



Socioeconomic Determinants of Grey Entrepreneurship among Older Persons in Ghana

George Domfe (PhD)^{a*} Kwadwo Opoku (PhD)^a Emmanuel Kumi (PhD)^a

^a Centre for Social Policy Studies, University of Ghana, Legon, Accra, Ghana

DOI: <https://doi.org/10.47963/jobed.v13i.1821>

*Corresponding Author: gdomfe@gmail.com/gdomfe@ug.edu.gh

To cite this Paper: Domfe, G., Opoku, K., & Kumi, E. Socioeconomic Determinants of Entrepreneurship among Older Persons in Ghana. *Journal of Business and Enterprise Development (JOBED)*, 13(3). <https://doi.org/10.47963/jobed.v13i.1821>

Article Information

Keywords:

Grey enterprise
Older persons
Necessity theory
Opportunity theory
Ghana

Received: 18th June 2025

Accepted: 9th October 2025

Published: 31st October 2025

Editor: Anthony Adu-Asare Idun

Copyright (c) 2025 George Domfe,
Kwadwo Opoku, and Emmanuel
Kumi



This work is licensed under
a [Creative Commons Attribution-
NonCommercial 4.0 International
License](https://creativecommons.org/licenses/by-nc/4.0/).

Abstract

Despite the substantial involvement of older persons in entrepreneurial activities in Ghana, limited scholarly attention has been directed towards understanding the motivations behind enterprise creation in later life. Much of the existing research on entrepreneurship in the country has focused on youth, leaving a gap in knowledge regarding the socioeconomic factors that influence entrepreneurial engagement among older adults. This study addresses that gap by examining the determinants of grey entrepreneurship using a probit regression model applied to data from the Seventh Round of the Ghana Living Standards Survey. The analysis reveals that both necessity-driven factors (gender [woman], limited access to pensions and remittances, and low educational attainment) and opportunity-driven factors (wealth, urban residence, and good health status) significantly shape entrepreneurial decisions in old age. Importantly, the study contributes to the evolving discourse on entrepreneurship by challenging the traditional binary classification of entrepreneurial motivation. The evidence suggests that older entrepreneurs in Ghana navigate a continuum of motivations, influenced by both personal agency and structural conditions. This complexity highlights the need for inclusive and context-sensitive policy interventions. Therefore, the study advocates for the establishment of a non-contributory pension scheme to safeguard the economic security of all older adults and calls for collaborative action among state agencies, credit institutions, and other stakeholders to provide a supportive and enabling environment for entrepreneurial activity among Ghana's ageing population.

Introduction

In Ghana, individuals who are 60 years or above are classified as older persons, and they currently represent nearly 6.7% of the total population (Ghana Statistical Service [GSS], 2022). While the proportion of older persons in the country is among the highest in Sub-Saharan Africa, it is expected to increase to 9.8% by the end of 2025 due to declining fertility rate, increasing life expectancy, improved health care, and improved nutrition and hygiene (Opoku, et al., 2025; Essuman & Mate-Kole, 2021; United Nations, 2017). In response to the rise in the ageing population, the state has, over the last few years, instituted various support systems to protect older persons against the risks that often accompany ageing. These support systems include pension payments, the Livelihood Empowerment Against Poverty (LEAP), and free accessible health insurance (Nkansah et al., 2021; Osei & Lambon-Quayefio, 2021), which either do not cover most older persons or are too inadequate to provide for the needs of those who are covered (Kpessa-Whyte & Tsekpo, 2020).

Unfortunately, the traditional family support system, which for centuries has provided for the needs of older persons, has been declining due to industrialisation, globalisation, youth unemployment, the nuclear family system, youth migration, urbanisation, and the economic and psychological burden of caring for the elderly (Abekah-Carter et al., 2022; Dovie, 2019; Essuman & Mate-Kole, 2021; Ongoh, et al., 2023; Segbenya et al., 2024). As a result, older persons have adopted several survival strategies to maintain their livelihood. One such coping mechanism is grey entrepreneurship (Amorós et al., 2024; Maâlaoui, 2019; Patel, 2025), which, according to some studies (Amorós et al., 2024; Saiz-Alvarez & Coduras-Martínez, 2020), constitutes a significant proportion of the small and medium-scale enterprises (SMEs).

The benefits of grey entrepreneurship are not only limited to the provision of a vital source of income for older individuals but also include contributions to the development of the community and the growth of businesses at large. Singh and DeNoble (2003) indicated that older entrepreneurs possess valuable attributes—namely, extensive experience, resilience, and well-established networks—that serve as essential resources for initiating and sustaining successful business ventures. Weber and Schaper (2004) emphasised the role of grey entrepreneurs in promoting community development, noting that their business ventures often have a localized impact and carry significant social relevance. Recent literature (Coduras-Martínez et al., 2020; Amorós et al., 2024) has observed that while older entrepreneurs may experience age-related reductions in creativity, multitasking ability, and openness to novel experience, they have different advantages in the interpretation of complex ideas, mobilizing human resources, and risk management skills, which are highly needed to facilitate innovation, inclusive growth and business performance.

While Abdulai et al. (2021) did not directly examine age-specific entrepreneurship, their research offers valuable insights into intergenerational dynamics within entrepreneurial ecosystems. Specifically, their findings indicate that grey entrepreneurs—typically older individuals engaged in business activities—play a pivotal role in mentoring and guiding younger entrepreneurs. This mentorship is particularly evident in rural and informal sectors, where experienced business owners often share practical knowledge, skills, and networks with emerging entrepreneurs. Such interactions not only foster entrepreneurial capacity among the youth but also contribute to the resilience and growth of local economies by promoting continuity, innovation, and community-based enterprise development.

Grey entrepreneurship represents a substantial component of entrepreneurial activity globally, contributing meaningfully across diverse countries and regions. The Global Entrepreneurship Monitor [GEM] (2025) reported that one in eight working-age adults worldwide, totaling approximately 665 million entrepreneurs, is engaged in entrepreneurial activity. In Ghana, while 37.5% of older adults are employed, 80.0% of them engage in entrepreneurial activities, underscoring the significant role of grey entrepreneurship in the national business landscape (GSS, 2022). Grey entrepreneurs often leverage their experience, networks, and practical knowledge to thrive in industries that value reliability, craftsmanship, and community engagement. According to Kautonen (2012), business services—such as consulting and advisory roles—account for up to 40% of grey entrepreneurial activity in Europe. In the case of Ghana, grey entrepreneurs mostly engage in informal trading, agriculture, and small service businesses (GSS, 2022; Abdulai et al., 2021).

The motivations for older persons to set up enterprises are numerous – either to maintain their livelihood, remain active in production, or for other reasons. In the literature, two competing theories have explained the motivations for entrepreneurship: the necessity theory and the opportunity theory (Coates & Lawless, 2024; Patel, 2025). According to the necessity theory, the motivation to own a business is usually borne out of desperation to survive due to the absence of alternative sources of income or employment (Moulton & Scott, 2016; Domfe et al, 2017; Guzman & Merlo, 2024). On the other hand, the opportunity theory posits that the motivation for owning an enterprise is to capitalise on a business opportunity, for financial gain, innovation, personal aspirations, and professional growth

(Domfe et al, 2017). Generally, opportunity-driven motivation for entrepreneurship appears to be popular in developed countries, while necessity-driven entrepreneurship is also more common in low-income economies (Minniti & Levesque, 2010).

The prevalence of necessity-driven entrepreneurship in low-income economies can be attributed to a range of underlying push factors. First, the high unemployment rate and lack of formal job opportunities have pushed individuals into self-employment (Fairlie & Fossen, 2019; Reynolds et al., 2002; Minniti et al., 2006). The limited availability of formal employment opportunities, coupled with the need to sustain livelihoods, has pushed many unemployed individuals in these economies to pursue entrepreneurship as an alternative means of economic engagement. Moreover, gender-based discrimination in labour markets has also pushed many women to establish their own businesses as a means of securing economic independence and overcoming employment barriers. As explained by Kantor (2002), discriminatory labour market conditions and limited access to formal employment opportunities lead many women in India to create microenterprises, especially in informal economies.

A key consideration in this study is the assertion by Kautonen et al. (2014) that age-related discrimination within labour markets, coupled with insufficient livelihood support systems, has pushed many older individuals to engage in entrepreneurial activities. Although certain older adults engage in entrepreneurship after retirement to remain active or fulfil long-standing personal goals (Singh & DeNoble, 2003), the more prevalent and compelling motivations are rooted in livelihood insecurity and the pursuit of financial autonomy (Curran & Blackburn, 2001; Singh & DeNoble, 2003; Kautonen et al., 2014). Danson et al. (2020) specifically indicated that the rise of older entrepreneurs in sub-Saharan Africa is primarily driven by their exclusion from formal labour markets and the absence of adequate social protection systems. This phenomenon is particularly evident in Ghana, where limited employment opportunities exacerbate age-related barriers in the labour market. As a result, older individuals often struggle to secure formal employment after retirement, largely due to perceptions of diminished capacity (Opoku et al, 2025).

While some studies in Ghana (Dovie, 2018; GSS, 2019) have confirmed the findings from Zhu et al. (2022) that several older persons are business owners, none of these studies explained the motivations behind older persons' quest to become entrepreneurs in the country. The objective of this paper is to investigate the socio-economic determinants influencing grey entrepreneurship in Ghana. Beyond its empirical contributions, the study seeks to amplify the Ghanaian perspective within the broader discourse on the motivations underpinning grey entrepreneurial activity. By doing so, it aims to inform more targeted policy interventions that support grey entrepreneurs to promote inclusive economic growth.

The study is organised as follows: The literature review, positioned after the introduction, explores the concepts of opportunity- and necessity-driven entrepreneurial motivations. Subsequent sections are organized sequentially as follows: methodology, a combined presentation of results and discussion, and finally, the conclusion.

Literature Review

Conceptual review

This part of the paper examines the key concepts underpinning the study, with a focus on grey entrepreneurship and its socio-economic dimensions. By clarifying the definitions, contextual relevance, and interrelationships among these concepts, the review lays the groundwork for understanding the motivations and constraints that influence entrepreneurial activity among older adults in Ghana.

Grey entrepreneurship

Grey entrepreneurship refers to entrepreneurial activities undertaken by older adults, typically those aged 60 and above, who engage in business ventures either post-retirement or in later stages of their working life (Liñán, 2020; Joel & Oguanobi, 2024). In the context of this study, grey entrepreneurship is examined as a response to socio-economic challenges such as limited pension coverage, income insecurity, and exclusion from formal labour markets. It encompasses both necessity-driven and opportunity-driven motivations, with a particular focus on how structural constraints in Ghana push older individuals toward self-employment and informal enterprise as a means of sustaining livelihoods.

Necessity-driven entrepreneurship

Necessity-driven entrepreneurship refers to business activities initiated primarily out of need rather than choice (Reynolds et al., 2002; Domfe et al., 2017). Individuals become entrepreneurs not because they identify an opportunity in the market, but because they have fewer job opportunities, are uncertain about their income, or live in poverty. Entrepreneurship, in this context, is a survival strategy. This is particularly common in developing countries where formal job markets are constrained and social safety nets are weak (Domfe et al., 2013). This form of entrepreneurship is frequently informal, resource-bound, and follows the need to generate revenue, as opposed to being driven by innovation or development.

Opportunity-driven entrepreneurship

Opportunity-driven entrepreneurship refers to business ventures initiated by individuals who identify and act upon a promising market opportunity, rather than being compelled by economic necessity (Reynolds et al., 2002; Domfe et al., 2017; Elia et al., 2020). These are the entrepreneurs who are generally driven by innovation, individual ambition, or the need to maximize their earnings and autonomy. They usually have access to resources, skills and networks which allow them to explore growth-oriented and possibly scalable businesses as opposed to necessity-driven entrepreneurs. This type of entrepreneurship is traditionally linked to increased creativity, long-term vision and strategic planning.

Conceptual framework

The conceptual framework of this study shows how socio-economic factors influence older adults' decision to start a business. As shown by Figure 1, older adults may pursue one of the two distinct entrepreneurial pathways—necessity-driven or opportunity-driven—based on prevailing socio-economic conditions. Factors such as income insecurity, inadequate pension coverage, exclusion from the formal labour market, household financial pressures, gender, geographic location, educational background, and age may significantly influence the direction the older adults take when starting a business (Domfe et al., 2017).

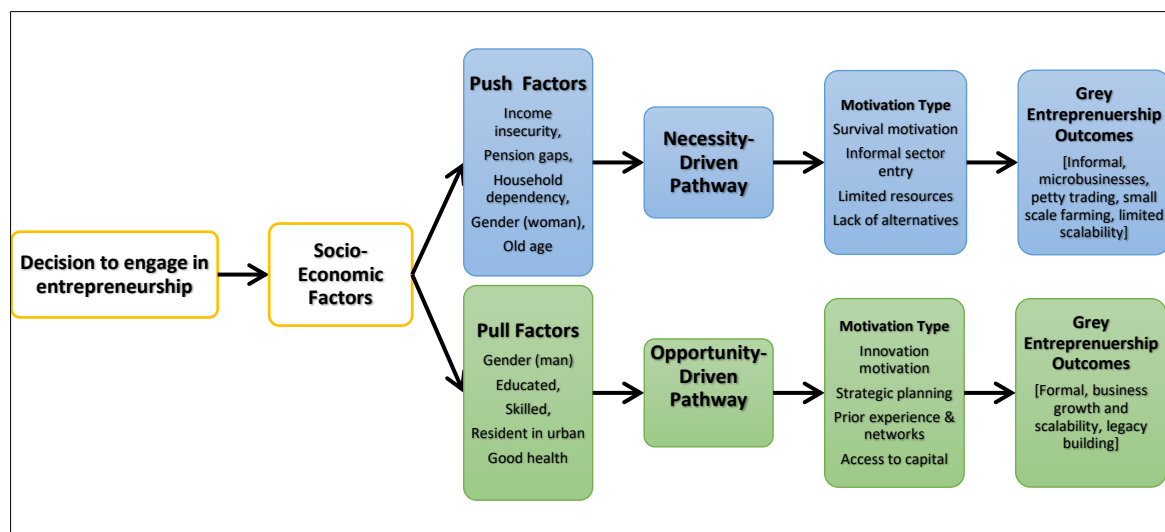
Older adults, particularly in developing economies like Ghana, frequently encounter a range of socio-economic challenges that limit their financial security and access to formal employment. Among the most pressing issues are income insecurity, stemming from inadequate savings or irregular earnings; lack of pension coverage, especially for those who spent their working years in the informal sector; and labour market exclusion, where age discrimination and limited job opportunities prevent them from re-entering the workforce (Domfe et al., 2017; Amoah et al., 2019; Aboderin & Beard, 2022). These conditions create a vulnerable environment that pushes them to seek alternative means of living.

As a result, many older adults turn to entrepreneurship not out of choice, but out of necessity. This form of business engagement—known as necessity-driven entrepreneurship—is typically characterized by small-scale, informal ventures aimed at meeting basic survival needs.

On the other hand, grey opportunity-driven entrepreneurship may arise in Ghana when older adults proactively choose to engage in business ventures, motivated not by survival but by the desire to capitalize on favourable conditions. These individuals often possess valuable assets, such as educational qualifications, professional experience, and financial resources, which enable them to identify and capitalize on market gaps or pursue their personal passions. Rather than being driven by economic hardship, they are drawn to entrepreneurship by the promise of autonomy, fulfillment, and potential for growth (Domfe et al., 2017; Amoah et al., 2019).

In the opportunity-driven pathway, older entrepreneurs may launch ventures that are strategically planned, formally registered, and highly innovative, with aspirations to scale or diversify. Their businesses often reflect accumulated knowledge, networks, and confidence gained over years of work, allowing them to navigate challenges more effectively. This form of entrepreneurship tends to contribute more significantly to economic development, job creation, and knowledge transfer, as these individuals are better positioned to mentor others, adopt new technologies, and build sustainable enterprises.

Figure 1: Dual pathways to grey entrepreneurship



Source: Authors' own design

Theoretical perspective

Necessity–opportunity entrepreneurship framework

The necessity–opportunity entrepreneurship framework is a widely used conceptual model that categorizes entrepreneurial motivations into two primary types: necessity-driven and opportunity-driven entrepreneurship. The theoretical foundations of the framework date back to the previous push and pull theories of entrepreneurship motivation, discussed by scholars such as Storey (1991) and subsequently developed by McMullen et al. (2008). These scholars explored how individuals are either "pushed" into entrepreneurship due to a lack of alternatives (necessity) or "pulled" by attractive opportunities. The necessity–opportunity entrepreneurship framework has since been popularized through the work of scholars contributing to the Global Entrepreneurship Monitor (GEM), especially

in the early 2000s. Researchers such as Reynolds, Bosma, and others helped formalize the distinction between necessity-driven and opportunity-driven entrepreneurship as part of GEM's global data collection and analysis efforts (see Reynolds et al., 2005).

The GEM project has since presented the necessity-driven and opportunity-driven as the two motivation factors for entrepreneurial intentions or activity (Alam et al., 2021; Block & Wagner, 2010). However, Dencker et al. (2019) recently reconceptualized the necessity–opportunity entrepreneurship framework using Maslow's hierarchy of needs, arguing that entrepreneurial motivation is multi-layered and context-dependent. Yet, proponents of the necessity–opportunity entrepreneurship framework have articulated a clear conceptual distinction through the lens of necessity and *opportunity entrepreneurship theories* to argue for its continued relevance as a foundational model for understanding entrepreneurial intent.

Necessity theory of entrepreneurship

The necessity theory of entrepreneurship comes from classical economics and sociology, and it fits with the idea of push factors, which are external factors such as unemployment, poverty, economic hardship, lack of educational qualifications and job loss (Gries & Naudé, 2011). It posits that individuals often engage in entrepreneurial activity not out of choice, but due to external pressures or constraints—most commonly, the lack of formal employment opportunities (Huang et al., 2023; Weber et al., 2023; Lim et al., 2024). This theory frames entrepreneurship as a survival strategy, particularly in contexts marked by economic hardship, high unemployment, or limited access to social safety nets. Entrepreneurs driven by necessity typically start small-scale ventures to meet basic needs, rather than to pursue innovation or market expansion.

The theory is especially relevant in developing economies, where informal entrepreneurship serves as a critical buffer against poverty and social exclusion (Brewer, 2014; Williams & Gurtoo, 2017; Yessoufou et al., 2018). In Africa, households with limited resources in terms of finances, human capital, physical capital and social capital try to overcome the economic hardship by channelling the limited resources into subsistence farming, manufacturing and trade entrepreneurship (Mahama & Maharjan, 2017; Yessoufou et al., 2018; Weber et al., 2023). Necessity entrepreneurs typically operate in the informal economy, engage in low-skill labour, and face significant resource constraints. Their ventures often lack access to financial services, formal training, and institutional support (Mead & Liedholm, 1998).

Generally, entrepreneurship in Ghana is often shaped by necessity-driven rather than opportunity-driven factors (Domfe et al., 2017). This is likely to be the case for the grey entrepreneurship because older Ghanaians face: income insecurity due to inadequate savings or irregular earnings during their working years, limited or no pension coverage, labour market exclusion and household dependency pressures, where older adults must support extended families despite lacking a stable income (Opoku et al., 2025). These socio-economic realities act as push factors, compelling older individuals to start small businesses—often in petty trading, agriculture, or informal services—as a means of survival. Their ventures are typically low-capital, informal, and subsistence-oriented, reflecting the core tenets of the *Necessity Theory*.

Opportunity theory of entrepreneurship

The opportunity theory of entrepreneurship aligns with the pull factors such as human development, self-actualisation, untapped market opportunities and passion. Entrepreneurs who are inspired by opportunity are typically able to come up with new ideas, take smart risks, and adjust to changes in the market (Mersha et al., 2010). While necessity-driven entrepreneurs may be less educated, have low managerial skills and have low capital for start-up, opportunity-driven entrepreneurs are mostly highly

educated with huge financial capital for start-up and high managerial skills. Although opportunity-driven entrepreneurship may be common in developed countries, it may exist in developing countries as well because necessity-driven and opportunity-driven entrepreneurship coexist (Giacomin et al., 2023). In Africa, individuals leveraged technology for agribusiness and e-commerce to create more employment opportunities while maximising profits (Kubik et al., 2024).

In the Ghanaian socio-economic landscape, *opportunity theory* offers a nuanced framework for analyzing the emergence and evolution of grey entrepreneurship. This theoretical lens challenges deficit-based narratives that portray older adults as economically dependent or disengaged, instead highlighting their capacity to act as resourceful agents of change within the entrepreneurial ecosystem. In this context, grey business starters are not engaging in business as a means of subsistence or post-retirement but rather, they are actively identifying and exploiting opportunities that are deeply embedded in their accumulated life experiences, professional expertise, and extensive social networks. These individuals often possess rich cultural capital, including indigenous knowledge systems, community leadership roles, and long-standing reputational trust, which serve as strategic assets in navigating the informal and formal sectors of Ghana's economy.

Older entrepreneurs may leverage intergenerational relationships and community embeddedness to access credit, mobilize labour, and build resilient business models (Bowen & De Clercq, 2008; Mersha et al., 2010; Amorós et al., 2024). Thus, opportunity theory not only illuminates the strategic behaviour of older adults in Ghana's entrepreneurial landscape but also underscores their transformative potential in advancing national development goals. Recognizing and investing in grey entrepreneurship is not merely a demographic necessity—it is a strategic imperative for building a more inclusive and resilient economy.

Even though a dichotomy between necessity and opportunity motivation of entrepreneurship has been instrumental in shaping global entrepreneurship research—particularly through platforms such as the Global Entrepreneurship Monitor (GEM)—recent scholarship has emphasized the fluidity between these categories, noting that entrepreneurial motivations are frequently hybrid and context-dependent. Smolka et al. (2025) have particularly challenged the rigid binary of the necessity–opportunity entrepreneurship framework, arguing that entrepreneurial motivations are rarely purely one or the other. Instead, they often exist along a continuum, shaped by both structural constraints and individual aspirations. For instance, an individual may initiate a business venture in response to job loss or economic hardship—typically classified as necessity-driven—but simultaneously identify a promising market opportunity that aligns with their skills or interests. In such cases, the entrepreneurial decision is informed by a blend of necessity and opportunity, illustrating the fluid and dynamic nature of motivation. This perspective underscores the importance of moving beyond dichotomous classifications to embrace more context-sensitive and multidimensional models of entrepreneurial intent.

Empirical review

Determinants of grey entrepreneurship

The debate between pull factors and push factors as the primary determinants of grey entrepreneurship has largely remained inconclusive, reflecting the complexity and diversity of motivations among older business starters. While some scholars argue that pull factors—such as the desire for autonomy, personal fulfillment, and the opportunity to leverage lifelong skills—are the dominant drivers, others emphasize the role of push factors like financial necessity, unemployment, or age-related discrimination in the labour market. This ongoing debate is further complicated by variations across regions, socioeconomic backgrounds, and individual circumstances.

Several studies conducted in developed countries have mostly identified pull factors as the key determinants of grey entrepreneurship, reflecting the voluntary and opportunity-driven motivations that lead older adults to start their own businesses (Gimmon et al., 2018; Amorós et al., 2024). In these economies, where social safety nets, healthcare systems, and pension schemes are relatively robust, older individuals often pursue entrepreneurship not out of necessity, but out of choice. They are drawn by factors such as the desire for continued engagement, personal fulfillment, financial independence, and the chance to leverage decades of professional experience and networks (Gimmon et al., 2018; Perenyi et al., 2018; Amorós et al., 2024).

Studying in the OECD countries, Amorós et al. (2024) indicated that older persons in entrepreneurship are motivated by opportunity-driven factors. A similar study conducted earlier in Australia by Perenyi et al. (2018) also suggested that older persons in entrepreneurship are motivated more by opportunity than by necessity. Additionally, Gimmon et al. (2018) also explained that opportunity-driven factors such as personal interest, self-realisation and self-fulfilment are the main drivers behind entrepreneurship by older persons in Israel.

On the other hand, studies conducted in low-income countries tend to emphasize necessity-driven motivations as the primary catalysts for grey entrepreneurship. In these contexts, older individuals often turn to self-employment not out of choice, but as a means of survival (Molina et al., 2017; Subanti et al., 2021). Limited access to formal employment, inadequate pension systems, and the absence of comprehensive social welfare programmes frequently compel older adults to seek alternative income sources (Opoku et al., 2025).

Molina et al. (2017) highlighted the dynamics in low-income countries and identified unemployment as a significant factor influencing entrepreneurial activity among the elderly in Latin America, Asia, and the Caribbean. Subanti et al. (2021) also highlighted poverty as a key factor compelling older individuals in Indonesia to engage in entrepreneurial activities. Their ventures tend to be small-scale, informal, and rooted in local markets, reflecting the urgent need to generate income in the absence of stable employment or retirement benefits. This finding highlights the critical role of socioeconomic context in shaping the motivations behind grey entrepreneurship, calling for targeted policy interventions that address structural inequalities to provide older adults with more secure and dignified pathways to economic participation.

The complexity in the ongoing discussions surrounding determinants of grey entrepreneurship is deepened by the recent argument presented by Smolka et al. (2025), which challenges the traditional binary classification of entrepreneurial motivations as either voluntary or necessity driven. According to their findings, this dichotomy may be overly simplistic and fails to capture the nuanced realities faced by older entrepreneurs. In practice, the motivations behind grey entrepreneurship often exist along a continuum, where elements of both opportunity and necessity intertwine. For example, an older individual may choose to start a business to pursue a long-held passion (a pull factor), while simultaneously needing to supplement insufficient retirement income (a push factor). This overlap complicates efforts to categorize entrepreneurial behaviours and makes it difficult to isolate a single set of determinants as universally decisive across different contexts. Smolka et al. (2025) argued that such blurred boundaries call for a more integrative framework—one that accounts for the interplay of personal aspirations, economic pressures, and institutional environments.

Indeed, the results from some other studies have shown mixed outcomes regarding the effect of necessity and opportunity drivers on entrepreneurial intentions (Tervo & Haapanen, 2017; Giacomini et al., 2023). In such studies, older entrepreneurs are driven by both necessity and opportunity factors, rendering the debate that appears to limit necessity or opportunity factors for old-age entrepreneurship to regions of the world, inconclusive. Using a dataset from the Global Entrepreneurship Monitor (GEM) for the study period 2013 to 2017, Amorós et al. (2021) examined the driving factors of entrepreneurship

by the elderly in Latin America and argued that higher income, perceived skills, occupation and education drive opportunity-driven entrepreneurship, while the factors underlying necessity-driven entrepreneurship are occupation and perceived skills. [Moulton and Scott \(2016\)](#) explored whether older persons are driven into entrepreneurship out of opportunity or necessity using the Health and Retirement dataset in the USA and found support for both opportunity (pull) factors and necessity (push) factors. The push factor is loss of job, while the pull factors are wealth, income levels, education and risk tolerance.

Beyond the ongoing debate surrounding the necessity versus opportunity dichotomy in grey entrepreneurship, scholarly interest in the motivations driving older individuals to start businesses has gained significant traction, mostly in high-income countries and a few middle-income countries across Asia and Latin America. This growing body of research reflects a recognition of the economic and social contributions that senior entrepreneurs can make, especially in aging societies where active engagement in the labour market is increasingly encouraged. In high-income countries, studies often explore how favourable institutional environments, robust welfare systems, and access to resources enable older adults to pursue entrepreneurship out of choice, driven by factors such as autonomy, personal fulfillment, and the desire to remain productive. Meanwhile, in middle-income countries—especially in regions like Latin America and parts of Asia—research has begun to highlight a more complex interplay of motivations, where both opportunity and necessity coexist.

