Original Research Article

Antecedents of corporate entrepreneurship and corporate entrepreneurship competencies of employees of SMEs in Ghana: Age, Education, Years of Operation and Gender in Perspective

Abstract

Introduction: Globally, Small and Medium-Sized Enterprises (SMEs) in the 21st century operates in a very competitive and volatile business environment as a result of rapid technological advancement and therefore the need for employees with corporate entrepreneurship competencies. This study, therefore, sought to assess the effects of age, education, years of operation and gender on antecedents of corporate entrepreneurship (CE), perceived feasibility and desirability, and CE competencies of employees.

Methods: This is a quantitative cross-sectional study among 400 employees of SMEs in the Sekondi-Takoradi Metropolis. Pretested questionnaires were used for the data collection. Independent samples t-test and one-way ANOVA were employed to analyse the data. Statistical significance was declared at $p<0.05$.

Results: There was a statistically significant difference in the views of male (Mean = 4.108, Std. Dev. = .914) and female (Mean = 3.894, Std. Dev. = .908) employees in terms of competitive intensity ($t = 2.175$, $df = 398$, $p = .023$). There were statistically significant differences in employees' views regarding organisational factors [$F (3, 396) = 2.991$, $p = .022$]. Also, there were statistically significant differences between the various levels of education with regard to employees perceived feasibility [$F (3, 396) = 2.998$, $p = .031$] and desirability [$F (3, 396) = 2.697$, $p = .046$]. Again, the results show that the highest level of education of employees has statistically significant effect on their corporate entrepreneurship competencies [$F (3, 396) = 4.272$, $p = .006$] regarding innovativeness, proactiveness, personal competence, personal initiative and risk-taking ability. In terms of years of operation, there was a statistically significant differences [$F (3, 396) = 2.777$, $p = .041$] in relation to environmental factors.

Conclusion: Per the findings, it is recommended to owners/managers of SMEs and policy makers in the sector to ensure that policies which involve promotion of SMEs and intrapreneurial competencies are properly implemented devoid of gender and age biases to enable larger proportion of the population get employed in the sector and also have the opportunity to acquire the needed intrapreneurial knowledge, skills and competencies.

Keywords: Antecedents; corporate entrepreneurship; Ghana; SMEs

1. Introduction

As evidence accumulates on the vital role corporate entrepreneurship (CE) play in deciding the well-being of organizations and workers, CE competencies have become an important issue in the business world. Employee abilities such as innovativeness, proactiveness, initiative, risk-taking ability, and autonomy are necessary to meet the ever-increasing consumer demand for improved products and services in the twenty-first century (Pandey, Gupta & Hassan, 2020). As a result of rapid technological innovation and the influence of globalisation, Small and Medium-Sized Enterprises (SMEs) in the twenty-first century operate in a very competitive and dynamic business environment, necessitating the need for staff with corporate entrepreneurial competencies (Zaman, 2013). SMEs play a critical role in the Ghanaian economy, both because of their sheer number and because they employ a considerable percentage of the country's workforce (Donkor et al., 2018).

SMEs survival and sustainability in the face of increased competitive pressure necessitates that workers corporate entrepreneurial skills be revitalized in order to develop and create new value and ensure the survival of these businesses (Letsie, 2013; Ma, Liu & Karri, 2016).
While some businesses appear to have minimal difficulty discovering and exploiting opportunities, others face significant challenges that may jeopardize their success. However, organizations must continue to foster employee entrepreneurial attitudes in order to facilitate corporate entrepreneurial behaviour (Van Wyk & Boshoff, 2004).

Some antecedents of corporate entrepreneurship have been identified that allow employees to demonstrate corporate entrepreneurial competencies. Given the influence of CE antecedents, it is expected that individuals demonstrate these CE competencies for organizational success. However, the deliberate creation of CE antecedents does not always yield the desired outcomes (Goodale, Kuratko, Hornsby & Covin, 2011). Although there is some agreement among researchers on some key antecedents that permit corporate entrepreneurship, the focus remains on large-sized corporations in Western nations at the expense of small and medium-sized businesses (Hughes & Mustafa, 2017). The SME sector (representing 92 percent of firms in Ghana) is the most prevalent kind of business, accounting for 70 percent of Ghana's GDP and 49 percent of employment (Yeboah, 2015).

