

**IMPACTS OF SOCIAL ENTREPRENEURIAL CONSTRUCTS AND THE
MODERATING ROLE OF SOCIAL ENTREPRENEURS ON
SUSTAINABILITY OF CORPORATE ORGANIZATIONS IN NIGERIA IN
PRE AND POST COVID 19 PANDEMICS**

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ABSTRACT

Social entrepreneurship (SE) has been significantly recognised to be the solution to worsening global pandemic, social issues and economic crises, which were caused by the pre and post era COVID 19 pandemics. The study determined the impacts of social entrepreneurial constructs and the moderating role of social entrepreneurs on sustainability of corporate organizations in Nigeria in pre and post Covid 19 pandemic. Five alternative hypotheses guided the study and were tested at 0.05 level of significance. A descriptive longitudinal-survey research design was utilised in this study. The population of the study comprises of 97,091 Nano, micro, small and medium scale enterprise in Lagos state (NMSMEs) in Lagos State, Nigeria. Random sampling and purposive sampling techniques was employed and a sample size of 146 and 140 of social entrepreneurs was derived during pre and post pandemic. Survey Online Google form of questionnaire distribution was used as instrument administration and data collection for the study. The instrument reliability was assessed with Cronbach's Alpha reliability test of .70. Hence, the data collected was analysed using Partial least square structural equation modelling (PLS-SEM). The analysis of the results showed that SEF, EEF, BEF and GEF has significant impact on sustainability during the pre-covid pandemic. The study also revealed that EES does not impact significantly on sustainability and social entrepreneurs have a significant role to play in the sustainability of NMSMEs.

KEYWORDS: Social entrepreneurship strategy, Social entrepreneurial constructs, Economic entrepreneurial constructs, Behavioural entrepreneurial constructs, Governmental entrepreneurial constructs, Sustainability, Social Entrepreneurs, Pre and Post Covid 19.

INTRODUCTION

The world has been ravaged by the devastating effect/t of COVID 19 pandemic and emerging economic hardship. There are rumors of war all over the place and societal ills and diseases are ravaging and devastating the world, most especially in the Sub-Saharan Africa. Hence, social and economic hardship is prevailing in the society, thereby affecting sales growth and corporate sustainability. Therefore, the achievement of sustainability is more relevant than ever before to all kind of businesses and social enterprises. This is why the understanding of the underlying factors determining sustainability cannot be over-emphasized. The influence social entrepreneurship strategy (SES) could have on sustainability is enormous especially from the social, economic, behavioural, and governance perspectives (Kamaludin, Xavier & Amin, 2021).

Numerous linkages have been examined the various constructs of social entrepreneurship strategy (SES) and how it has led to corporate sustainability during and after COVID 19 diseases and tragedy worldwide. Conversely, the devastating effect on entrepreneurs and corporate organisations is still noticeable in their operational activities, sales growth and profit. On the contrary, a number of entrepreneurial strategies (Akande, Inegbedion, Ighodalo, Ojelade, Nwaogu (2019) and strategic plans have been implemented as emergent action plans in tackling the devastating effect and possible solution to providing a conducive and sustainable environment for businesses to thrive. Undoubtedly, there are traces of calamity of the pandemic and sustainability. In spite of that, over 30 percent of businesses in Africa continents, were closed down after COVID 19 Pandemic, 45 percent of Business in Asia region are picking up and doing well post COVID (Anakpo & Misha, 2021, Teachout & Zipfel 2020). In the same vein, in Europe, 43 percent of businesses are striving to survival after COVID. Here in Nigeria, 48% of Businesses are been sustained after COVID tragedy (Chinedu et al., 2020, Ekanem & Lawrence 2024). In the Atlantic region basically in the New York City 54 percent of business were temporary shut down and unemployment lump by 47 percent due to the pandemic as reported by Alexander, Marianne & Zoe (2020). Consequently, corporate enterprises and MSMEs particularly are closing down some of their business or product line which intend to have low returns/profits that could limit their potential in generating huge sales and profit, thereby hampering on the sustainability of the corporate organisations. From the foregoing, there is paramount need to re-evaluate the fundamental SES constructs and how it impacts the sustainability performance of MSMEs especially in the sub-Sahara Africa, most especially those enterprises domicile in Nigeria.

There is evidence that numerous researches have been done in this area of study. However, very little works focus on how it has affected the covid -19 crises in the sub-Sahara Africa. Furthermore, there is a dearth in the role of social entrepreneurs in achieving sustainability development of Micro, small and medium scale businesses during the pandemic. Therefore, there is need for the examination of certain frameworks and dimensions regarding the constructs of SES. Furthermore, very little from the developing countries of Africa such as Nigeria. Some business processes and measurement of social impact still need attention so as to unveil the likely impact of social entrepreneurship on business survival and sustainability in Nigeria. Kamaludin et al. (2021) observed that in the emerging field of academic research on social entrepreneurship, studies linking social entrepreneurship to sustainability were gaining traction due to the importance of these constructs. However, there are traces of inconsistency and various dimensions on the different conceptual models that have been developed with regard to the variables. This has given rise to the need for better understanding of the ideal conceptual framework and theoretical underpinning to addressing the issues based on the importance of the relationship between social entrepreneurship strategy and business sustainability. Furthermore, the understanding of the predictors of sustainability from the point of view of social entrepreneurship paves way for businesses to employ suitable strategies to sustain competitive advantage (Muralidharan & Pathak, 2018). It is noteworthy that many authors and researchers have delved into the relationship between social entrepreneurial constructs and social entrepreneur on sustainability in Nigeria but they focused on the trait part of behaviour whereas the behavioural dimension is broad and requires more extensive research. This study, therefore, was deemed imperative in order to fill the gaps in the body of knowledge on the influence.

LITERATURE REVIEW

Related literature to the study were reviewed under the key variables in the study as follows:

Social Entrepreneurship (SE)

The word social entrepreneurship (SE) was initiated by social entrepreneurs called Bill Drayton (Cited in Zulkifle & Aziz 2023). It was during the workplace in Ashoka Foundation he supported and financed solely corporate entrepreneurs in their social mission. Through entrepreneurial intention of Bill Drayton, he addressed the financial challenges and social issues of the vulnerable by formulating policies in tackling the challenges and bringing to an end the problems. Also, Bill extensively creating public wealth through innovative thinking (Wallance, 1999). Therefore, social entrepreneur is an individual or corporate personality who has a strong interest in resolving social issues and demonstrating ethical behaviour towards driving social mission (Koe Hwee Nga & Shamuganathan, 2010; Hockerts, 2015; Patient Takawira, 2021). Subsequently, there are four determinant factors of social entrepreneurship strategy, namely the social

factors, economic factors/dimension, behavioural factors and governance factors. In whole, this strategy led to the emergence of social entrepreneurship.

Social Entrepreneurial factor (SEF)

The motives of one trying to participate in the social entrepreneurship is altruistic in nature, meaning that some people do because of fulfilment the desire for achievement (Kuznecova, 2016). Hence, the social strategy indicators include value creation, social mission, community, network and change constitute the social dimension.

Economic Entrepreneurial factor (EEF)

Economic factor is another dimension that defines the social entrepreneur. After striving to attain a social mission, a social entrepreneur has also tried to implement strategies that would help to attain economic efficiency (Costa & Pesci, 2016). The critical nature of the economic dimension cannot be over emphasized since we ensure that social entrepreneurship and sustainability is achieved.

It is imperative to study this economic dimension in order to differentiate it from the perspective of various corporate organisations and charitable giving and social mission (Grieco, 2018). Economic elements in this regard comprises of accountability, product/service innovation, new opportunities in the marketplace, generating wealth and individual or corporate firm being financially autonomous.

Behavioural Entrepreneurial factor (BEF)

One concept that is critical in defining is the behavioural factor, this is because the constructs social entrepreneur encompasses a myriad of variables like culture, image, identity, cognition, and business-like behaviours that is tend towards behaving entrepreneurially as well as having individual attributes and acting boldly (Kamaludin et al., 2021). It is worthy of note that while many researchers and academics have focused on the trait part of behaviours of social entrepreneurs, there is still need to differentiate it from certain known phenomenon, and since the behavioural dimension is broad, it calls for more extensive research (Kadir & Sarif, 2016).

Governance Entrepreneurial Factor (GEF)

The governance structure and strategy of any corporate entrepreneurial firm is undermined with due cognisance to accountability, transparency and corporate ethics. The basic element of social entrepreneurship comprises of two variable which are governance and autonomy. Santos, Pache & Birkholz, (2015) noted that the importance of governance dimensions stem from the fact that it encompasses areas such as social impact as well as the interaction between customers, clients and beneficiaries in order to achieve social entrepreneurship sustainability.

Sustainability

It is recognized that sustainability literature has its origin from the 1980s Kamaludin et al (2021). The concept of sustainability has garnered many academicians' interest worldwide since it is pivotal to the difficulties encountered in trying to bring about positive economic growth and development in any social enterprise (Sarango-lalangui, Santos & Hormiga, 2018). Result shows that many have misconceived the concept of sustainability in business by giving it different meanings and names. While some researchers refer to sustainability as the growth, expansion and advancement that meet the requirement of the present without necessarily compromising the capacity or enablement to future generations to be able to meet their needs, others argue that it consists of many kinds of social and economic equity which covers areas of resources, policy, health and exchange. It tries to assure the viewers and investors that there is future stability in the business (Stenn, 2017).