The works of [Amorós et al. \(2024\)](#), [Amorós et al. \(2023\)](#), [Gimmon et al. \(2018\)](#), [Leporati, Torres & Roses \(2021\)](#), [Perenyi et al. \(2018\)](#), [Ortega-Lapiedra \(2020\)](#), [Stephens & Hegarty \(2022\)](#), and [Zhu et al. \(2022\)](#) collectively underscore the diversity of entrepreneurial motivations among older adults, offering valuable insights into how socioeconomic context, cultural norms, and policy frameworks shape the landscape of grey entrepreneurship across different regions

While literature in Africa has explored the survival strategies adopted by retirees and the challenges faced in elderly entrepreneurship, much is not known about the drivers that motivate older adults to start an enterprise. For example, [Ongoh et al. \(2023\)](#) explored the surviving strategies of pensioners in Ghana and concluded that retirees resorted to inflows from savings, family support, enterprise ownership, inflows from investment, post-retirement contracts, inflows from building assets, loans, begging, withdrawing a child from school, migrating to the rural areas and alcoholism. Furthermore, a study conducted to explore the survival mechanisms of pensioners in Zimbabwe found that many pensioners relied on their family members and friends for support ([Nhodo et al., 2013](#)). [Dzingirai and Ndofirepi \(2024\)](#) argued that the challenges faced by older persons aged 55 and above in entrepreneurship in Zimbabwe, using an exploratory study approach and in-depth interviews, are a lack of media exposure, financial constraints, insufficient information and a lack of support from government, family and friends.

Comparing the popularity of old-age entrepreneurship across the regions of the world, [Zhu et al. \(2022\)](#) identified old-age entrepreneurship as being highest in the sub-Saharan African region. Even though they concluded that engagement of older persons in the sub-Saharan African region in entrepreneurship improves personal well-being and enhances societal development, their study did not cover factors that influence grey entrepreneurship. The primary aim of this study is to utilize data from Ghana to amplify Africa's perspective in the ongoing discourse on the factors that drive older adults to engage in entrepreneurial activities.

Hypothesis of the study

The primary objective of this study is to investigate the key determinants that influence grey entrepreneurship among older adults in Ghana. Drawing on insights from empirical literature, the study is grounded in the observation that socio-economic conditions in low-income countries often act

as a catalyst for entrepreneurial engagement among older individuals. In such settings, limited access to formal employment, inadequate pension coverage, and financial insecurity frequently compel older adults to seek alternative income-generating avenues, with entrepreneurship emerging as a viable—if not necessary—option. Based on these findings, the study proposes the following hypothesis to guide data analysis:

H1: Adverse socio-economic conditions among older adults in Ghana are positively associated with participation in entrepreneurial activities.

This hypothesis reflects the assumption that economic hardship, lack of institutional support, and constrained livelihood options serve as push factors that drive older Ghanaians toward self-employment and business creation. By empirically testing this relationship, the study aims to contribute to a more nuanced understanding of grey entrepreneurship in the Ghanaian context and offer insights that may inform targeted policy interventions.

Research Methods

The data

This study employs a quantitative approach to examine the old-age perspective of socioeconomic determinants of ownership of enterprises in Ghana. The data set of the seventh round of the Ghana Living Standard Survey (GLSS 7), conducted between November 2016 and October 2017, was used. The GLSS 7 is a comprehensive national survey containing detailed information on the living circumstances of households and individuals across the country. In all, over 15,000 households across 10 regions (at the time), representing both urban and rural areas, were covered. While GLSS 7 is a key source of data for assessing poverty trends, inequality, and socio-economic development, it is especially important for this study because of the comprehensive information it provides on employment and demographic characteristics of the respondents (GSS, 2019).

The GLSS 7 dataset has been anonymised and therefore all the personally identifiable information has been eliminated to safeguard the privacy and confidentiality of respondents. Additionally, the dataset is publicly available, allowing researchers open access to high-quality data for academic and policy-related analysis. The use of such ethically curated and transparent data source is consistent with best practices in social science research and supports the integrity and replicability of the study's findings. However, since the dataset is cross-sectional in nature, it restricts the analysis to a single point in time and therefore does not allow for the examination of longitudinal trends or changes in grey entrepreneurship over time. Again, the data was collected about 8 years ago, making it relatively outdated. Nonetheless, it remains the most comprehensive and relevant nationally representative quantitative dataset currently available for examining the study's objectives.

Empirical framework

As indicated, the study used the data from the sections of GLSS 7 on employment and demographic characteristics of respondents. The probit model is employed to identify the key demographic characteristics of older persons that motivate them to own enterprises. This model is considered superior and appropriate for the study because of the discrete nature of the dependent variable, measured as '1' if an older person had either operated or owned an enterprise and '0' if otherwise. Even though a Logit model could also handle the binary dependent variable, the probit model appears superior based on the assumption that, with the large size of the data (over 15,000 households), the error term would be normally distributed.

We regress the dependent variable on some selected socioeconomic factors of the respondents to explain factors that influence old-age enterprise ownership in Ghana. Domfe et al. (2017) developed a model examining the socio-economic determinants of enterprise ownership in Ghana, which provides

a useful foundation for the present study—particularly in terms of how the dependent variable is conceptualised and the relevance of the selected independent variables. Following this study closely, the model for the present study is mathematically represented as:

$$Y_i^* = f(X_i B_i + u_i) \dots\dots\dots(1)$$

Where:

$Y_i^* = 1$ if an i_{th} older person owns an enterprise and $Y_i^* = 0$, if the i_{th} older persons does not own an enterprise during the reference period. In the context of this study the variable Y_i^* represents a binary indicator of enterprise ownership for the i_{th} older individual (typically aged 60 and above) in the dataset. This variable is used as the dependent variable to estimate the probability that an older person owns an enterprise, given a set of explanatory variables such as age, gender, availability of pension, education, income, employment status, rural residency, and region of residence.

X_i , represents the vector of explanatory variables. Domfe et al. (2017) structured the vector of explanatory variables to include four distinct categories of socioeconomic factors. Demographic characteristics help illustrate how personal attributes shape individuals' decisions to embark on entrepreneurial ventures. Furthermore, Domfe et al. (2017) highlighted the influence of household dynamics, transfer receipts, and residential location on business formation decisions in Ghana.:

- demographic characteristics of the individual; for example, age, marital status, education and religion.
- household characteristics (household size and ownership of assets, such as land, car and houses).
- receipt of transfers (pension, remittances)
- location variables (rural/urban, regional dummies).

Most of the independent variables in the model are categorical in nature. For instance, the pension variable is a binary variable, coded as 1 if an older individual receives a pension and coded 0 if the opposite is the case. Based on the four defined categories of explanatory variables, equation 1 is expanded as:

$$Y_i^* = \beta_0 + \beta_1 X_{i1} + \beta_2 X_{i2} + \beta_3 X_{i3} + \beta_4 X_{i4} + e_i \dots\dots\dots(2)$$

Results and Discussions

Descriptive statistics

The study focuses on non-farm enterprise ownership by older adults. According to Table 1, older persons who are non-farm enterprise owners, compared to their counterparts who are not involved in non-farm enterprise, are more concentrated in the Central, Greater Accra, Volta, Eastern, and Ashanti regions.

Table 1: Non-farm enterprise Ownership by region

Region	Non-farm enterprise owner		
	No	Yes	Total
Western	5.85	5.50	5.81
Central	8.30	9.97	8.51
Greater Accra	6.36	14.43	7.36
Volta	11.33	14.95	11.78
Eastern	8.96	13.57	9.53
Ashanti	7.62	11.00	8.04
Brong Ahafo	8.52	6.87	8.32
Northern	11.38	5.67	10.68

Table 1 Contd.

Upper East	16.29	11.51	15.70
Upper West	15.39	6.53	14.29

Source: GLSS 7

Table 2 presents the distribution of older nonfarm enterprise owners across the relevant variables of interest. According to the results, older individuals who own enterprises tend to have smaller household sizes and are wealthier than their counterparts who do not own enterprises. A significantly smaller proportion (2.92%) of older entrepreneurs are on a pension compared to their non-entrepreneurial counterparts (4.68%). This appears to suggest that older persons on a pension mostly get enough to cover their basic needs and therefore may not need to set up enterprises to maintain their livelihoods. This confirms the position of the Institute for [Fiscal Studies \(2019\)](#) that indicated that low pension coverage and benefits have been pushing some retirees into entrepreneurship in Ghana. The data indicate that an overwhelming proportion (84.56%) of the young-old category (older persons between 60 and 74 years) is engaged in entrepreneurship. Therefore, as older persons become too old and weak, they tend to give up on entrepreneurship. Again, old-age entrepreneurship is more common in the urban (59.52%) compared to the rural (40.48%). Also, almost all the older-person entrepreneurs are healthy (96.23%). This tends to suggest that being healthy is a prerequisite for entrepreneurship.