This study, therefore, sought to assess the effects of age, education, years of operation and gender on antecedents of CE, perceived feasibility and desirability, and CE competencies of employees. Findings from this study will be of immense benefit to Ghanaian society at large and the employees within the various SMEs. This is so, because, these firms provide many social, economic, and political services to their stakeholders. Therefore, there is the need to ensure that CE competencies of employees of SMEs are enhanced to make them continue to provide a wide range of services that do not only contribute positively to the quality of life of many individuals but also enhance many sectors of the economy. The findings will also help in guiding SMEs to appreciate the need for all employees to develop, nature, and exhibit their CE competencies which among many benefits to the firm, would also help individual employees within to also

start their own SME or work to improve existing products or services and or develop products or services. Largely, this will help reduce the turnover rate among the staff of SMEs since innovative, proactive, and competent employees do not quit their firm to work for other firms but stay committed or start their firm (Chen et al., 2017).

2. Methods

2.1. Study area

Sekondi-Takoradi Metropolis (STM) in Ghana's Western Region was the study region. The Metropolis, which was formerly known as Shama Ahanta East Metropolis (SAEM) and has Sekondi as its administrative seat, is located in the south-eastern section of the Western Region, according to the Ghana Statistical Service (GSS, 2014). It is bordered by the municipalities of Ahanta West, Shama, and Komenda-Edina-Eguafo-Abrem. It has a population of 404,041 people and is located on the coast around 200 kilometers west of Accra (GSS, 2014). STM's urban area accounts for around 32% of the total land area. According to GSS (2014), port and fishing are the two most important economic activities in the metropolis. This is Ghana's third-largest industrial and commercial centre. It has a sizable manufacturing industry (food processing, cement, household utilities, cocoa processing, wood processing and metal fabrication). The presence of numerous types of SMEs in the area has resulted in significant growth in the production and consumption of locally produced items. This is a clear sign that improving the corporate entrepreneurship competencies of personnel in SMEs in the area will have a major influence on firm performance and national revenue.

2.2. Study design and Measures

This study forms part of a large study that sought to assess the antecedents of corporate entrepreneurship and competencies of employees in SMEs in Ghana. For this particular study, the section on the effects of controlling variables on antecedents of corporate entrepreneurship, perceived feasibility and desirability, and corporate entrepreneurship competencies of employees was used. Specifically, cross-sectional data from employees were collected using pretested and validated questionnaires.

2.3. Study population and sampling

The study population comprised SMEs recognised by the Ghana Enterprises Agency (GEA) and Association of Ghana Industries (AGI) in the Metropolis. All employees of SMEs in STM formed the study population. Current records show that there are 1,592 registered and active SMEs in the Metropolis (GSS, 2020). Approximately, a sample size of 400 respondents within SMEs in the Metropolis was used for the study. The sample size used was based on Slovin's (as cited in Gravetter & Forzano, 2018) recommended formula. This formula was used because it has been tested and used for most surveys and case studies (Gravetter & Forzano, 2018; Zikmund, 2018).

2.4. Data Collection Procedures

The data collection lasted a period of one month. The questionnaires were self-administered questionnaire. The respondents were given 30 minutes to complete the questionnaire. Prior to the administration of the instruments, informal familiarisation visits were made to the various SMEs selected and the office of GEA. The questionnaires

were administered by the researcher personally to the respondents with the support of four field assistants. These field assistants were principal research assistants of Takoradi Technical University, and as a result, have adequate experience regarding the data collection process. The field assistants were given training and orientation, which made it easier for them to administer the questionnaires. The training programme included explaining the objectives of the study, how to identify and approach respondents and data management and ethical issues.