Sustainability from the point of view of Social Entrepreneurship is concerned with the need for social enterprise to survive as well as how they can endure financial pressure over time. This shows that to achieve sustainability, social enterprise has to establish viable business that is running well. This means that there is not significant evidence of social enterprise demonstrating sustainability unless they possess the ability to attain operation impact within a duration of time. Subsequently, prior studies revealed that sustainability arising from SE hinges on three components of social sustainability (SS), economic sustainability (ES) and environmental sustainability (ES) (Burkett 2010; Javed, Yasir& Majid, 2019). In addition, Elkington's triple bottom line framework depicts those efforts geared toward sustainability, which are focused on three areas bothering on people, profit as well as the planet. Sustainability for social purposes has to do with the ability to survive in serving the constituencies of the enterprise. It is in this manner that social mission organisation fulfils their commitment to the entire stakeholders of business (customers, clients, employees, financial institutions and community at large) in which they operate. Apparently, sustainability can be ascertained when resources of the organisation are managed and controlled with a view to ensuring long -term sustainability and performance. Enterprise can also initiate possible strategic plans and action with view to achieving long term goals and entrepreneurial operational efficiency and effectiveness (Rajput & Chopra, 2014).

It is important to have social entrepreneurship sustainability that requires business endurance as well as the ability to press on in an ever changing, challenging and complex environment. In Nigeria today, many organisations cannot sustain their business because there is no capability especially in terms of ability to foresee through forecasting uncertainty in the near future. So having experienced the effect of COVID 19, it became difficult to manage and compete favourably in the industry (Alegro, Kislenko & Berbegal-Mirabel, 2017). Thus, the achievement of sustainability of social

enterprise is realistic with the maximization of positive impact through the effective management of health, nature of the ventures by way of incorporating social equity, economic prosperity and also environmental integrity into their business philosophy (Wilson & Post, 2013; Chowdhury et al., 2021). The social entrepreneurial sustainability is the state of achieving a social purpose while staying financially viable (Kamaludin et al., 2021; Jay, Robert & Gillian, 2010). However, the problem of unifying conceptual framework arising because of many competing concepts has caused the definition or the concept to lack unifying background (Preeti, Anil & Jyoti, 2022).

THEORETICAL FRAMEWORK

this study is anchored on dynamic capabilities theory which states that organisational internal resources (Values, HR, financial resources, Mission statement, competencies and capabilities and external resources are determinant for social obligations, Eriksson, Rodger & Oguji, (2021) entrepreneurial intention and corporate sustainability (Inegbedion & Oghojafor, 2021; Pascucci, Cardella, Hernandez-Sanchez, Sánchez-Garcia, 2022). For instance, sustainable social entrepreneurship (SE) involves funds or resources which could be internal source of finance to entrepreneurship in most corporate firms in Nigeria. Internal sources of finance to simply mean getting funds to finance entrepreneurship outcomes through personal saving, the external source of funds to financing entrepreneurship could come through borrowing from bank. The dynamic capability theory helps to enhance and promotes the sources of finance to social entrepreneurship. Therefore, this theory is most suitable for this study.

OBJECTIVES OF THE STUDY

The main objective of the study was to determine the impacts of social entrepreneurship (SE) constructs and social entrepreneurs on sustainability in Nigeria in pre and post COVID 19 pandemics. Specifically, the study determined the impact of

1. Social entrepreneurial (SE) indicators on ~~and~~ sustainability in Nigeria in pre and post Covid 19 pandemic.
2. Economic entrepreneurial (EE) indicators and sustainability in Nigeria in pre and post Covid 19 pandemic.
3. Behavioural entrepreneurial (BE) indicators and sustainability.
4. Governance entrepreneurial (GE) indicators and sustainability.
5. Social entrepreneurs on social entrepreneurship constructs and sustainability.

RESEARCH HYPOTHESES

The following alternative hypotheses were tested at

H₁: Social entrepreneurial (SE) indicators have significant impact on sustainability in Nigeria in pre and post Covid 19 era.

H₂: Economic entrepreneurial (EE) indicators have significant impact on sustainability