Table 3: Non-farm enterprises Ownership

Variable	Nonfarm enterprise owner		
	No	yes	Total
household size	5.01	4.13	4.90
Quintile			
Lowest	36.45	14.24	33.69
Second	20.88	21.44	20.95
Third	16.10	18.87	16.44
Fourth	13.17	19.21	13.92
Highest	13.41	26.24	15.00
Pension			
No	95.32	97.08	95.54
Yes	4.68	2.92	4.46
Remittance			
No remittance	53.84	52.49	53.68
remittance	46.16	47.51	46.32
Age Group			
young-old	66.39	84.56	68.64
old-old	24.61	12.69	23.14
very old	9.00	2.74	8.22
Location			
Urban	28.44	59.52	32.29
Rural	71.56	40.48	67.71
Gender			
Women	55.92	76.50	58.47
Men	44.08	23.50	41.53
Marital status			
Married	51.65	43.74	50.67
Consensual Union	1.65	2.23	1.72
Separated	2.50	3.43	2.61
Divorced	5.82	7.89	6.08
Widowed	37.32	41.51	37.84
Never married	1.07	1.20	1.08

Health status**Table 3 Contd.**

healthy	87.27	96.23	88.38
Poor health	12.73	3.77	11.62
Level of education			
No education	71.21	56.63	69.40
Primary	6.12	12.05	6.85
JHS/MLS	15.20	21.17	15.94
High School	1.65	3.10	1.83
Post Secondary	5.83	7.06	5.98
Land/Plot			
No	84.24	85.93	84.45
Yes	15.76	14.07	15.55
House/Building			
No	59.82	61.00	59.97
Yes	40.18	39.00	40.03
Car Ownership			
No	96.72	94.85	96.49
Yes	3.28	5.15	3.51
Motorcycle Ownership			
No	89.12	92.78	89.58
Yes	10.88	7.22	10.42

Source: GLSS 7

Regression analysis

As indicated earlier, the dependent variable is binary, with an older person owner of an enterprise being = 1 and 0 otherwise. The results of the probit regression of the dependent variable over selected independent variables are shown in Table 3.

The regression estimates (both probit coefficients and marginal effects) demonstrate a statistically significant upward trajectory across ascending wealth quintiles. This suggests that older individuals with greater financial resources exhibit a higher propensity to engage in entrepreneurial activities, underscoring the positive correlation between wealth accumulation and business initiation in later life in Ghana. This finding is consistent with a body of international literature (Cagetti & De Nardi, 2003; Fonseca, Michaud, & Sopraseuth, 2007; Berna & Johanna, 2008; Amorós et al., 2023), which identifies liquidity constraints and startup costs as significant impediments to entrepreneurial entry. In the Ghanaian context, access to credit remains a critical challenge for aspiring entrepreneurs (Owusu & Asare, 2018; Mensah & Nyarko, 2024), particularly for those lacking collateral or formal financial histories. Consequently, older individuals with accumulated wealth or stable income streams are better positioned to initiate business ventures, as they can more readily overcome financial barriers. As indicated by Rizvi (2024), such entrepreneurial engagement among affluent individuals is typically driven by opportunity rather than necessity, implying that a wealthy retiree in Ghana may pursue business creation not out of financial desperation but in response to perceived market gaps, personal interest, or innovative aspirations (Mersha et al., 2010).

The empirical findings presented in Table 3 indicate that pension receipt is a statistically significant determinant of grey entrepreneurship. Specifically, the marginal effect of -0.079 suggests that, holding all other variables constant, access to a pension is associated with a 7.9 percentage point reduction in the probability of enterprise initiation among older adults. This negative association implies that access to pension income may reduce the economic necessity to engage in entrepreneurial activity, particularly among older adults who might otherwise pursue self-employment as a means of

financial survival. The finding resonates with the Ghanaian context, where retirement income plays a pivotal role in shaping post-retirement economic behaviour. For retirees whose pension income is insufficient to meet basic living expenses, entrepreneurship may emerge as a viable strategy to supplement household income and maintain financial stability (Burman et al., 2018; Megbetor, 2024). On the other hand, sufficient pension coverage appears to dampen necessity-driven entrepreneurial motivation.

Closely related to pension access is the receipt of remittances, which exhibits a marginal effect of -0.019 , indicating a 1.9 percentage point reduction in the probability of enterprise establishment among the older adults. This suggests that older adults with many sources of income are less inclined to engage in necessity-driven entrepreneurship, as financial support from remittances may alleviate the economic pressures that typically motivate self-employment (Megbetor, 2024).

The regression results further suggest that advanced age acts as a disincentive to entrepreneurial engagement among older Ghanaians. Specifically, individuals aged 75–84 experience a 1.9 percentage point decline in the likelihood of initiating an enterprise, while those aged 85 years and above face a more pronounced reduction of 6.5 percentage points. This trend can be attributed to factors such as heightened financial risk aversion, deteriorating health conditions, and restricted access to capital. As noted by Mohamad and Chin (2020), older adults often encounter difficulties in building business networks and accessing critical resources, which may compromise their entrepreneurial viability. However, within this context of constraint, necessity-driven motivation becomes particularly salient. For many older Ghanaians, especially those with limited pension income or inadequate social support, entrepreneurship may not be a matter of choice but of survival. Faced with economic insecurity, some older individuals are compelled to engage in business activities as a means of supplementing household income and maintaining financial independence, despite the structural and personal challenges associated with advanced age.

Table 3: Non-farm enterprises

VARIABLES	(1) Probit Coefficients	(2) Marginal Effects
Quintile: Second	0.327***	0.053***
Quintile: Third	0.310***	0.049***
Quintile: Fourth	0.381***	0.063***
Quintile: Highest	0.398***	0.067***
Pension (=1 if receives pension)	-0.597***	-0.079***
remittance (=1 if receives remittance)	-0.111**	-0.019**
Age_Group = 2, old-old (75 – 84 years)	-0.398***	-0.065***
Age_Group = 3, very old (85 years and above)	-0.705***	-0.098***
Urban (=1 if lives in urban)	0.590***	0.114***
Gender (=1 if Woman)	0.553***	0.091***
Marital status: Consensual Union	0.100	0.019
Marital status: Separated	-0.113	-0.019
Marital status: Divorced	-0.097	-0.017
Marital status: Widowed	-0.045	-0.008
Marital status: Never married	0.139	0.027
Health status (=1 if abled/in good health)	0.603***	0.082***
Level of education: Primary	0.273***	0.053***
Level of education: JHS/MLS	0.071	0.012
Level of education: High School	0.209	0.039
Level of education: Post Secondary	-0.000	-0.000
Land/Plot (=1 if owns land)	-0.057	-0.010

Table 3 Contd.

House/building (=1 if owns a house)	0.076	0.013
Car Owners (=1 if owns a car)	-0.064	-0.011
Motorcycle (=1 if owns a motorcycle)	-0.017	-0.003
household size	-0.018*	-0.003*
Constant	-0.742***	
Observations	4,694	4,694
REGIONAL DUMMIES	YES	YES
Log-Likelihood Full Model	-1490	
Chi-square test	377.8	
Prob > chi2	0	

Robust standard errors used; *** p<0.01, ** p<0.05, * p<0.1

Additionally, the data reveal a spatial dimension to entrepreneurial participation, with older individuals residing in urban areas exhibiting a 11.4 percentage point increase in the probability of setting up an enterprise. As highlighted by [Peek \(2025\)](#), rural residents encounter significant structural barriers—including poor road infrastructure, limited transportation options, unreliable internet connectivity, and constrained access to formal financial institutions and investment platforms—which collectively inhibit enterprise development. Consequently, the urban-rural disparity in entrepreneurial activity appears to be driven by opportunity-based motivations, as urban environments offer relatively more favourable conditions and accessible markets that encourage business creation.

According to the results (see Table 3), being a woman increases the probability of setting up an enterprise by 9.1 percentage points. This outcome is consistent with a position by [Zelekha \(2021\)](#) that the gender gap in entrepreneurship is because of intergenerational parental roles that tend to influence entrepreneurial tendencies and do not favour men in pursuing business ventures. Indeed, a study by [Domfe et. al \(2017\)](#) concluded that more women in Ghana enter entrepreneurship out of necessity to maintain their livelihood because they are less competitive in the labour market when it comes to employment. Apart from being less competitive in the formal established employment, women are mostly overburdened with childcare in the event of divorce, which perhaps pushes most of them to establish enterprises to take care of their dependents ([Conroy & Rupasingha, 2025](#)).

As expected, the regression results indicate that good health status among older persons increases their likelihood of engaging in entrepreneurial activities by 8.2 percentage points. This finding aligns with the insights of [Shepherd and Patzelt \(2017\)](#), who argued that individuals in poor health often face physical and psychological barriers to entrepreneurship, including reduced capacity to manage business demands and diminished motivation to innovate or take risks. In the Ghanaian context, where the business environment can be physically and mentally demanding, older adults in poor health may be further discouraged from pursuing entrepreneurial ventures. Conversely, those in good health are better positioned to capitalize on available opportunities, as affirmed by [Guzman and Merlo \(2024\)](#), who found that healthy entrepreneurs are more likely to be driven by opportunity-based intentions. This outcome resonates with the objectives of Ghana's National Ageing Policy, which emphasizes the promotion of active ageing and the creation of enabling environments that support older persons in remaining economically productive ([Ministry of Employment and Social Welfare \[MESW\], 2010](#)). By recognizing health as a critical determinant of economic participation, the policy underscores the importance of accessible healthcare and wellness programmes to empower older Ghanaians to pursue entrepreneurship as a viable livelihood strategy.

Another interesting finding from the regression analysis is that older adults with low educational attainment are 5.3 percentage points more likely to engage in entrepreneurial activities. Specifically, individuals with limited formal education exhibit a higher probability of initiating

enterprise activity in later life. This finding resonates with the conclusions of [Santini et al. \(2020\)](#), who argued that older persons with lower levels of education often pursue entrepreneurship as a pathway to economic autonomy and social inclusion. In the Ghanaian context, this relationship may be shaped by structural and historical factors. Many older adults, particularly those in rural and peri-urban areas, may have had limited access to formal education due to socioeconomic constraints and educational infrastructure deficits during their formative years. Consequently, formal employment opportunities, especially in the public and formal private sectors, may be less accessible, prompting a reliance on informal economic activities and self-employment as viable livelihood strategies.