2.5. Data analyses

Various steps were followed to analyse the data. First, the questionnaires were checked for completeness. Afterwards, they were coded and keyed into SPSS version 25. After the entry and data management, descriptive statistics (frequencies and percentages) were used to describe the sample. Afterwards, the independent samples t-test and one-way ANOVA were employed. The independent samples t-test was used to analyse the data in order to determine if gender has any significant effect on the study variables. In relation to age, level of education and years in operation, the data was analysed using the one-way ANOVA. This statistical tool is used to find out differences between independent groups such that the groups are more than two categories where the distribution is normal with numerically constructed dependent variable. In all the analyses statistical significance was declared at $p<0.05$.

2.6. Ethical Consideration

Before commencement of the data collection, official letters in the form of an introductory letter that was collected from the Department of Marketing and Corporate Strategy, School of Business, Kwame Nkrumah University of Science and Technology was submitted to owners/managers of the various SMEs in the Metropolis through for approval. A copy of the proposal and the self-designed instruments were also submitted to the office of GEA at the Metropolis for review and validation. During the data collection stage, the respondents were informed about the purpose of the research and its objective. All ethical principles and procedures including COVD-19 protocols were observed strictly.

3. Results

3.1. Background characteristics of respondents

The socio-demographic variables considered in the study were age, educational level, years in business and gender. It was found as contained the majority of the respondents (63.0%) were males while 37.0 percent were females. More of the employees' (49.8%) highest level of education was at the secondary level. However, 31.0 percent of the employees' highest level of education was at the tertiary level. More of the employees (48.8%) have been working in the SME sector for less than six (6) years (Table 1).

Table 1: Socio-demographic characteristics of respondents

Variable	Frequency	Percentage
Age of respondents(years)		

18 – 24 years	95	23.8
24 - 30 years	160	40.0
31 - 37 years	67	16.8
38 - 44 years	48	12.0
45 years and above	30	7.4
Educational level		
No formal education	16	4.0
Basic	61	15.2
Secondary	199	49.8
Tertiary	124	31.0
Number of years in business		
Less than 6 years	195	48.8
6 - 10 years	70	17.5
11 - 15 years	50	12.5
Over 15 years	85	21.2
Gender		
Male	252	63.0
Female	148	37.0
Total	**400**	**100.0**

3.2. Effect of Gender on Employees' Views Regarding Antecedents of CE, Perceived Feasibility and Desirability

The results from Table 2 shows that there was a statistically significant difference in the views of male (Mean = 4.108, Std. Dev. = .914) and female (Mean = 3.894, Std. Dev. = .908) employees in terms of competitive intensity (t = 2.175, df = 398, p = .023). However, there were no statistically significant differences between male and female employees of SMEs with regard to their views on organisational structure, management support, resource availability, reward motivation, Organisational factors, Competitive intensity, Technology changes, Market dynamics and Environmental factors.

Table 2: Effect of Gender on Employees' Views Regarding Antecedents of CE, Perceived Feasibility and Desirability

Variables	Gender	N	Mean	Std. Dev.	t-value	p-value	η^2
Organisational structure	Male	252	3.749	.807	1.218	.224	
	Female	148	3.646	.815			
Management support	Male	252	3.763	.898	.663	.508	
	Female	148	3.694	.904			
Resource availability	Male	252	3.671	.914	-.480	.631	
	Female	148	3.716	.918			
Reward and motivation	Male	252	3.664	.890	.869	.385	
	Female	148	3.572	.914			
Organisational factors	Male	252	3.712	.738	.710	.478	
	Female	148	3.657	.746			
Competitive	Male	252	4.108	.914	2.175	.023	.012

intensity	Female	148	3.894	.908		
Technology	Male	252	3.688	.956	.503	.615
changes	Female	148	3.637	.978		
Market	Male	252	3.741	.915	1.752	.080
dynamics	Female	148	3.543	.903		
Environmental	Male	252	3.846	.766	1.945	.053
factors	Female	148	3.691	.772		

Source: Field Data, 2021 df = 398 (N = 400)

Where η^2 = Eta Square, and *Std. Dev. = Standard Deviation*

3.3. Effect of Gender on Employees' CE Competencies

As indicated in Table 3, there were no statistically significant differences in the views of the males and female employees regarding their Perceived feasibility, Perceived desirability, Innovativeness, Proactiveness, Personal initiative, Personal competence, Risk taking and corporate entrepreneurship competencies of employees. However, female employees are able to exhibit a high level of corporate entrepreneurship competencies as compare to their male counterparts with regard to innovativeness, proactiveness, personal initiative, personal competence and risk-taking ability. This shows that the extent to which employees of SMEs are personally attracted to the idea of creating something and become entrepreneurs is not influenced by their gender. Similarly, employees' higher-level characteristics that encompass personality traits, skills, and knowledge, which are demonstrated by their total ability to perform a job successfully are not affected by the gender of the employees (See Table 3).