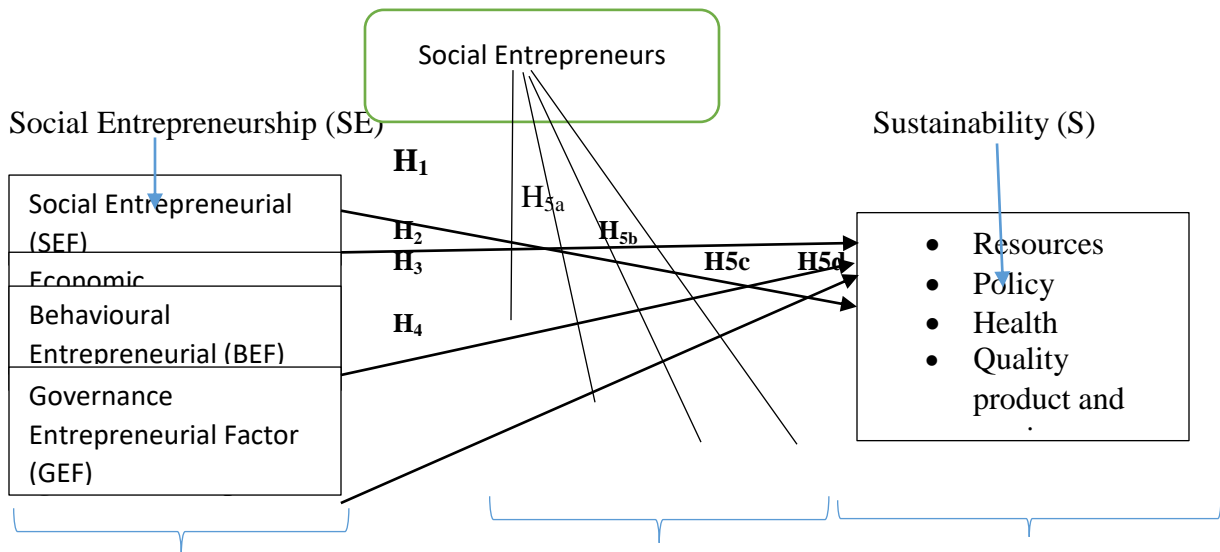
H₃: Behavioural entrepreneurial (BE) indicators have significant impact on sustainability

H₄: Governance entrepreneurial (GE) indicators has significant impact on sustainability

H_{5a}-H_{5d}: Social entrepreneurs moderate and mediate & significantly between social entrepreneurship constructs and sustainability.

Research Framework

This study adapted mentioned the Hocketts' model (Hocketts', 2017) as the theoretical approach in line with the standard and previous work done by prior social entrepreneurs, researchers and academia. Explicitly, the study also utilised perceived social support model as a framework.



mework and model design of the study

Source: Adapted from Zulkfle and Aziz (2023). Determinant of social entrepreneurship intention: A longitudinal study among Youth in Higher Learning Institutions.

The study explored the impacts of the four constructs of social entrepreneurship and the social entrepreneur on sustainability of business processes. Studies report that social entrepreneurial factors or dimensions have linkages with social entrepreneurship and sustainability. Hence, the proposition is that the concept of social entrepreneurship provides an intended experiences for social values, social needs and awareness. The intention of every social entrepreneur is to make available resources that can sustain the business, deliver quality services and products that can exploit opportunities in the marketing environment (Paredo & McLean, 2006) and also increase entrepreneurial

innovativeness (Matinaro & Liu, 2017, Inegbedion, Afolayan & Opaleye, 2019). Hence, the essential need for social intention is to increase value creation and deliver free healthy society caused by COVID 19 crises. Kamran, Khaskhely, Nassani, Haffer & Abro (2022), examined the interrelationship between social entrepreneurship (SE), the importance of social distancing during the pandemic and the value of social creation and innovation and found that information technology significantly shaped entrepreneurial opportunities and innovation as a tool for social distancing during the pandemic. In the same vein, Priya and Venkatesh (2019) evaluated the factors that determine social entrepreneurship such as social values, environmental issues and cultural norms and their influence on sustainable development and entrepreneurship creation while Kamaludine et al., (2021) examined the association between social entrepreneurship (SE) dimensions and sustainability and reported a significant relationship. Haugh & Talwar, (2016) also explored the use of previous data base on literatures integrating social entrepreneurship, social empowerment, social change and entrepreneurial activities of Indian women in the rural cities. The authors found out that entrepreneurial engagement promotes or contributes to social change and social empowerment and at the same time facilitates Indian women's engagement to engaging in economic and innovative processes.

H₁: Social entrepreneurial (SE) indicators have significant impact on sustainability.

Economic Entrepreneurial factors as it relates to social entrepreneurship is the integrate part of enterprises discovering market/products opportunities, developing innovating ideas and product (Inegbedion, Asikhia & Obi, 2022; Inegbedion, Micheal and Opaleye, 2019) with a view to attaining sustainable development through wealth creation and entrepreneurs being financial sufficient and inclusive (Inegbedion, Akande, Asikhia, Adeyemo & Adebayo 2022). Therefore, when a social entrepreneur is said to be financially empowered and all-inclusive, there is tendency of supporting innovation, delivery quality products, formulating policies that is comprehensive and holistic achieving enterprise sustainability. Most importantly, social entrepreneurs can provide financial assistance in eradicating COVID pandemic and also incubating new industry formation. Therefore, a number of previous literatures has supported this view. Empirical studies from Islam, Hossain, Khan, Rana, Ema & Bekun (2022) empirically conducted a study in Bangladesh on contextual issues and linkages between economic factors, global warming and climate change and how it affects the SDGs of 2030 in Bangladesh. The study utilised the secondary data approach from 45years annual data 1972-2017. They authors found out that there was a significant interrelatedness between the various dimensions used in the study. In addition, these variables can significantly affect suitable development goals in 2030. Furthermore, Kamaludine et al., (2021) employed the use of conceptual literature to examine the association between social entrepreneurship factor (SEF) dimensions and sustainability. The

findings revealed a significant relationship between the SE constructs and sustainability. In the same vein, Wagner (2015) utilised the structural equation modelling (SEM) and the RBV model to examine the effect of performance of economic and environmental determinant on sustainable integration. The overall results indicate that the RBV can be used to achieving sustainability, economic performance and environmental integration. Similarly, Singh (2016) determine the relatedness between ecological, environmental and economic factors, concerns and how it affect the sustainable development in the cities of Himalayan. The author discovered that environmental dilapidation and economic poverty has affected sustainable development in that county. Based on the empirical standpoint the following assumptions are proposed as:

H₂: Economic entrepreneurial (EE) indicators have significant impact on sustainability

Prior empirical research examines the connection between behavioural indicator of social entrepreneurship and sustainability. Most of the research pays attention to social and economy related changes. There is dearth or very little research that has employed the utilisation of behaviour entrepreneurship factors in social entrepreneurship. Behavioural trait is very key to the success of an entrepreneur. Attitude towards innovative change and quality sustainability is an epitome of entrepreneurial traits found in any corporate entrepreneur. Therefore, leadership, personal assessment and management is a comprehensive and integral parts that promotes entrepreneurial performance and sustainability Francis, John, Okon & Inegbedion (2015). It is therefore, essential that social entrepreneurs should possess good behavioural skills and traits in order to demonstrate entrepreneurial innovativeness and encourage reward on social entrepreneurial activity. Consequently, social entrepreneur can only demonstrate social reward by constantly educating and promoting entrepreneurial education Inegbedion, et al., (2021) on the process of altitude entrepreneur should embark during and after COVID pandemic Owenbuigie & Egbri, (2021). Vanessa, (2022) review the components of social entrepreneurship such as cultural pattern, demographic pattern, lifestyle and social change. The author completely focused on the developing issues affecting entrepreneurs. The results found out these components are essential factor that drive social entrepreneurship. This mean that culture and life style entrepreneur aligned their entrepreneurial practice to suit their individual circumstances (Sun & Xu, 2017). In line with the above empirical review and preposition, the following hypothetical assumption are proposed:

H₃: *H₃*: Behavioural entrepreneurial (BE) indicators have significant impact on sustainability

Apparently, very few empirical studies indicate the association between governance factors and sustainability. Kamaludin et al., (2021) was the first to link governance

structure with sustainability. The authors examined four key strategic measurements of SE and its linkages on sustainability. They exposed that the literature framework of these key dimensions has an association with SE and sustainability. On the other hand, Ebrahim, Battilana & Mair, (2014) also investigated the problems of governance mechanism in corporate enterprise when making effort to achieving social mission and social sustainability. The authors revealed that the key limitations and problems faced by the amalgamated enterprises are recently addressed by the board governance stakeholders with a view to achieving performance objectives, accountability and transparency. Consequently, in line with previous submission the following assumption was highlighted as:

H4: Governance entrepreneurial (GE) indicators have significant impact on sustainability.

Next on the list of empirical submission is the moderating role of social entrepreneurs in connection with the independent's variables (Social entrepreneurial factor, economic entrepreneurial factor, Behavioural entrepreneurial factor and Governance entrepreneurial factor in association with sustainability. The desired goal of a social entrepreneur as an individual or corporate organisation is to provide solutions to the social needs, economic needs, behavioural needs and governance needs. Therefore, in the context of social entrepreneurship, individuals with social desire may have the desired goal to solve entrepreneurial need, promote entrepreneurial intention Inegbedion et al., 2021), solved social and behavioural issues. Therefore, behavioural issues, governance system and challenges are seen as another deliberate constructs that stimulate the creation of social and corporate entrepreneurs. Therefore, the underline assumption was stated.

H_{5a}-H_{5d}: Social entrepreneurs moderate and mediate significantly between social entrepreneurship constructs and sustainability. Thus, the above listed moderating assumptions are seen in the research framework (Figure 1).

RESEARCH METHODS

The study was designed to adopt the quantitative-online survey approach. The online survey approach was distributed to corporate and social entrepreneurs in Nigeria, most especially those domiciles in Lagos state. There were two basic sections in the online survey. The first section comprises of demographic/personal related information and section two is made up of five constructs. Explicitly, SEF, EEF, BEF and GEF. The measurement scale used for this survey item is the 5-point Likert scale (Croasmum & Ostrom 2011; Kothari, 2008). The random and purposive sampling approach was utilised in this study. Random sampling techniques were employed which give the population equal chances of being selected and the purposive method of sampling was also chosen, reason being that there was no particular target of population of social

entrepreneurs and specific criteria of social entrepreneurs as respondents. The study employed the utilisation of Survey Online Google form of questionnaire distribution to the target respondents. This approach was employed to facilitate the administration of the questionnaire and to ensure quick access and response. Therefore, the hypothetical proposition was analysed.