Lastly, the regression results indicate that the addition of one more household member corresponds to a 0.3 percentage point decline in the likelihood of entrepreneurial engagement among older adults within the household. This finding supports the conclusions of [Weller et al. \(2016\)](#) that increased financial and caregiving responsibilities within extended households may inhibit entrepreneurial participation. Within the Ghanaian context, older adults who support multiple dependents often experience intensified economic strain, which diminishes their capacity to undertake the risks associated with business ventures. For such individuals, entrepreneurship is not driven by opportunity but emerges as a necessity, often pursued only when no other livelihood options are available. This dynamic aligns with the objectives outlined in Ghana's National Ageing Policy, which emphasizes the need to promote income-generating opportunities and social protection mechanisms for older persons ([MESW, 2010](#)). The policy recognizes that many older Ghanaians continue to bear economic responsibilities within their households and advocates for targeted interventions that reduce vulnerability and enhance economic independence in later life.

This study contributes to the growing body of literature on grey entrepreneurship by examining the determinants of entrepreneurial engagement among older persons in Ghana. The regression analysis reveals a nuanced interplay between opportunity-driven and necessity-driven motivations, confirming earlier findings ([Tervo & Haapanen, 2017](#); [Gimmon et al., 2018](#); [Giacomin et al., 2023](#)). Opportunity-enhancing factors—such as wealth, urban residence, and good health status—enable older individuals to pursue entrepreneurship voluntarily, often driven by innovation, market potential, and access to capital ([Rizvi, 2024](#); [Cagetti & De Nardi, 2003](#); [Fonseca et al., 2007](#); [Amorós et al., 2023](#)). On the other hand, necessity-driven factors—particularly gender and low educational attainment—compel older persons into self-employment as a survival strategy, reflecting structural inequalities and limited access to formal employment and pension schemes ([Mahama & Maharjan, 2017](#); [Yessoufou et al., 2018](#); [Santini et al., 2020](#)).

Conclusion

Importantly, this study advances the discourse on grey entrepreneurship by engaging with a challenge to the conventional binary framing of entrepreneurial motivation. Evidence from the Ghanaian context illustrates that older entrepreneurs navigate a spectrum of motivations influenced by both individual agency and structural limitations. This nuanced reality necessitates a reconsideration of policy frameworks that transcend reductive distinctions—such as associating necessity-driven entrepreneurship with developing economies and opportunity-driven entrepreneurship with advanced economies—and instead embrace the complexity inherent in later-life entrepreneurial engagement.

Advancing grey entrepreneurship among older adults in Ghana necessitates a multidimensional policy framework that fosters a more enabling and age-responsive entrepreneurial ecosystem. This may include an integration of targeted training, inclusive financial access, and robust social protection. Tailored capacity-building programmes should be designed to equip older individuals with entrepreneurial competencies, including financial literacy, digital skills, and market

navigation strategies. Age-responsive microcredit schemes—structured to accommodate the unique risk profiles and repayment capacities of older borrowers—can significantly reduce barriers to startup capital and enhance financial inclusion.

Equally critical are comprehensive social protection mechanisms that safeguard older adults from economic precarity. Measures such as pension portability, universal health coverage, and income security programmes not only mitigate vulnerability but also prevent frail or economically disadvantaged older people from engaging in entrepreneurship solely out of necessity. These interventions collectively form a coherent strategy to unlock the latent productive potential of older citizens, contributing to inclusive economic growth, active ageing, and the realization of Sustainable Development Goals—particularly SDG 1 (No Poverty), SDG 8 (Decent Work and Economic Growth), and SDG 10 (Reduced Inequalities).

Given that the lack of qualitative insights constrains a more nuanced understanding of how individuals may concurrently experience opportunity- and necessity-driven motivations, this paper recommends undertaking future qualitative research to explore these complex dynamics in greater depth.

Declarations

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Funding Information

The authors did not receive any funding support for this study.

ORCID ID

George Domfe: <https://orcid.org/0000-0002-0727-2223>

Kwadwo Opoku: <https://orcid.org/0000-0002-5108-6217>

Emmanuel Kumi: <https://orcid.org/0000-0001-8318-8499>

Contribution of Authors

Conceptualization: Dr. George Domfe; **Methodology:** Dr. Kwadwo Opoku; **Formal analysis and investigation:** Dr. Kwadwo Opoku; **Writing - original draft preparation:** Dr. George Domfe, Dr. Kwadwo Opoku and Dr. Emmanuel Kumi; **Writing - review and editing:** Dr. George Domfe, Dr. Kwadwo Opoku and Dr. Emmanuel Kumi; **Supervision:** Dr. George Domfe

References

- Abdulai, M., Zakaria, H., & Abdulai, A. (2021). A study of small and medium enterprises in Ghana: Entrepreneurial outlook. *Academy of Entrepreneurship Journal*, 25(S2), 1–10. <https://www.abacademies.org/articles/A-study-of-small-and-medium-enterprises-in-Ghana-1528-2651-25-S2-775.pdf>
- Abekah-Carter, K., Awuviry-Newton, K., Oti, G. O., & Umar, A. R. (2022). The unmet needs of older people in Nsawam, Ghana. *Health & Social Care in the Community*, 30(6), e4311-e4320. <https://doi.org/10.1111/hsc.13824>
- Aboderin, I., & Beard, J. R. (2022). Population ageing and social protection in Ghana. In S. Vanderbeck & I. Aboderin (Eds.), *Ageing in Sub-Saharan Africa: Spaces and practices of care* (pp. 45–62). Springer. https://doi.org/10.1007/978-3-030-97243-4_3

- Alam, M. S., Biswas, K., & Sulphrey, M. M. (2021). A case study on the entrepreneurial process of push and pull women entrepreneurs. *South Asian Journal of Business and Management Cases*, 10(2), 207-217. <https://doi.org/10.1177/22779779211028536>
- Amoah, P. A., Edusei, J., & Amuzu, D. (2019). The status of older adult care in contemporary Ghana: A sociological perspective. *Frontiers in Sociology*, 4, 1–10. <https://doi.org/10.3389/fsoc.2019.00001>
- Amorós, J. E., Cristi, O., & Naudé, W. (2021). Entrepreneurship and subjective well-being: Does the motivation to start-up a firm matter? *Journal of Business Research*, 127, 389–398. <https://doi.org/10.1016/j.jbusres.2020.11.044>
- Amorós, J. E., Leporati, M., & Torres-Marín, A. (2023). Senior entrepreneurship dynamics: A Latin American perspective. *International Journal of Entrepreneurial Behaviour & Research*. Advance online publication. <https://doi.org/10.1108/IJEBR-07-2022-0650>
- Amorós, J. E., Leporati, M., Torres-Marín, A. J., & Roses, S. (2024). Opportunity entrepreneurship after 65: Relevant factors in OECD countries. *International Entrepreneurship and Management Journal*, 20(2), 1215-1244. <https://doi.org/10.1007/s11365-024-00953-x>
- Berna, D., & Johanna, F. (2008). Wealth, Industry and the Transition to Entrepreneurship (2008). Fordham University Department of Economics Discussion Paper No. 2008-09, Available at SSRN: <https://ssrn.com/abstract=1143525> or <http://dx.doi.org/10.2139/ssrn.1143525>
- Block, J. H., & Wagner, M. (2010). Necessity and opportunity entrepreneurs in Germany: characteristics and earnings differentials. *Schmalenbach Business Review*, 62, 154-174. <https://doi.org/10.1007/BF03396803>
- Bowen, H. P., & De Clercq, D. (2008). Institutional context and the allocation of entrepreneurial effort. *Journal of International Business Studies*, 39, 747-767. <https://doi.org/10.1057/palgrave.jibs.8400343>
- Brewer, J. (2014). Defining and classifying necessity entrepreneurs: A review of the literature. *Necessity Entrepreneurs*, 1-22. <https://doi.org/10.4337/9781781956182.00010>
- Burman, L. E., McClelland, R., & Lu, C. (2018). The effects of estate and inheritance taxes on entrepreneurship. Tax Policy Center. Retrieved from: https://taxpolicycenter.org/sites/default/files/publication/153466/2018.03.05_estate_tax_and_entrepreneurship_final_1_0.pdf
- Cagetti, M., & De Nardi, M. (2003). Entrepreneurship, frictions, and wealth (Federal Reserve Bank of Minneapolis Research Department Working Paper No. 620). Retrieved June 13, 2025, from <https://www.jstor.org/stable/pdf/community.2811466.pdf>.
- Coates, D., & Lawless, M. (2024). *Entrepreneur characteristics and determinants of self-employment across Europe* (No. 772). ESRI Working Paper.
- Coduras-Martínez, F., Dinis, A., Buttarazzi, D., & Riso, S. (2020). Entrepreneurial competencies in higher education: Analysis of the expert model. *Journal of Business Research*, 115, 1–6. <https://doi.org/10.1016/j.jbusres.2019.11.054>

