
In Nigeria today, Family businesses are in tatters. They are operating in fears owing to the advert of Coronavirus (covid-19) Pandemic. Some family businesses are in a sorry state, some are struggling to survive, while some have registered into extinction because of poor customer patronage orchestrated by the pandemic. This study examined the family business and Covid 19 imbroglio in the 21st Century, especially in Dangote Group Ltd, Nigeria. The study adopted a survey design method, the population of the study was 995 staff members of the family business under study. Sample size of 553 was obtained using Freund and Williams formula. Data were collected using a designed questionnaire on a 5-point likert scale. The study employed Linear regression to test the hypotheses at a 5% level of significance. The study found that Self-isolation had a significant positive impact on the performance of family business in Kano State, Nigeria (r = 0.957, p < 0.05); Self-care had a significant positive impact on the performance of the family business in Kano State, Nigeria (r = 0.905, p < 0.05); Self-efficacy had a significant positive impact on the performance of the family business in Kano State, Nigeria (r = 0.879, p < 0.05). Based on the findings, this study has emphasized that the implementations and effective use of self-isolation, self-care and crisis communication, as well as other measures internally and externally available in order to

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reduce the spread of co-vid 19 in family businesses, bring about competitive advantage. The use of these measures has a great impact on family business performance as it helps to provide a platform for its growth. From the literature review and the cases studied, it was certain that there are a number of advantages associated with the use of these measures in family businesses such as making family business a co-vid 19 free environment as well as saving lives. The study recommended that family businesses should create a strategic alliance with their foreign, counterpart so as to gain new and practical knowledge on the fight against co-vid 19. Family businesses should adopt modern measures available so as to demote the spread of co-vid 19 in Kano State, Nigeria. There should be a constant upgrading of proper awareness such as new programmes and new methods of co-vid 19 avoidance in order to arrest the novel disease. Appropriate modern organizational information, communication and technical knowledge Should be adopted.

**Keywords:** Family business, Co-vid 19 imbroglio, Self-isolation, Self-care, Self-efficacy and Dangote Group, Nigeria

### 1.0 Introduction

A novel coronavirus was first reported in Wuhan, Hubei province, China, in December 2019. The COVID-19 pandemic has since reached an unprecedented magnitude, with approximately 2 million cases and 150,000 deaths worldwide at the time of writing. Nigeria is one of the most affected countries by COVID-19 in the African region (Muellbauer, 2020). The World Health Organization (2020) reported that as of 15 April, there had been 76,389 confirmed cases of the infection and 4777 deaths in Nigeria due to COVID-19. Also, more than 2000 Nigerian health workers died from the coronavirus.

According World Health Organization (2020), ensuring the safety and smooth operation of family business is not only crucial in protecting them against the virus but also in preventing the transmission of the virus among its members. In this regard, the World Health Organization (WHO) has identified education as one of the most important components of prevention programmes.

The emergency of co-vid 19 has seriously affected the business world and disintegrated the economy. According to Bluhm, Harman, Lee and Mitchell (2019), Family businesses are the most affected across the globe, though they Family are inherently resilient, whether recently-founded or long-established. Newer family businesses have survived and thrived in tough environments. Older ones have ridden out world-changing events, from wars to recessions to natural disasters. Either way, resilience can be part of your family business, underpinned by your deeply-held values and purpose, long-term horizon, agile decision-making, patient capital, and a deep commitment to your workforce and communities (Boddy, 2016). However, the COVID-19 pandemic is severely testing the attributes that give family businesses a competitive edge. Bootsma and Ferguson (2017) argued that the ability to survive and prepare for the “new normal” is critical to the future of our family, your business and all the people who rely on it.
Today, there are unique challenges with a family business, particularly when it comes to making tough decisions in difficult times (Brand.Tiberius ,Bican, and Brem ,2019). There is always this pressure in a family business to not be the one to screw it up. The Co-vid 19 crisis is forcing family businesses to make trade-offs among objectives that would have previously been unimaginable (Brockner, and James, 2018). “But family businesses differ from other companies in that their form of ownership gives them the ability to take critical actions that could help them through these difficult times.” A recent Banyan Global survey of family businesses found that 82% had seen a negative impact on their business from the Covid-19 pandemic and about half of those said the impact has been significant (Carney, 2015). During crisis times for family businesses, “family members tend to come together and do whatever it takes to promote the family's health and prosperity,” (Bauweraerts, 2019). “Opportunities for a family to come together and work towards a common purpose make the family stronger.” Existing literature and prominent scholars show that family businesses may react faster in crisis situations than their non-family counterparts (Benner and Zenger , 2016). Some investigations however find that this does not necessarily have to be the case in all family firms, and that family ownership is not always a pure advantage. Family firms in particular with a large number of shareholders and external directors may end up in greater trouble than non-family firms in crisis situations as family owners' interests may diverge from those of non-family managers (Berrone ,Cruz and Gomez-Mejia, 2020). Family settings often do not provide the opportunity for digital meetings everywhere, especially now that self-isolation, improved hygiene, improved communication, proper integration and awareness and also social distancing is a legal requirement. The speed with which the COVID-19 crisis has erupted, the immediate health hazards for all economic actors and the strict governmental restrictions around it create a unique situation that to date has not been investigated in family business research (Betts, 2019). Thus, this work focuses on the Family Business and Co-vid Imbroglio in 21st Century: The Dangote Group, Nigeria.

1.1 Statement of the Problem

In Nigeria today, Family businesses are in tatters. They are operating in fears owing to the advert of Coronavirus Pandemic. Some family businesses are in a sorry state, some are struggling to survive, while some have registered into extinction because of poor customer patronage orchestrated by the pandemic (Ojikwe, 2020). Prices of products and operational styles have suspended many family businesses and also ushered in managerial crises among the family members. Amann and Jaussaud (2019) argued that though coronavirus pandemic if properly managed will enhance electronic transactions such as e-commerce, e-business, e-banking, etc but its negative impacts strongly supercede its positive impacts.

In Kano State, Nigeria, the economic flow is at a low very ebb. Family business owners, Customers and workers are in a hidden and business activities devastated in the wake of covid 19 (Ojikwe, 2020). As the reality of the coronavirus pandemic dawns on the State, like the rest of the states in Nigeria, has begun canceling events, flights, and virtually everything
that requires social, official, and religious gatherings. This development affected the economy of the state in general and family business in particular.

Existing literature and prominent scholars show that family businesses may react faster in crisis situations than their non-family counterparts (Bansal and Corley, 2020). Some investigations however find that this does not necessarily have to be the case in all family firms, and that family ownership is not always a pure advantage. Family businesses in particular with a large number of shareholders and external directors may end up in greater trouble than non-family businesses in crisis situations as family owners' interests may diverge from those of non-family managers (Barker and Duhaime, 2015). Family settings often do not provide the opportunity for digital meetings everywhere, especially now that self-isolation, self-care, self-efficacy, self-assessment, improved hygiene, improved communication, proper integration and awareness and also social distancing are a legal requirement.

Despite the academic and managerial relevance of family business in business environments, no previous academic studies have investigated how and by what means family businesses are responding to the COVID-19 crisis (Carnahan, 2017). In general, only a very few studies have investigated how business Organizations manage and overcome Co-vd 19 crises but none has been done on family business (Baron, