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Mediating Effect of Entrepreneurial Self-Efficacy on Entrepreneurial Orientation and Performance: Case of Ghana Club 100 Companies

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Abstract

The empirical literature shows that entrepreneurial orientation, such as risk-taking, pro-activeness, and innovation, predict firm financial performance. However, research is limited on the mediating role of entrepreneurial self-efficacy on firm-level entrepreneurial orientation and financial performance. This paper fills this void by applying the structural equation model to investigate the mediating role of entrepreneurial self-efficacy on entrepreneurial orientation and performance of firms listed on the Ghana Club 100 (N = 199 CEOs). The finding of the study shows that risk-taking directly predicts the financial performance of companies on the Ghana Club 100 whilst entrepreneurial self-efficacy is a significant mediator between all the constructs of entrepreneurial orientation and the financial performance of Ghana Club 100 companies.

Keywords

Club 100, Entrepreneurship, Ghana, Mediating Effect, Self-Efficacy, Structural Equation Model

1. Introduction

Entrepreneurial literature is replete on the effect of entrepreneurial orientation (EO) on performance (Hmieleski & Baron, 2008; Hyvonen & Tuominen, 2006; Kusa, Duda, & Suder, 2021), however, a paucity of the entrepreneurial literature have not examined the mediating role of self-efficacy in the EO and performance relationship. As indicated by Mohd et al. (2015), and Tajeddini et al. (2020), personal acumens such as decision-making skills, being creative, and the ability to

solve problems, mediates between the relationship between EO and performance. The recurrent debates in the empirical literature like to the role of personal traits of the owners of businesses associated with business-level entrepreneurial orientation (EO) (Baum & Locke, 2004; Wiklund, Patzelt, & Shepherd, 2009; Fatima & Bilal, 2020). A recommendation from these studies is that self-efficacy is pivotal to entrepreneurial success. Self-efficacy is an intrinsic universal trait, which infers, to the judgment, or the ability of an individual to achieve a certain level of performance or desired outcomes (Kelly & Kumar, 2009; Hmieleski & Baron, 2008; Alves & Yang, 2022). In terms of the impact of self-efficiency on EO and performance, fewer empirical studies have opined that self-efficacy successfully differentiates entrepreneurs from non-entrepreneurs (Lucas & Cooper, 2004; Markman, Balkin, & Baron, 2002; Chen, Greene, & Crick, 1998; Bilal & Fatima, 2022). EO factors such as pro-activeness (PRO), innovation (INNO), and risk-taking (RSK) in combination with cognitive factors that switch on entrepreneurial alertness influence performances in diverse ways. Entrepreneurial orientation (EO) is a precursor of a company's growth, competitive advantage, and superior performance (Kraus, Kauranen, & Reschke, 2011; Chen, Lin, & Tsai, 2020). Researchers on self-efficacy as an entrepreneurial characteristic of entrepreneurs proffer that individuals with high in self-efficacy are more likely to start their own businesses and leads them to growth than people (Schjoedt & Shaver, 2012; Amofah, Saladrigues, & Akwaa-Sekyi, 2020). Individuals with high self-efficacy are more likely to persevere in the face of challenges and are likely to take initiative with higher aspirations for success (Franco, Haase, & Correia, 2018).

Though a growing body of research on entrepreneurship in Ghana has attempted to identify the underlying factors that inspire or embolden individuals to engage in entrepreneurial activity (Adu, Boakye, Suleman, & Boawei, 2020), empirical studies on the relationship between entrepreneurial orientation (EO) and performance are largely missing. In Ghana, fewer studies have not focused on and captured the Ghana Club 100 members who are integral to entrepreneurial operations in Ghana. The Ghana Club 100 was introduced in 1998 by the Ghana Investment Promotion Centre (GIPC) and features a yearly collection of 100 exceptional companies in the Ghanaian business landscape. It is aimed at encouraging competition and improvement of company products and services in the country and the achievement of excellence. The Ghana Club 100 aims to celebrate and recognize companies making remarkable strides in their various business sectors. More importantly, the Ghana Club 100 awards and encourages entrepreneurs who are impacting the Ghanaian business landscapes and have a promising future of expanding to the global business environment.

In the bid to extend the frontier of the empirical literature on the use of mediators to test the strength of the EO and performance relationship, entrepreneurial self-efficacy is introduced. Therefore, the present study fills this gap by using companies that have featured on the Ghana Club 100, at least thrice or more times for the period 2005 to 2015. The three overarching objectives of this study are:

- To examine the relation between entrepreneurial orientation and firm performance;
- To examine the relations between entrepreneurial self-efficacy and firm performance;
- To examine the extent to which entrepreneurial self-efficacy mediates the relationships between entrepreneurial orientation and firm performance.

The rest of the paper is organised as follows: Section two reviews literature on the entrepreneurial orientation, entrepreneurial self-efficacy, and performance, followed by the methodology of the study (section three). The results of the study and the discussion are presented in section four and section five of the paper. The final section of the paper, section six is the conclusion and recommendation of the paper.

2. Literature Review

The review of literature will dilate on the three overarching issues which underpin the objectives of this study.

2.1. Theoretical Literature Review

2.1.1. Entrepreneurial Orientation (EO) and Performance

Entrepreneurial orientation is the intellectual characteristic of entrepreneurship that encompasses strategy strategy-making process in business (Sirén, Hakala, Wincent, & Grichnik, 2017). As a result of EO, firms are able to be pro-active towards dominant situations, more inclined towards risk-taking propensity, enthusiastic, and energetic to compete in the market and excel via innovativeness. These proponents of EO, that is, pro-activeness, risk-taking and innovativeness have been attributed to Miller (1983). Entrepreneurial orientation consists of personae that make an individual behave entrepreneur. As said by Miller (1983), an entrepreneurial firm is one that engages in product-market innovation, undertakes somewhat risky ventures, and is the first to come up with "proactive" innovations, beating competitors to the punch. A non-entrepreneurial firm is one that innovates very little, is highly risk averse, and imitates the moves of competitors instead of leading the way.

Entrepreneurial orientation is to steer one's behaviour, attitude, knowledge, and skills toward entrepreneurship. The difference between entrepreneurs and non-entrepreneurs is embodied in the entrepreneurial orientation phase (Majumder & Mahapatra, 2021). EO is echoed in the desires and discernments of entrepreneurs as entrepreneurial disposition prompts and raises the pursuit of the need for accomplishment. EO comprises traits, behaviours and attitudes that are essential in the development of business strategies. Entrepreneurial orientation is expected to augment firm performance because firms with higher EO can recognize evolving prospects and gain first-mover advantages (Yang, Dess, & Robins, 2019). EO includes such processes as "experimenting with promising new technologies, being willing to seize new product–market opportunities and having a predispo-

sition to undertake risky ventures" (Lumpkin & Dess, 1996). With greater EO, it is expected that entrepreneurs will be more available to developing prospects and be equipped with strategies that help outperform others in vibrant environments. The bulbous traits that are found to construct entrepreneurial orientation are: pro-activeness, innovativeness, and risk-taking (Miller, 1983).

Entrepreneurs need to be observant of their environs which comprise opportunities, threats, and challenges. According to Lumpkin and Dess (1996), a proactive firm is a leader rather than a follower, because it has the will and foresight to seize new opportunities, even if it is not always the first to do so. Proactive entrepreneurs are situationally alert and attuned to environmental changes. The issue of creativity does not require the individual to be engaged in different things but to do the same things differently. It is anticipated that entrepreneurship to bring disruptive innovation into progress. To be innovative, the individual is expected to be skillful, determined and novel in conceiving and executing an idea. To accomplish this, creativity is required in its approach and knowledge for execution. Innovativeness reflects a firm's tendency to engage in and support new ideas, novelty, experimentation, and creative processes that may result in new products, services, or technological processes (Lumpkin & Dess, 1996).

The idea of doing business without taking risks is considered a negated thought. Most of the business ideas don't come into reality due to the very consideration of risk associated with such projects. Risk-taking behaviour is considered as incurring heavy debt or making large resource commitments, in the interest of obtaining high returns by seizing opportunities in the marketplace (Lumpkin & Dess, 1996). Large-scale business activities indulge in highly risky venturing. Risk-taking is viewed as an organization's willingness to pursue opportunities boldly, and aggressively by selecting high-risk projects, with chances of very high returns over low-risk projects with lower and more predictable rates of return.

Lumpkin and Dess (1996) state that firms with entrepreneurial orientation are often typified by risk-taking behaviour, such as incurring heavy debt or making significant resource commitments, in the interest of obtaining high returns by seizing opportunities in the marketplace. Risk-taking describes the nature of easily venturing into the unknown, borrowing heavily, and/or committing remarkable resources to ventures in uncertain environments. Without a degree of risk-taking, firms delay or refrain from introducing innovations, undertaking exploitative activities and reacting conservatively to changing market conditions. The results would be weaker performance as the firm would do little to seize customer and market opportunities. Risk-oriented firms, combine opportunity-seeking behaviour with constructive risk-taking to generate a bias for exploration and exploitation (Thomas & Baird 1990; Lumpkin & Dess, 1996). Risk aversion renders firms passive to developing new market opportunities which is likely to deteriorate performance in an age of rapid change (Miller & Friesen, 1982). Risk-taking can carry costs but where customer demands change incessantly, the thrust of research opinion, suggests that firms need to demonstrate a willingness to take risks and challenge the existing order of business, to secure performance and the decision

to venture into any risk-taking venture rests with leadership. According to Lumpkin and Dess (1996), Miller (1983), and Zahra and Garvis (2000), risk-taking orientation indicates a willingness to engage resources in strategies or projects where the outcome may be highly uncertain (Wiklund & Shepherd, 2003; Zahra & Garvis, 2000). If new ventures have a risk-taking orientation, they may seize market opportunities to obtain higher returns and make lucrative deals. Hence, risk-taking tendency may be positively related to success (Brantjes & Hoorn, 2002).

A strong proactive propensity gives a firm the capability to predict variations in the markets and the needs of customers (Lumpkin & Dess, 1996). A proactive firm can anticipate ahead, a new market segment or introduce new products or services ahead of competitors (Hunt & Arnett, 2006; Hunt & Morgan, 1995; Lumpkin & Dess, 1996). With a forward-looking perspective, a proactive firm tends to become first movers, and it is rewarded by marketplace positions of competitive advantage such as unusual returns, distribution channels, and brand recognition (Hunt & Arnett, 2006; Lee et al., 2001; Lumpkin & Dess, 1996; Wiklund & Shepherd, 2003). It is therefore postulated that entrepreneurial orientation will have a significant effect on the performance of the firm. This study hypothesizes that EO has a significant positive influence on firm performance.

Studies on entrepreneurial literature have generally reported a positive effect of EO on performance (Rauch, Wiklund, Lumpkin, & Frese, 2009; Wales, Gupta, & Mousa, 2013). These studies have generally been conducted either using moderators or/ mediators to test the strength of the relationship between EO and performance (Zhao et al., 2005; Clerq et al., 2009; Davis et al., 2010).

2.1.2. Entrepreneurial Self-Efficacy on Performance

Entrepreneurial Self-Efficacy (ESE) in recent times is receiving significant attention in entrepreneurial research (Khedhaouria, Gurău, & Torrès, 2014; Klyver & Thornton, 2010; Torres & Watson, 2013). ESE refers to an individual's views concerning their abilities to determine and exploit opportunities in the process of starting and growing a business (Klyver & Thornton, 2010). ESE is essential to the performance outcomes of business ventures since the personae of the operators of the business, directly influence the direction of the firm. The belief of the entrepreneur, in his or her capability to produce favorable results has a direct correlation with the performance of the business (Baum & Locke, 2004; Markman, Baron, & Balkin, 2005). Chen et al. (1998) established the essential role ESE plays in the ultimate success of a business venture. Drawing inference from work done by Chen et al. (1998), Khedhaouria et al. (2014) modified the model of their work and concluded that, ESE had a significant positive correlation with firm performance. Other studies in entrepreneurial literature have established the positive effect of ESE on firm performance (Baum & Locke, 2004; Hmieleski & Baron, 2008; Khedhaouria et al., 2014; Kickul et al., 2009; Torres & Watson, 2013). Entrepreneurs that set puzzling growth prospects for their businesses and strive to achieve the set goals have been associated with high ESE (Forbes, 2005; Hmieleski & Baron, 2008). ESE is said to directly affect the activities that entrepreneurs en-

gage in, and their level of persistence (Bandura, 1997). This is premised on the individual's bulk of knowledge and capabilities of the entrepreneur. This implies that the more confidence entrepreneurs have in their ability to successfully complete entrepreneurial tasks, the more likely they would be to lead their businesses to better perform. Entrepreneurs with high levels of ESE always set daunting performance targets for their firms and resort to various strategies to accomplish the set goals (Hmieleski & Baron, 2008).

2.1.3. Mediating Effect of Entrepreneurial Self Efficacy (ESE)

While it has been proven in the entrepreneurial literature that EO has a significant influence on firm performance, EO might not provide a full understanding of the EO-performance construct. Majumder and Mahapatra (2021) view EO as an intellectual characteristic involving how strategies can be adopted in the business process. Miller (1983) synthesized EO as the proactive, innovative and risk-taking attitude of the entrepreneur. ESE has the potential to provide the entrepreneur the ability to evaluate their competencies in undertaking an entrepreneurial task, which eventually leads to business to better perform. Several factors pertinent to the entrepreneur, including the psychology of the entrepreneur may have a bearing on the EO-performance construct. According to Mohd et al. (2014) even though entrepreneurial literature is replete with the positive effect of EO on performance, what drives the relationship is not fully understood, due to the paucity of studies to explain this relationship. Works done by Boyd & Vozikis (1994) and Baum & Locke (2004) have thrown some searchlight to explain this relationship, and the use of other factors to further explain this relationship becomes more obvious. The use of moderators or mediator variables could impact the EO-performance relationship. Hence the need to test how ESE mediates the relationship between EO and performance. Various studies in entrepreneurship have used ESE as a mediating variable in their work. In all these studies, ESE was established as a significant mediatory variable in strengthening the entrepreneurial approach in the various models used. Mohd et al. (2014) used ESE to mediate the between personal values and EO. In their study, ESE mediated the relationship between personal values and EO. Boyd and Vosikis (1994) evaluated the role of ESE as a mediator variable. Zhao et al. (2010) also used ESE as mediator variable in their study. All of these studies attested to the important role of ESE in determining the mediatory strength of ESE in all the entrepreneurial models used. In the study of Zhao et al. (2005), ESE mediated the relationship between perceived learning from experience and courses and entrepreneurial intentions. Again, Shane et al. (2003) established that ESE mediated the relation between personal characteristics and EO. This study hypothesizes that ESE will mediate the relationship between EO and firm performance.

H3: ESE will mediate the relationship between EO and business performance.

3. Material and Method

The study falls within the quantitative research paradigm which made use of pri-

mary data. To address the research problem, a survey of research design was adopted in the study. A questionnaire was used to collect data in a cross-sectional field survey. The target population of the study was members of the Ghana Club 100. The study targeted CEO and managers of companies who are members of the Ghana Club 100.

Sampling and Measurement

The survey questionnaires were sent to two hundred and fifteen (215) companies listed on the Ghana Club 100 since its inception. A total of 199 entrepreneurs from these Ghana Club 100 answered the hard copy survey questions. The response rate was 90.5%, hence, the sample was deemed appropriate for the analysis that will be performed. The researcher used a sampling frame consisting of companies that have be part of Ghana Club 100 from 2005 to 2023. The researcher sorted and counted the list of companies that have featured on the Ghana Club 100, at least thrice or more times for the period 2013 to 2023. The three dimensions of entrepreneurial orientation were derived from previous theoretical and empirical literature and research work. Pro-activeness, innovativeness, and risk-taking propensity are widely used constructs in the literature, though two additional dimensions, competitive aggressiveness and autonomy have been introduced in the literature (Lumpkin & Dess, 1996). To assure the reliability and validity of constructs, we use the pro-activeness, innovativeness, and risk-taking propensity construct since it has been well documented and the standard questionnaires abound (Covin & Slevin, 1989).

To measure entrepreneurial orientation, a nine-item questionnaire was used: three questions for innovativeness, three questions for pro-activeness and three questions for risk-taking propensity. To measure the mediator (entrepreneurial self-efficacy) a six-item questionnaire was used (**Figure 1**). To measure financial business performance, a three-item questionnaire was used: one question ROE, one question for growth in revenue and one question for return on sales. In this study, SPSS 25.0 was used for empirical analysis. Each survey question uses the Likert scale as a tool of measurement and has choices ranging from 1 point standing for "strongly disagree" to 5 points standing for "very much". The structural equation model analysis was performed using AMOS.

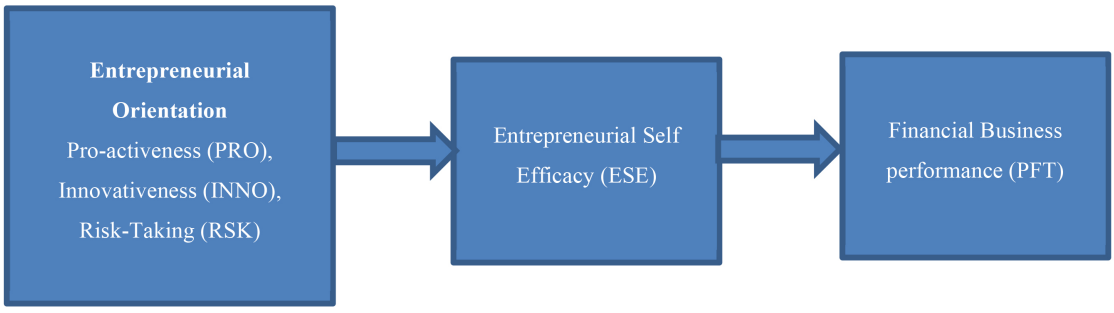

Figure 1. Conceptual framework.

4. Results and Discussion

4.1. Reliability and Validity

The test of the internal consistency among items used in the study was performed using Cronbach's alpha test which indicates that higher reliability values preferred. The test conducted on the "Reliability of the items" as reported in **Table 1** shows that all the items of the variables had reliability values higher than the minimum satisfactory level of 0.4 (Hair, Ringle, & Sarstedt, 2011; Henseler, Ringle, & Sarstedt, 2015) and were closer to the ideal level of 0.7. Due to the argument against the use of Cronbach's alpha to measure internal consistency, such as, it's providing a conservative measurement (Hair et al., 2011), the "Composite Reliability" was suggested (Hair, Ringle, & Sarstedt, 2011; Henseler, Ringle, & Sarstedt, 2015). As indicated by Hair et al. (2011), composite reliability values between 0.60 and 0.70 are considered, whereas values between 0.70 and 0.95 are considered satisfactory for adequate exploratory research. From **Table 1**, both Cronbach's alpha and composite reliability values are larger and, hence, have high levels of internal consistency and are reflective of the latent variables.

Table 1. Factor loadings, Cronbach's alpha, composite reliabilities and average variance extracted.

Latent Variable	Item	Factor loadings	Cronbach's alpha	Composite Reliability	Average variance Extracted (AVE)
PRO	PRO_1	0.887	0.619	0.854	0.667
	PRO_2	0.799			
	PRO_3	0.750			
INNO	INNO_1	0.850	0.711	0.825	0.612
	INNO_2	0.767			
	INNO_3	0.724			
RSK	RSK_1	0.708	0.712	0.784	0.549
	RSK_2	0.814			
	RSK_3	0.694			
ESE	ESE_1	0.645	0.550	0.845	0.545
	ESE_2	0.686			
	ESE_3	0.650			
	ESE_4	0.740			
	ESE_5	0.665			
	ESE_6	0.985			
PFT	PFT_1	0.674	0.758	0.775	0.536
	PFT_2	0.781			
	PFT_3	0.737			

To test for convergent validity, each latent variable's average variance extracted (AVE) was evaluated. The AVE values were above the threshold of 0.5 as suggested by Henseler et al. (2015).

The established discriminant validity of the data for the study is presented in Table 2. Following the Fornell-Larcker Criterion which posits that all diagonal values (i.e. the square root of the AVE) were found to be higher than the correlation that relates one factor to another. From Table 2, it can be concluded that the measurement model exhibited acceptable psychometric properties and hence further analysis can be done.

Table 2. Square root of average variance extracted (AVE) and correlations among all constructs in the model.

Latent Variables	PRO	INNO	RSK	PFT	ESE
PRO	*0.924*				
INNO	0.350**	*0.908*			
RSK	0.282**	0.507**	*0.885*		
PFT	−0.022	−0.022	0.078	*0.880*	
ESE	0.220**	0.132	0.249**	−0.056	*0.919*

**signifies significance at 5%.

4.2. Structural Path Significance in Bootstrapping

The estimated results of the path relationships in the structural model are presented in Figure 2 and Table 3. The study reports the sign, magnitude and significance as per the conducted analysis. The findings of the paths through entrepreneurial self-efficacy using risk-taking, pro-activeness, and innovation were all positive. Further, apart from entrepreneurial self-efficacy and innovation which was not significant, entrepreneurial self-efficacy and pro-activeness and also entrepreneurial self-efficacy and risk-taking were significant at various levels of significance. Added to this, the findings show that entrepreneurial orientation, made up of risk-taking behaviour, pro-activeness of the behaviour, and innovation has a varied effect on the profit of the Club 100 members, though these findings are not significant as indicated by Table 3.

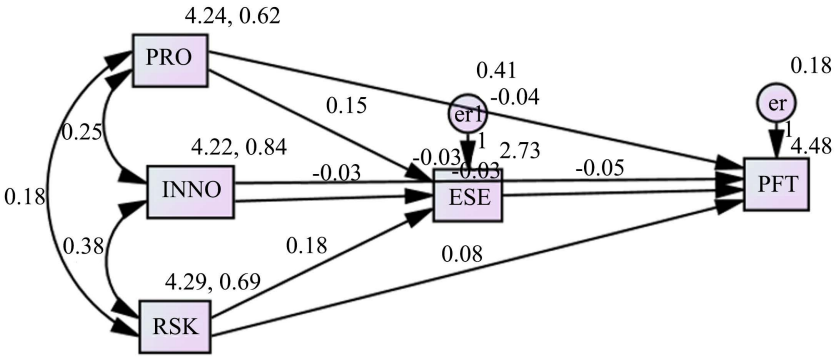

Figure 2. Estimated path model.

Table 3. Results of partial least square path analysis.

Path	Original sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T statistics (|O/STDEV|)	*p* value
PRO → PFT	−0.036	−0.066	0.042	−0.862	0.342
PRO → ESE	0.147	0.172	0.062	2.352	0.019
RSK → PFT	0.076	0.146	0.044	1.744	0.081
RSK → ESE	0.179	0.221	0.064	2.785	0.050
ESE → PFT	0.045	0.070	0.048	0.949	0.342
INNO → PFT	−0.030	−0.064	0.040	0.762	0.446
INNO → ESE	−0.029	−0.040	0.060	−0.492	0.623

Lastly, the Standardized Root Mean Square Residual (SRMR) value of 0.05, also below the recommended cutoff of 0.08, suggests that the model's residuals are small and the model fits the data well.

4.3. Mediation Effects

The mediation effects of the intervening variable (entrepreneurial self-efficacy) based on the assessment of the specific indirect effects on business profitability are presented in Table 4. The analysis revealed that through entrepreneurial self-efficacy, there exist significant specific indirect effects of the relationship between entrepreneurial proactive and profitability, entrepreneurial risk-taking and profitability and entrepreneurial Innovation and profitability. Hence, entrepreneurial self-efficacy mediates the relationship between entrepreneurial proactive, risk-taking and innovation and profitability as indicated in H2, H3 and H4.

Table 4. Mediation effects through specific indirect effects.

Path	Original sample (O)	Sample mean (M)	Standard Deviation (STDEV)	T statistics (|O/STDEV|)	*p* value
PRO → ESE → PFT	0.008	0.015	0.002	3.998	0.000 mediation
RSK → ESE → PFT	0.005	0.003	0.001	0.057	2.023 mediation
INNO → ESE → PFT	0.007	0.012	0.003	2.333	0.040 mediation

Furthermore, seven fit indices employed and their various threshold values are presented in Table 5. The Chi-square value is less than 3 indicating a good fit. In addition, the Goodness of Fit Index (GFI), the Adjusted Goodness of Fit Index (AGFI), the Comparative Fit Index (CFI), the Normed Fit Index (NFI), the Parsimony Normed Fit Index (PNFI), and the Root Mean Square Error of Approximation (RMSEA) were all within the recommended range indicating that the model has a good fit.

Table 5. Fit indices.

Fit indices	Recommended values	Estimated Value	Decision
χ^2/df	$\prec 5 preferably \prec 3$	0.225	Good fit
GFI	$\succ 0.90$	0.917	Good fit
AGFI	$\succ 0.80$	0.986	Good fit
CFI	$\succ 0.90$	0.993	Good fit
RMSEA	$\prec 0.08$	0.010	Good fit
NFI	$\succ 0.90$	0.991	Good fit
PNFI	$\succ 0.60$	0.621	Good fit

5. Conclusion and Recommendation

Using a sample of 199 Companies listed on the Club 100 our study examined the mediating effect and role of entrepreneurial self-efficacy on entrepreneurial orientation and financial performance. Our findings provide insight for both practitioners and academia. The finding shows the mediating role of entrepreneurial self-efficacy between entrepreneurial orientation and financial performance. More specifically, risk-taking, innovativeness and pro-activeness are positively mediated between entrepreneurial orientation and financial performance with pro-activeness being the highest, followed by innovativeness and risk-taking. Without mediation, the study concludes that pro-activeness has a positive effect on the financial performance of companies listed on the Ghana Club 100 platforms of the Ghana Investment Promotion Center. The findings of the study provide entrepreneurs with a useful understanding to enhance the performance of Club 100. Entrepreneurs should promote their entrepreneurial orientation by encouraging entrepreneurial self-efficacy to enable the exploration and exploitation of financial performance.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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