- Conroy, T., & Rupasingha, A. (2025). Childcare closures and female entrepreneurship. *Annals of Regional Science* 74, 67 (2025). <https://doi.org/10.1007/s00168-025-01393-3>
- Curran, J., & Blackburn, R. A. (2001). Older people and the enterprise society: Age and self-employment propensities. *Work, Employment and Society*, 15(4), 889–902. <https://doi.org/10.1177/09500170122127124>
- Danson, M., Galloway, L., Richards, J., & Sang, K. (2020). Grey entrepreneurship: Implications for policy and practice. *Local Economy*, 35(5), 457–472. <https://doi.org/10.1177/0269094220954671>
- Dencker, J. C., Bacq, S., Gruber, M., & Haas, M. R. (2019). Reconceptualizing necessity entrepreneurship: A contextualized framework of entrepreneurial processes under the conditions of necessity. *Academy of Management Perspectives*, 33(4), 473–491. <https://doi.org/10.5465/amp.2017.0008>
- Domfe, G., Osei, R. D., & Ackah C. (2013). Economic Exclusion and Working Poverty: The Case of the Informal Sector Workers in the MiDA Intervention Zone in Ghana. *Oguuaa Journal of Social Sciences*, Vol. 7 (1): pp. 111 – 135
- Domfe, G., Ackah C., Afutu-Kotey, R. L., & Oduro, A. D. (2017). Gender Perspectives on Socio-economic Determinants of Ownership of Enterprise in Ghana. *Journal of Economics and Policy Analysis*, Vol. 2 (21), pp. 162-184.
- Dovie, D. A. (2018). Leveraging Healthcare Opportunities for Improved Access among Ghanaian Retirees: The Case of Active Aging. *Social Sciences*, 7(6), 92. <https://doi.org/10.3390/socsci7060092>
- Dovie, D. A. (2019). The status of older adult care in contemporary Ghana: A profile of some emerging issues. *Frontiers in Sociology*, 4, 1-12. <https://doi.org/10.3389/fsoc.2019.00025>
- Dzingirai, M., & Ndofirepi, T. M. (2024). Challenges faced in elderly entrepreneurship: evidence from Zimbabwean older entrepreneurs. In *Fostering Long-Term Sustainable Development in Africa: Overcoming Poverty, Inequality, and Unemployment* (pp. 29-48). Cham: Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-61321-0_3
- Essuman, A., & Mate-Kole, C. C. (2021). Ageing in Ghana. *Ageing Across Cultures: Growing Old in the Non-Western World*, 1-11. https://doi.org/10.1007/978-3-030-76501-9_1
- Elia, G., Margherita, A., & Passiante, G. (2020). Digital transformation and entrepreneurship: A systematic literature review. *Global Business and Organizational Excellence*, 39(6), 1–15. <https://doi.org/10.1002/joe.22061>
- Fairlie, R. W., & Fossen, F. M. (2019). Opportunity versus necessity entrepreneurship: Two components of business creation. *CESifo Working Paper Series*, No. 7980. <https://www.cesifo.org/en/publikationen/2019/working-paper/opportunity-versus-necessity-entrepreneurship-two-components-business>
- Fonseca B, R., Michaud, P.-C., & Sopraseuth, T. (2007). Entrepreneurship, wealth, liquidity constraints, and start-up costs (RAND Working Paper No. WR-500). RAND Corporation. Retrieved June 13, 2025, from https://www.rand.org/pubs/working_papers/WR500.html

- Global Entrepreneurship Monitor. (2025). *Global Entrepreneurship Monitor 2024/2025 Global Report*. GEM Consortium. <https://www.gemconsortium.org/report/gem-2024-2025-global-report>
- Ghana Statistical Service. (2019). *Ghana Living Standards Survey Round 7 (GLSS 7): Main report*. Accra, Ghana: Ghana Statistical Service.
- Ghana Statistical Service (2022), Population and Housing Census Report, Ministry of Finance and Economic Planning, Accra.
- Giacomin, O., Janssen, F., Guyot, J. L., & Lohest, O. (2023). Opportunity and/or necessity entrepreneurship? The impact of the socio-economic characteristics of entrepreneurs. *Sustainability*, 15(14), 10786. <https://doi.org/10.3390/su151410786>
- Gimmon, E., Yitshaki, R., & Hantman, S. (2018). Entrepreneurship in the third age: retirees' motivation and intentions. *International Journal of Entrepreneurship and Small Business*, 34(3), 267-288. <https://doi.org/10.1504/IJESB.2018.092743>
- Gries, T., & Naudé, W. (2011). Entrepreneurship, structural change and a global economic crisis. *Entrepreneurship Research Journal*, 1(3), 1–28. <https://doi.org/10.2202/2157-5665.1029>
- Guzman, J. J., & Merlo, J. I. (2024). Determinants of entrepreneurship and self-employment for older people in Chile. *International Journal of Business Environment*, 15(1), 25-40. <https://doi.org/10.1504/IJBE.2024.135695>
- Huang, Y., Li, P., Chen, L., & Wang, J. (2023). Opportunity or necessity entrepreneurship? A study based on the national system of entrepreneurship. *Journal of Innovation & Knowledge*, 8(4), 1-11. <https://doi.org/10.1016/j.jik.2023.100448>
- Institute for Fiscal Studies Ghana. (2019). Leslie Pension Presentation. Retrieved on June 6, 2025, from IFS Ghana <https://ifsghana.org/wp-content/uploads/2019/07/Leslie-Pension-Presentation.pdf>
- Joel, M., & Oguanobi, T. (2024). *Gendered dynamics of entrepreneurial leadership and innovation*. In *Entrepreneurial Leadership* (pp. 1–18). Springer. https://link.springer.com/rwe/10.1007/978-3-030-68128-9_36-1
- Kantor, P. (2002). Gender, microenterprise success and policy implications in the informal sector: Evidence from India. *Canadian Journal of Development Studies*, 23(4), 817–836. <https://doi.org/10.1080/02255189.2002.9668913>
- Kautonen, T. (2012). Age and grey entrepreneurship. In M. Minniti (Ed.), *The dynamics of entrepreneurship: Evidence from the Global Entrepreneurship Monitor data* (pp. 117–139). Springer. https://link.springer.com/content/pdf/10.1057/9780230355057_4
- Kautonen, T., Down, S., & Minniti, M. (2014). Age and entrepreneurship: The role of age in entrepreneurial activity. *Journal of Business Venturing*, 29(2), 193–210. <https://doi.org/10.1016/j.jbusvent.2012.10.005>
- Kpessa-Whyte, M., & Tsekpo, K. (2020). Lived experiences of the elderly in Ghana: Analysis of ageing policies and options for reform. *Journal of Cross-Cultural Gerontology*, 35, 341-352. <https://doi.org/10.1007/s10823-020-09401-z>

- Kubik, Z., Getahun, T. D., Adegbola, P. Y., Beye, A., & Mbaye, A. A. (2024). *Opportunity or necessity? Youth agripreneurs in Benin, Ethiopia and Senegal* (No. 238). ZEF Working Paper Series.
- Leporati, M., Torres Marin, A. J., & Roses, S. (2021). Senior entrepreneurship in Chile: necessity or opportunity? A GEM perspective. *European Business Review*, 33(6), 892-917. <https://doi.org/10.1108/EBR-11-2020-0277>
- Lim, W. M., Bansal, S., Kumar, S., Singh, S., & Nangia, P. (2024). Necessity entrepreneurship: a journey from unemployment to self-employment. *Global Business and Organizational Excellence*, 43(6), 41-58. <https://doi.org/10.1002/joe.22256>
- Liñán, F. (2020). The effect of youth entrepreneurship education programmes: Two large-scale studies. *SAGE Open*, 10(3), 1–15. <https://doi.org/10.1177/2158244020956976>
- Maâlaoui, A. (Ed.). (2019). *Handbook of Research on Elderly Entrepreneurship*. Springer.
- Mahama, T. A. K., & Maharjan, K. L. (2017). Determinants of livelihood diversification in Ghana from the national livelihood strategies and spatial perspective. *Journal of International Development and Cooperation*, 23(1), 75-90.
- McMullen, J. S., Bagby, D. R., & Palich, L. E. (2008). Economic freedom and the motivation to engage in entrepreneurial action. *Entrepreneurship Theory and Practice*, 32(5), 875–895. <https://doi.org/10.1111/j.1540-6520.2008.00260.x>
- Megbetor, E. K. (2024). Examining the Ghanaian pension system: An economic perspective. *Wisconsin Journal of Arts and Sciences*, 6(1), 4–24. Retrieved from Wisconsin International University College
- Mead, D. C., & Liedholm, C. (1998). The dynamics of micro and small enterprises in developing countries. *World development*, 26(1), 61-74. [https://doi.org/10.1016/S0305-750X\(97\)10010-9](https://doi.org/10.1016/S0305-750X(97)10010-9)
- Mensah, S., & Nyarko, E. (2024). *Bridging the SME financing gap in Ghana: Policy options and institutional reforms*. *International Journal of Economics, Commerce and Management*, 12(1), 55–72.
- Mersha, T., Sriram, V., & Hailu, M. (2010). Nurturing opportunity entrepreneurs in Africa: Some lessons from Ethiopia. *Journal for Global Business Advancement*, 3(2), 155-175. <https://doi.org/10.1504/JGBA.2010.0332>
- Ministry of Employment and Social Welfare. (2010). *National Ageing Policy: Ageing with security and dignity*. Government of Ghana.
- Minniti, M., Bygrave, W. D., & Autio, E. (2006). *Global Entrepreneurship Monitor: 2005 Executive Report*. Babson College and London Business School. <https://www.gemconsortium.org/report/gem-2005-global-report>
- Minniti, M., & Lévesque, M. (2010). Entrepreneurial types and economic growth. *Journal of Business Venturing*, 25(3), 305-314. <https://doi.org/10.1016/j.jbusvent.2008.10.002>
- Mohamad, M. A., & Chin, O. (2020). Demographic Factors, Entrepreneurial Munificence And Business Networking And Youth Entrepreneurs' Success. In N. S. Othman, A. H. B. Jaaffar, N. H. B. Harun, S. B. Buniamin, N. E. A. B. Mohamad, I. B. M. Ali, N. H. B. A. Razali, & S. L. B.