Sample size Determination and techniques

In order to determine the sample size techniques, the study first of all extrapolated the number of Nano, micro, small and medium scale enterprise in Lagos state (NMSMEs) which is estimated to be 97,091. This figure was reported by National MSMEs in 2020. (Also Cited in owners of by Inegbedion, et al., 2022). Furthermore, Adeyemi, (2022) reported in research conducted by FATE foundation in collaboration with British council. In their research it was reported that there are estimated 443,096 social enterprises which is made up of NGOs, Co-operative societies and MSMEs. Therefore, Taro Yarmane (1973) Formula for determining sample size was adopted to determine 146 sample size of the study and the number was fully retrieved from the respondents.

Data Collection Techniques and Longitudinal Design Approach

The data collection instrument for this study was the utilization of online survey approach through the means of questionnaire as a primary base instrument. The study also employed a longitudinal approach due to the nature of the research that covered a period of 2019 pre covid pandemic and 2021 Post covid pandemic. Thus, the study examining the variables of the study during the pre-COVID 19 era and post-COVID 19 era. Data collection was done during the peak period when Covid 19 started in 2020 and 2021 and after Covid 19 era, that is the ending year of 2021 and 2022.

Validity and Reliability of Research Instrument

50 percent of responses collected from the respondents were analysed to validate the reliability of the surveyed instruments. The Cronbach's Alpha test that is above .70 is adequately suitable and .80 greater is preferable, accepted and deemed fit to be good. Therefore, the survey carried out was good and acceptable (Cortina, 1993). Table 1 represent the Cronbach's Alpha results of the various constructs used in measuring social entrepreneurship.

Table 1: Construct Measurement and Cronbach's Alpha results:

S/N	Constructs	Alpha Values	N
1	Social Entrepreneurship (SEF)	0.821	29
2	Economic Entrepreneurship (ESF)	0.722	29
3	Behavioural Entrepreneurship (BEF)	0.772	29
4	Governance Entrepreneurship Factor (GEF)	0.712	29
5	Sustainability.	0.787	29

Field survey, 2022

Data Analysis Strategy

Given the association between two constructs social entrepreneurship (SE) and sustainability and the moderating variable, the study employed the structural equation model (SEM) and multivariate correlation analysis method (MCAM) to test the proposed research framework and supported the examination of linkages between the two constructs. In this study, two analytical approach was employed, first to examine the constructs of the model for its reliability and validity and next to utilised SEM to evaluate the postulated hypotheses. Partial least square structural equation modelling (PLS-SEM) version 3.3 was employed as a research software to run the data analysis. In order to appraise the various dimensions, the dependability and consistency was measured by utilising Composite Reliability (CR) (factor reliability/construct reliability) (Fornell & Larcker, 1981; Netemeyer et al, 2003). Furthermore, validity of the constructs was measured by Average Variance Extracted (AVE) which was used to validate the constructs. In the same vein, SEM was also used to measure or evaluate the statistical method to determine the coefficient of determination (R^2) and the model fit value standardize root mean square residual (SRMR). The model fit determines how well the model suggests covariance matrix matches the simple covariance matrix. The values of the model fit stated that if the value is less than 0.03 represent excellent fit, Thus, if the good values (GFI) is greater than 0.95 scaled between 0.1. Furthermore, the acceptable SRMR value/index is between 0 and 0.08.

RESULTS AND DISCUSSION**Reflective Measurement Model**

In order check the dependability of the model, reliability and consistency was evaluated utilising the Composite Reliability (CR) and the outside loading, while validity of the research model was assessed utilising the Average Variance Extracted (AVE). All of this measurement was employed using PLS-SEM 3.3. The scale value of the Composite Reliability (CR) is from 0 to 1. If the value is greater than the standard scale 0.7, this indicates the measurement model achieve a greater internal consistency reliability (Hair et al, (2017b). Table 3 reflects the CR values for all the loading constructs used are beyond 0.70, which is above the standard value of 0.7. Thus, implies the CR values was accepted. Reflecting back to Table 3 all loading values is deemed to be acceptable because all values meet the threshold of 0.7 and none of the items required was eliminated. Furthermore, according to Hair et al., (2022) AVE standard value is 0.5, which implies that all the reflective constructs used in the study exceed the standard AVE of 0.5 and they all fulfil the convergent validity test.

Table 2: Typical Framework showing Reflective measurement

			Pre-COVID Pandemic (n=146)			Post-COVID Pandemic (n=140)	
Constructs	Items	Loadings	AVE	CR	Loadings	AVE	CR
SS	1	0.739	0.518	0.810	0.771	0.561	0.810
	2	0.759			0.773		
	3	0.808			0.770		
	4	0.774			0.775		
	5	0.767			0.852		
	6	0.735			0.716		
ES	1	0.767	0.681	0.821	0.710	0.589	0.911
	2	0.792			0.712		
	3	0.718			0.770		
	4	0.817			0.781		
	5	0.840			0.821		
	6	0.735			0.844		
BS	1	0.725	0.561	0.941	0.761	0.574	0.883
	2	0.719			0.755		
	3	0.767			0.761		
	4	0.814			0.883		
	5	0.850			0.817		
	6	0.724			0.712		
	7	0.792			0.740		
GS	1	0.721	0.626	0.820	0.734	0.565	0.910
	2	0.745			0.541		
	3	0.741			0.751		
	4	0.703			0.702		
	5	0.861			0.882		
	6	0.833			0.821		
S	1	0.762	0.762	0.674	0.820	0.639	0.912
	2	0.841			0.778		
	3	0.852			0.840		
	4	0.791			0.782		

After thorough analysis and the extent of empirical standardise threshold, it was obvious on the differences in the measure of constructs. These differences in measures of constructs are said to be called discriminant validity (DV). Consequently, this study for the purpose of this research was assessed by the standard recommended by Fornell-Larcker (1981) and Hair, page & Brunsveld (2020). Larcker standards of DV compares the reflective measured constructs in association with the square root of the Average variance extracted (AVE) standards. Regarding the analytical results of Table 4 & 5, the AVE values for both pre-Covid pandemic and Post Covid pandemic for all the social entrepreneurship measurement constructs SEF, EEF, BEF, GEF and S is greater than the relationship with other variables used in the study, thereby reflecting the uniqueness and validity of the constructs.

Table 3: Multi-Correlation Matrix showing the impact of social entrepreneurial constructs and sustainability during Pre-Covid Pandemic

UNIZIK JOURNAL OF ENTREPRENEURSHIP (ENTREP)
Vol.6 No.1

	SEF	EEF	BEF	GEF	Social entrepreneurs	S
SEF	0.773					
EEF	0.581	0.714				
BEF	0.439	0.617	0.818			
GEF	0.557	0.481	0.537	0.831		
Social entrepreneurs	0.040	0.043	0.034	0.028	1.000	
S	0.293	0.343	0.480	0.242	0.087	0.871

Table 4: Multi-Correlation Matrix showing the impact of social entrepreneurial constructs and sustainability during Post Covid Pandemic Multi-Correlation Matrix

	SEF	EEF	BEF	GEF	Social entrepreneurs	S
SEF	0.757					
EEF	0.663	0.760				
BEF	0.629	0.717	0.752			
GEF	0.551	0.616	0.644	0.821		
Social entrepreneurs	0.088	0.060	0.044	0.031	1.000	
S	0.386	0.488	0.487	0.474	0.087	0.891

The testing of the proposed hypotheses in this research tends to assess the association between the various constructs of SEF, EEF, BEF, GEF and S is represented in Table 5. For a two tailed test study of this magnitude of research in social sciences, Hair et al., (2017b) suggested a *p*-values of 5%. The probability values test the possibility of error occurring in the calculation. The results from the study revealed a significant relationship and linkages between the various constructs SF, EF, BF, GF and the independent variable Sustainability (S) during the pre and post covid pandemic. Consequently, H1, H2, H3, H4, H5 and H5a-H5d are significantly associated with each variable. That is the postulated hypothesis tested are significant in both periods of Covid. However, H2 was found to be significant in pre-Covid and not to have significant relationship with S in Post Covid period. Next, the results also revealed the moderating variables of H5b which was found not to be significant in the Pre Covid era. Furthermore, the moderating effect of each of the relationship variables (H5c and H5d) was also found to be significant and revealed that there is a relationship between the moderating variables and sustainability in both periods.

In order to test the coefficient of determination, which is represented as R² or r² or R squared as pronounced. Then R² is the square of the coefficient of multiple correlation. This concept emphasis the proportion of the variation/construct in the independent variable that is predictable in the dependent variables/constructs. Specifically, the R squared emphasis the proportion of the variance in the dependent variable that is predicted or explained by the linear regression. In the context of statistical framework or analysis, the major objectives is the prediction of future outcomes or the testing of

formulated hypothesis Draper & Smith, (1998). Thus, in the case of this study, the correlated determination ranges from 0 to 1. The R square value has three standards. First if the predicted value is 0 it indicates a weak prediction or model, if the value is 0-1 it indicates a moderate prediction or model and if the value is 1 it indicates a perfect or substantial prediction or model. Therefore, showing in Table 7 the prediction value of SE constructs on sustainability during the pre and post covid pandemic is 0.652 and 0.572, indicating that the prediction value is perfect and moderate.

