Likert Scale of 1 to 5, please indicate the extent to which you agree or disagree with the following statements. **Tick or circle the appropriate number on the Likert Scale, with 1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly Agree.**

SUSTAINABLE ENTREPRENEURSHIP							
		Likert Scale	1	2	3	4	5
Design Practice							
1	I design clothes that optimize the fabrics at my disposal						
2	I recommend fabrics to my clients that can complement the climate we live in						
3	I focus on ethical fashion designs that make good use of the local fabrics						
4	In my design, I consider how best to make the client look good without excess fabric consumption						
5	I am mindful of the kind of fabrics I use to make clothes because some fabrics are not suited for certain designs						
6	In designing clothes, I do not always conform to latest trends that are not sustainable (fads)						
Upcycling							
7	I use old garments to recreate new designs						
8	I transform old clothes into new fashion for my clients						
9	I develop new collections based on existing designs and styles						
10	Sometimes I redesign old clothes to make new ones for sale						
11	I don't allow old clothes to go to waste; I always find something valuable to make from them						
Waste Reduction							
12	I make a conscious effort to avoid wasting resources						
13	Every item of material has a use in my shop and does not go to waste						
14	I gather material pieces and other elements and store them for reuse to avoid waste and environmental pollution						
15	I ensure that all the fabric we buy are used efficiently to avoid waste						
16	We measure fabric before cutting to ensure we do not waste it						
Energy Conservation							
17	I turn off the lights in the shop after work						
18	I do not leave machines on during non-working hours						
19	All electrical gadgets, machines and equipment are turned off once the working day is over						
20	I make sure I do not waste energy						
21	The light bulbs in my shop are all energy saving bulbs						
ORGANIZATIONAL LEARNING CAPABILITIES							
22	I experiment and learn new things as a way of improving my fashion outputs						
23	I follow what other designers in the industry are doing						
24	I adopt useful practices and techniques that I believe to be useful						
25	I appreciate different ideas and opinions						
26	I try to improve my ways of thinking and working						



27	I review my performance for both successful and failed projects					
SOCIAL MEDIA CAPABILITIES						
28	I use social media to share posts on my fashion products					
29	I use social media to detect fundamental shifts in the fashion industry					
30	I use social media to understand changes in consumer's fashion preferences					
31	I use social media to conduct market research on my industry of operations					
32	I use social media to identify designs for my customers					
33	Using social media helps me to attract new customers					
	I use social media to enhance the relationship with my customers					
FIRM PERFORMANCE						
34	I have observed an increase in sales over the past two years					
35	I have observed an increase in profit growth over the past two years					
36	I have observed that more of our customers keep coming back to place new orders					
37	I have observed that our customers continue to purchase from us					
38	The business has been able to retain most of its customers					
39	The business has been able to acquire new equipment over the past two years					
40	The business is now able to acquire more materials and inventory than at any point in our history					
41	The business has grown to employ more apprentices					
42	Staff strength has increased over the past two years					

Source of Scales

No.	Variable	Number of Items	Source
Sustainable Entrepreneurship (Predictor)			
1.	Design practice	6	Fung et al. (2021); Zhang (2023); Li et al. (2024);
2.	Upcycling	5	Aus et al. (2021); Shi et al. (2022)
3.	Waste Reduction	5	Minelgaitė & Liobikienė (2019)
4.	Energy Conservation	5	Ntona et al. (2015)
Mediating Variables			
5.	Organisational Learning Capabilities	6	1-3 from Camisón and Villar-López (2011); [Match] Limpibuntern & Johri (2009) [Match]
6.	Social Media Capabilities	6	Trainor et al. (2014) [Match]
Dependent Variable			
7.	Firm Performance	9	Junaid et al. (2023) [Match]
TOTAL		42	

NB: Control Variables = Age of Firm, Size of Firm, Form of Ownership