Table 3: Effect of Gender on Employees' CE Competencies

Variables	Gender	N	Mean	Std. Dev.	t-value	p-value
Perceived feasibility	Male	252	3.725	.829	-.501	.617
	Female	148	3.767	.825		
Perceived desirability	Male	252	3.486	.959	-.332	.740
	Female	148	3.518	.879		
Innovativeness	Male	252	3.608	.920	-.469	.639
	Female	148	3.664	.908		
Proactiveness	Male	252	3.607	.931	-.984	.326
	Female	148	3.696	.863		
Personal initiative	Male	252	3.714	.924	-.090	.928
	Female	148	3.725	.898		
Personal competence	Male	252	3.523	.903	-.538	.591
	Female	148	3.579	.901		
Risk taking	Male	252	3.443	.906	-1.025	.306
	Female	148	3.554	.902		
Corporate entrepreneurship competencies of employees	Male	252	3.579	.886	-.770	.442
	Female	148	3.643	.796		

Source: Field Data, 2021 df = 398 (N = 400)

3.4. Effect of Age on Employees' Views Regarding Antecedents of CE, Perceived Feasibility, Perceived Desirability, and CE Competencies of Employees

As indicated in Table 4, there were no statistically significant differences at $p < .05$ level in the respondents' views regarding organisational [$F (4, 395) = .340$, $p = .851$] and environmental factors [$F (4, 395) = .586$, $p = .673$], perceived feasibility [$F (4, 395) = .878$, $p = .477$] and desirability [$F (4, 395) = .881$, $p = .475$] and corporate entrepreneurship competencies of employees [$F (4, 395) = .293$, $p = .882$], the results again show that age has no effect on the views of the respondents. Even though, there are no statistically significant differences among the employees with regard to their views on organisational and environmental factors, perceived feasibility and desirability, and corporate entrepreneurship competencies, the findings from Table 4 show that employees who were above 23 years perceived the study variables more positively than the others.

Table 4: Effect of Age on Employees' Views Regarding Antecedents of CE, Perceived Feasibility, Perceived Desirability, and CE Competencies of Employees

Variables	Age group	N	Mean	Std. Dev.	F	Sig.
Organisational factors	Less than 24 years	95	3.657	.746	.340	.851
	24 - 30 years	160	3.679	.726		
	31 - 37 years	67	3.779	.753		
	38 - 44 years	48	3.710	.717		
	45 years and above	30	3.642	.768		
	Total	400	3.692	.742		
Environmental factors	Less than 24 years	95	3.702	.752	.586	.673
	24 - 30 years	160	3.824	.745		
	31 - 37 years	67	3.843	.795		
	38 - 44 years	48	3.729	.762		
	45 years and above	30	3.841	.791		
	Total	400	3.789	.769		
Perceived feasibility	Less than 24 years	95	3.689	.830	.878	.477
	24 - 30 years	160	3.715	.852		
	31 - 37 years	67	3.912	.798		
	38 - 44 years	48	3.710	.799		
	45 years and above	30	3.703	.856		
	Total	400	3.741	.827		
Perceived desirability	Less than 24 years	95	3.497	.894	.881	.475
	24 - 30 years	160	3.409	.997		
	31 - 37 years	67	3.547	.888		
	38 - 44 years	48	3.656	.975		
	45 years and above	30	3.608	.841		
	Total	400	3.498	.919		
Corporate entrepreneurshi	Less than 24 years	95	3.536	.813	.293	.882
	24 - 30 years	160	3.597	.815		

p competencies of employees	31 - 37 years	67	3.645	.906		
	38 - 44 years	48	3.652	.820		
	45 years and above	30	3.677	.851		
	Total	400	3.603	.841		