Table 5: Testing of Hypotheses using the Structural Equation Model (SEM)

Hypotheses (H)	Constructs	<i>p</i> -values	Pre-Covid Pandemic (n=146) T-values	Results	<i>p</i> -values	Post-Covid Pandemic (n=140) T-values	Results
H ₁	SEE → S	**0.047	2.767	Significant	**0.048	2.584	Significant
H ₂	EEE → S	**0.000	2.553	Significant	0.363	1.592	Not Significant
H ₃	BEE → S	**0.045	2.776	Significant	*0.037	2.520	Significant
H ₄	GEF → S	*0.034	2.892	Significant	*0.029	2.522	Significant
H _{5a}	Social entrepreneurs (SEF → S)	▶ *0.037	2.656	Significant	*0.031	2.521	Significant
H _{5b}	Social Entrepreneurs (EEF → S)	→ 0.268	0.588	Not Significant	**0.044	2.501	Significant
H _{5c}	Social entrepreneurs (BEF → S)	**0.035	2.660	Significant	*0.019	2.215	Significant
H _{5d}	Social entrepreneurs (GEF → S)	**0.032	2.490	Significant	0.029	2.644	Significant
		Pre-Covid Pandemic (n=146)				Post-Covid pandemic (n=140)	
Variable	R ²	Predictive Value		R ²		Predictive Value	
SE	0.652	Perfect		0.572		Moderate	

DISCUSSION OF FINDINGS

The findings showed that a correlational relationship exists between social entrepreneurship constructs and sustainability with a moderating variable social entrepreneur in the era of pre and post pandemic. The study revealed that three social entrepreneurship (SE) constructs specifically SEF, BEF and GEF were found to be significantly linked to sustainability in the pre and post covid pandemic. These findings are consistent with the work of Priya and Venkatesh (2019) which demonstrated that social strategy (SS) such as social values and environmental issues significantly influences sustainable development and entrepreneurship creation. Also, works of Kamaludine et al., (2021) was in line with the findings which revealed a significant relationship between the SES constructs such as SS in achieving sustainability. Furthermore, the works of Islam et al., (2022), was also in line with prior submission; Thus, the findings exposed that there was a connection between economic factors (SEF) and other climatic and environmental factor and these factors affect the achievement of SDGs 2030 in Bangladesh. Next, the findings BEF was found to be significantly related to sustainability. The findings were also in line with previous empirical studies, Noruzi, et al., (2010) found that determinant if SE such as Behavioural traits help to achieve entrepreneurial activities. More so, Vanessa, (2022) review the social entrepreneurship behavioural components namely cultural pattern, demographic pattern, lifestyle and social change. The results found out these components are essential factors that drive social entrepreneurship and sustainability. This is an indication that the behavioural pattern of individuals and social entrepreneurs during pre and post covid influences sustainable development. Additionally, the findings of BEF were found to be significantly related to sustainability. The findings were in accordance with past empirical literature. Kamaludin et al., (2021) found out that governance strategic factor contributes significantly to sustainability. Therefore, the role and effort of government in the control, prevention and monitoring during pre and post covid pandemic tend to achieve significantly social and economic sustainable development. Relatedly, Ebrahim, Battilana & Mair, (2014) also found that the challenges social enterprises face when making deliberate effort in solving the pandemic issues have been solved, addressed and supported by government.

On the contrary, a combine effort has been made by social enterprise stakeholders and government in the control of covid 19 pandemic. In the same vein, the meditating role of social entrepreneurs was found to be interconnected and significantly related with SEF, EEF, BEF & GEF. Hence, the results confirmed the hypothetical preposition of the study. Therefore, the findings are consistent with past studies. Zulkifle & Aziz (2023) revealed that social responsiveness, social entrepreneurial drive, self-sufficiency, past experience in entrepreneurial management is significantly associated and determinant of social entrepreneurial mind-set and entrepreneurial participation in

the Pre and Post Covid 19 Pandemic era. In addition, social entrepreneur was found to have a moderating role in associating with the variables.

CONCLUSIONS

The research focused on the linkages between four social entrepreneurship (SE) constructs (SEF, EEF, BEF, and GEF) and sustainability (S) and the moderating impact of social entrepreneurs on sustainability in the pre and post Covid 19 Pandemic. The findings revealed that each of the four social entrepreneurship constructs has significant relationship with sustainability and that mediation by social entrepreneurs had positive impact on sustainability in the pre and post Covid 19 Pandemic era. Based on these findings, it was concluded that integrating social values as part of our corporate culture would bring about sustainable performance and create social and economic development.

RECOMMENDATIONS

Based on the findings and conclusions of the study, the following recommendations were made:

- 1 The government should provide conducive environment and financial support for owners of SMEs entrepreneurs and social entrepreneurs to drive the vision of social intention and values.
- 2 Collaborative efforts from all stakeholders in entrepreneurial ecosystem should pursue the social mission with a view to achieving enterprise sustainability.
- 3 The government through the intervention strategy and programmes should address the social challenges and social issues of the vulnerable by formulating policies in tackling the social pandemic and bringing the economic hardship and pandemic to an end.

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