- M. Hashim (Eds.), Driving Sustainability through Business-Technology Synergy, vol 100. European Proceedings of Social and Behavioural Sciences (pp. 642-651). European Publisher. <https://doi.org/10.15405/epsbs.2020.12.05.70>
- Molina, J. A., Ortega, R., & Velilla, J. (2017). Older entrepreneurs-by-necessity using fuzzy set methods: differences between developed and developing countries. University Library of Munich, Germany.
- Moulton, J. G., & Scott, J. C. (2016). Opportunity or necessity? Disaggregating self-employment and entry at older ages. *Social Forces*, 94(4), 1539-1566. <https://doi.org/10.1093/sf/sow026>
- Nhodo, L., Maunganidze, F., Gukurume, S., Nyamubarwa, W., & Marimba, G. (2013). Surviving on the margins of the formal employment, an analysis of the life experiences of pensioners in Masvingo Zimbabwe. *Current Research Journal of Social Sciences*, 5(1), 28-34. <https://doi.org/10.1108/EBR-11-2020-0277>
- Nkansah, O. J., Awuviry-Newton, K., Gyasi, M., Newton, A., & Boateng, A. S. A. (2021). "Who doesn't Have Challenges? I Have a Lot of Challenges": Exploring the Challenges and Coping Strategies of Neglected Older Adults in Ghana. *Journal of Cross-Cultural Gerontology*, 36(1), 91-104. <https://doi.org/10.1007/s10823-020-09419-3>
- Ongoh, M., Abekah-Carter, K., & Godi, A. H. (2023). Life after Retirement: exploring the survival strategies of SSNIT pensioners in the Greater Accra Region of Ghana. *Journal of Cross-Cultural Gerontology*, 38(4), 327-342. <https://doi.org/10.1007/s10823-023-09487-1>
- Opoku, K., Domfe, G. and Adu Boahen, E. (2025), "Determinants of older people labour market decision in Ghana", *Journal of Economic Studies*, Vol. 52 No. 1, pp. 72-87. <https://doi.org/10.1108/JES-07-2023-0345>
- Ortega-Lapiedra, R. (2020). Why Senior Workers Are Becoming Entrepreneurs: Necessity or Passion?. In *The Entrepreneurial Behaviour: Unveiling the cognitive and emotional aspect of entrepreneurship* (pp. 271-280). Emerald Publishing Limited. <https://doi.org/10.1108/978-1-78973-507-920201018>
- Osei, R. D., & Lambon-Quayefio, M. (2021). Cash transfers and the supply of labour by poor households: Evidence from the livelihood empowerment against poverty program in Ghana. *Review of Development Economics*, 25(3), 1293-1304. <https://doi.org/10.1111/rode.12784>
- Owusu, A., & Asare, K. (2018). Challenges facing micro and small enterprises in accessing credit in Ghana: A case study of Suame Magazine. *Journal of African Business*, 19(2), 245-263. <https://doi.org/10.1080/15228916.2018.1439981>
- Patel, P. C. (2025). Look before you leap: Earnings gaps and elderly self-employment. *Journal of Business Research*, 189,1-33. <https://doi.org/10.1016/j.jbusres.2024.115081>
- Peek, M. (2025). Rural micro-entrepreneurs: Building thriving businesses in remote areas. Biznality. Retrieved from: <https://www.biznality.com/rural-micro-entrepreneurs-building-thriving-businesses-in-remote-areas/>
- Perenyi, A., Zolin, R., & Maritz, A. (2018). The perceptions of Australian senior entrepreneurs on the drivers of their entrepreneurial activity. *International Journal of Entrepreneurial Behavior & Research*, 24(1), 81-103

<https://doi.org/10.1108/IJEBR-12-2016-0424>

- Reynolds, P. D., Bygrave, W. D., Autio, E., Cox, L. W., & Hay, M. (2002). *Global Entrepreneurship Monitor: 2002 Executive Report*. Babson College, London Business School, and Ewing Marion Kauffman Foundation. <https://www.gemconsortium.org/report/gem-2002-global-report>
- Reynolds, P., Bosma, N., Autio, E., Hunt, S., De Bono, N., Servais, I., Lopez-Garcia, P., & Chin, N. (2005). Global Entrepreneurship Monitor: Data collection design and implementation 1998–2003. *Small Business Economics*, 24(3), 205–231. <https://doi.org/10.1007/s11187-005-1980-1>
- Rizvi, H. (2024). Opportunity vs necessity entrepreneurship: Choosing one over the other for success. Hidayat Rizvi. Retrieved from <https://hidayatrizvi.com/opportunity-vs-necessity-entrepreneurship>
- Saiz-Álvarez, J. M., & Coduras-Martínez, A. (2020). Territorial maps of senior entrepreneurship: A multidimensional analysis based on GEM data. *Entrepreneurship and Family Business Vitality: Surviving and Flourishing in the Long Term*, 133-150. https://doi.org/10.1007/978-3-030-15526-1_8
- Santini, S., Baschiera, B., & Socci, M. (2020). Older adult entrepreneurs as mentors of young people neither in employment nor education and training (NEETs): Evidence from a multi-country intergenerational learning programme. *Educational Gerontology*. pp. 1-20, <https://doi.org/10.1080/03601277.2020.1714142>
- Segbenya, M., Onomah, J., Kangmennaang, R., & Grantson, E. (2024). Exploring the awareness, preparedness and the state of pension among informal workers in Ghana. *Social Sciences & Humanities Open*, 9, 1-11. <https://doi.org/10.1016/j.ssaho.2023.100776>
- Shepherd, D. A., & Patzelt, H. (2017). Trailblazing in entrepreneurship: Creating new paths for understanding the field. In D. A. Shepherd & H. Patzelt (Eds.), *Trailblazing in entrepreneurship* (pp. 1–20). Palgrave Macmillan. https://doi.org/10.1007/978-3-319-48701-4_1
- Singh, G., & DeNoble, A. (2003). Early retirees as the next generation of entrepreneurs. *Entrepreneurship Theory and Practice*, 27(3), 207–226. <https://doi.org/10.1111/1540-8520.00005>
- Smolka, K. M., Heugens, P. P. M. A. R., Bacq, S., & Slade Shantz, A. F. (2025). Toward a shared agenda for necessity entrepreneurship research: Definitions, theories, and perspectives. In S. Bacq, K. M. Smolka, A. F. Slade Shantz, & P. P. M. A. R. Heugens (Eds.), *Necessity Entrepreneurship: Getting Beyond the Binary* (Vol. 92, pp. 13–35). Emerald Publishing. <https://doi.org/10.1108/S0733-558X20250000092004>
- Stephens, S., & Hegarty, C. (2022). Retirees from public service: the journey to small enterprise ownership. *Small Enterprise Research*, 29(1), 52-67. <https://doi.org/10.1080/13215906.2021.1901141>
- Storey, D. J. (1991). *The birth of new firms—does unemployment matter?* A report prepared for the Employment Department. London: Employment Department.
- Subanti, S., Hakim, A. R., & Sulandari, W. (2021). The determinant of entrepreneurial work for elderly in Indonesia. In AIP Conference Proceedings (Vol. 2329, No. 1). AIP Publishing.

- Tervo, H., & Haapanen, M. (2017). Opportunity- and necessity-driven self-employment among older people in Finland. In I. Aaltio, A. J. Mills, & J. H. Mills (Eds.), *Ageing, organisations and management* (pp. 255–276). Springer.
https://link.springer.com/chapter/10.1007/978-3-319-58813-1_12
- United Nations Department of Economic and Social Affairs Population Division. (2017). *World population prospects: The 2017 revision, key findings and advance tables*. UNDESA.
- Weber, P., & Schaper, M. (2004). Understanding the grey entrepreneur: Age-related barriers to business start-up. *Journal of Enterprising Culture*, 12(01), 1–23.
<https://doi.org/10.1142/S0218495804000037>
- Weber, C., Fasse, A., Haugh, H. M., & Grote, U. (2023). Varieties of necessity entrepreneurship–New insights from Sub-Saharan Africa. *Entrepreneurship Theory and Practice*, 47(5), 1843–1876.
<https://doi.org/10.1177/10422587221111737>
- Weller, C. E., Wenger, J. B., Lichtenstein, B., & Arcand, C. (2016). Push or pull: Changes in the relative risk and growth of entrepreneurship among older households. *The Gerontologist*, 56(Suppl_3), 540–541.
https://www.rand.org/pubs/external_publications/EP66740.html
- Williams, C. C., & Gurtoo, A. (Eds.). (2017). *Routledge handbook of entrepreneurship in developing economies* (pp. 13–16). London: Routledge.
- Yessoufou, A. W., Blok, V., & Omta, S. W. F. (2018). The process of entrepreneurial action at the base of the pyramid in developing countries: a case of vegetable farmers in Benin. *Entrepreneurship & Regional Development*, 30(1-2), 1–28. <https://doi.org/10.1080/08985626.2017.1364788>
- Zelekha, Y. (2021). What stands behind the gender gap in entrepreneurship? Untangling the intergenerational parental role. *PLOS ONE*, 16(12), e0261108. Retrieved from: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0261108>
- Zhu, Y., Collins, A., Xu, Z., Sardana, D., & Cavusgil, S. T. (2022). Achieving aging well through senior entrepreneurship: a three-country empirical study. *Small Business Economics*, 59(2), 665–689. <https://doi.org/10.1007/s11187-021-00564-8>