Source: Field Data, 2021 (N = 400)

3.5. Effect of Highest Educational Level on Employees' Views Regarding Antecedents of CE, Perceived Feasibility, Perceived Desirability, and CE Competencies of Employees

As indicated in Table 5, there were statistically significant differences in employees' views regarding organisational factors [F (3, 396) = 2.991, p = .022] such as organisational structure, management support, resource availability and reward and motivation for the four groups. The effect size calculated using eta square was .022. Also, there were statistically significant differences between the various levels of education with regard to employees perceived feasibility [F (3, 396) = 2.998, p = .031] and desirability [F (3, 396) = 2.697, p = .046]. The effect sizes calculated using eta square, for employees' perceived feasibility and desirability, were .022 and .020 respectively. Again, the results show that highest level of education of employees has a statistically significant effect on their corporate entrepreneurship competencies [F (3, 396) = 4.272, p = .006] regarding innovativeness, proactiveness, personal competence, personal initiative and risk-taking ability. This means, higher-level characteristics encompassing personality traits, skills, and knowledge, which can be seen as the total ability of the employees to perform a job successfully, differ significantly among the various level of education.

Table 5: Effect of Highest Educational Level on Employees' Views Regarding Antecedents of CE, Perceived Feasibility, Perceived Desirability, and CE Competencies of Employees

Variables	Level of education	N	Mean	Std. Dev.	F	Sig.	η^2
Environmental factors	No formal education	16	3.869	.718	2.235	.084	
	Basic	61	3.739	.823			
	Secondary	199	3.884	.717			
	Tertiary	124	3.664	.818			
	Total	400	3.789	.769			
Organisational factors	No formal education	16	3.625	.757	2.991*	.031	.022
	Basic	61	3.699	.727			
	Secondary	199	3.789	.741			
	Tertiary	124	3.539	.743			
	Total	400	3.692	.742			
Perceived	No formal	16	3.725	.849	2.998*	.031	.022

feasibility	education						
	Basic	61	3.685	.813			
	Secondary	199	3.858	.815			
	Tertiary	124	3.696	.831			
	Total	400	3.741	.827			
Perceived desirability	No formal education	16	3.469	.903	2.697*	.046	.020
	Basic	61	3.606	.848			
	Secondary	199	3.585	.974			
	Tertiary	124	3.308	.951			
	Total	400	3.498	.919			
Corporate entrepreneurship competencies of employees	No formal education	16	3.550	.776	4.272**	.006	.031
	Basic	61	3.636	.907			
	Secondary	199	3.729	.877			
	Tertiary	124	3.497	.804			
	Total	400	3.603	.841			

Source: Field Data, 2021 *p<.05, **p<.01 (N = 400)
Where Std. Dev. = Standard Deviation, η^2 = Eta Square

3.6. Post hoc analysis

On the basis of the findings that emerged from Table 5, with regard to the differences that existed, the study further conducted post-hoc comparisons for the groups. The variables that indicated some levels of differences were organisational factors, corporate entrepreneurship competencies, perceived feasibility and desirability. The results are presented in Table 6. As indicated in Table 6, the post-hoc comparisons using the Tukey HSD test show that the mean score differences between employees with secondary and tertiary levels of education were significantly different from each other with regard to their views on organisational factors (MD = .250, p = .017), perceived feasibility (MD = .276, p = .018), perceived desirability (MD = .278, p = .041), and corporate entrepreneurship competencies (MD = .338, p = .002). The significant differences occurred only between those whose highest level of education was secondary and tertiary. Specifically, as indicated in the table, employees with secondary education as their highest level of education perceived the variables higher as compare to those who indicated that their highest level of education was at the tertiary level.

Table 6: Post-Hoc Comparisons of Employees' Level of Education with regard to their Views Regarding Antecedents of CE, Perceived Feasibility, Perceived Desirability, and CE Competencies

Tukey HSD Dependent variable	(I) Highest educational level	(J) Highest educational level	MD (I-J)	Sig.
Organisational factors	Secondary	Tertiary	.250*	.017
Perceived feasibility	Secondary	Tertiary	.276*	.018
Perceived desirability	Secondary	Tertiary	.278*	.041
Corporate				

entrepreneurship competencies of employees	Secondary	Tertiary	.338**	.002

Source: Field Data, 2021 Where MD = Mean Difference (N = 400)

3.7. Effect of Years of Operation on Employees' Views Regarding Antecedents of CE, Perceived Feasibility, Perceived Desirability, and CE Competencies of Employees

As indicated in Table 7, the number of years SMEs have been in business/ operation has no statistically significant effect on employees' views organisational factors [F (3, 396) = .292, p = .831], perceived feasibility [F (3, 396) = 1.073, p = .360], perceived desirability [F (3, 396) = .690, p = .559], and CE competencies of employees [F (3, 396) = 1.320, p = .267]. The findings mean that the operational attributes, processes or conditions within the various SMEs are not influenced by their number of years in business/operations. Similarly, the extent to which employees are personally attracted to the idea of creating something new or becoming an entrepreneur is not influenced by their number of years in business/operations. Also, the higher-level characteristics exhibited by employees encompass personality traits, skills, and knowledge, and can be seen as the total ability of the entrepreneur to perform a job successfully is not influenced by the number of years the various SMEs have been in business/ operations.

However, in relation to environmental factors such as competitive intensity, technology changes and market dynamics, there was a statistically significant difference at the p < .05 level in the years of operation of SMEs in the Metropolis for the four groups [F (3, 396) = 2.777, p = .041]. The effect of the actual difference in mean scores between the groups with regard to employees' views on environmental factors was small. The effect size calculated using eta square was .021. Specifically, the results show that employees who are working in the various SMEs that have existed actively for less than six (6) years perceived the various environmental factors more positively than those working in enterprises who have been in business/operation for over 15 years. The calculated mean difference was 25.9 percent (MD = .259, p = .047). This shows that the external business environment that affects the firms, and influences and circumstances or situations that SMEs cannot control and it can affect their business decisions are more severe among young firms as compared to old firms.

Table 7: Effect of Years of Operation on Employees' Views Regarding Antecedents of CE, Perceived Feasibility, Perceived Desirability, and CE Competencies of Employees

Variables	Years of experience	N	Mean	Std. Dev.	F	Sig.	η^2
Organisational factors	Less than 6 years	195	3.716	.739	.292	.831	
	6 - 10 years	70	3.702	.815			
	11 - 15 years	50	3.612	.668			
	Over 15 years	85	3.672	.746			
	Total	400	3.692	.742			
Environmental factors	Less than 6 years	195	3.935	.796	2.777*	.041	.021
	6 - 10 years	70	3.889	.729			
	11 - 15 years	50	3.740	.752			

	Over 15 years	85	3.592	.799		
	Total	400	3.789	.769		
Perceived feasibility	Less than 6 years	195	3.793	.854	1.073	.360
	6 - 10 years	70	3.793	.785		
	11 - 15 years	50	3.612	.825		
	Over 15 years	85	3.653	.844		
	Total	400	3.741	.827		
Perceived desirability	Less than 6 years	195	3.488	.985	.690	.559
	6 - 10 years	70	3.607	.844		
	11 - 15 years	50	3.471	.973		
	Over 15 years	85	3.426	.874		
	Total	400	3.498	.919		
Corporate entrepreneurship competencies of employees	Less than 6 years	195	3.674	.851	1.320	.267
	6 - 10 years	70	3.599	.849		
	11 - 15 years	50	3.426	.868		
	Over 15 years	85	3.713	.796		
	Total	400	3.603	.841		

Source: Field Data, 2021 *p<.05 (N = 400)

Where Std. Dev. = Standard Deviation, η^2 = Eta Square

4. Discussion

This study sought to assess the effects of age, education, years of operation and gender on antecedents of CE, perceived feasibility and desirability, and CE competencies of employees. It was found that the views of employees regarding the operational attributes, processes or conditions within their respective SMEs are not influenced by their gender and age. Similarly, the employees view on the external business environment that affects their respective firms is not influenced by their gender and age and also the size of the firms. This shows that in the various firms, equal opportunities are given to both male and female, and old and young employees. Thus, employees are not discriminated against based on their gender or age. All employees, irrespective of gender, age or firm size, are exposed to the same operational attributes, processes or conditions within the firms and also the external business environment that affects the firms are felt by all. Even though the Ghanaian business environment is patriarchal in nature, SMEs have managed to ensure equity in the sector regarding the opportunity to be intrapreneurs (Afriyie, 2019).

Similarly, the extent to which employees of SMEs are personally attracted to the idea of creating something new and become entrepreneurs is not influenced by their gender and age, and size of the firms. Also, employees' higher-level characteristics that encompass personality traits, skills, and knowledge, which are demonstrated by their total ability to perform a job successfully are not affected by the gender and age of the employees or the size of the firms. This shows that gender and age of employees and also the size of the firms are not factors that influence the views of employees with regard to organisational and environmental factors of their firms, and their perceived

feasibility, desirability and competencies. In line with this general finding, Kahkha et al. (2014) also indicate that firms (be it small, medium and large) should not create room for the gender and age of employees to have an influence on their perception regarding antecedents of corporate entrepreneurship, and employees' perceived feasibility, desirability and competencies.

Also, Falola et al. (2018) assert that employees' corporate entrepreneurship competencies are largely influenced by organisational and environmental factors rather than the size of the firm; meaning, firms with appropriate intrapreneurial engagement initiatives and strategies are those who are able to survive in the industryand not firms who are large. Generally, the findings that emerged from the controls support the assertion of Madu (2019) who indicates that the more an employee is educated, experienced, motivated through compensation and exposed to market dynamics, the better he or she is able to acquire the requisite corporate entrepreneurship knowledge, skills and competencies such as innovativeness, proactiveness, personal competence, personal initiative and risk-taking ability.

However, regarding highest level of education of employees, the results show that it has a significant impact on employees' views with regard to antecedents of corporate entrepreneurship, perceived feasibility, desirability and competencies. The findings are consistent with the assumptions of human capital and organisational support theories. The argument of human capital theory (as cited in Netcoh, 2016) is that the higher the level of training or education of an employee, the higher the level of his or her output or productivity. Also, organisations that support employees through further training and education are able to attract employees with high levels of human capital who tend to develop as a resultant effect of higher education, and vast personal experience (Bernard, 2017; Neequaye, 2019; Turro Sol, 2016). The findings and the theoretical support provide a useful lens through which antecedents of corporate entrepreneurship can better be understood as it highlights the wide variations in the educational attainment, and professional experience of employees who may potentially develop entrepreneurial behaviours within their organisation.

4.1. Strength and limitations

The main strength of the study is the use of a relatively large sample size to assess the effects of age, education, years of operation and gender on antecedents of CE, perceived feasibility and desirability, and CE competencies of employees. Despite this, the following limitations are worth acknowledging. First, the study was a cross-sectional study, therefore causal inferences cannot be drawn from the findings. In addition, the study was limited to only STM of the Western Region of Ghana. There is also the possibility of social desirability biases, however, this was limited by making the respondents understand that this study is not an assessment of their performance but rather for an academic work. In addition, the respondents were given ample time to respond to the questionnaires. The privacy and confidentiality of their responses were also upheld during the data collection.

2. Conclusions and implications

Per the finding that gender and age of employees have no statistically significant effects on employees' views regarding organisational and environmental factors, perceived feasibility and desirability, and CE competencies, one can say that being a woman or young will not lead to poor acquisition of CE competencies. It is, therefore, recommended to owners/managers of SMEs and policy makers in the sector to ensure that policies which involve promotion of SMEs and intrapreneurial competencies are properly implemented devoid of gender and age biases to enable a larger proportion of the population to get employed in the sector and also have the opportunity to acquire the needed intrapreneurial knowledge, skills and competencies. Therefore, the Ministry of Trade and Industry through GEA should create room for employees within the SME sector, particularly women and the youth, to have meaningful opportunities through on-the-job training and workshops/seminars to acquire the necessary intrapreneurial competencies for development.

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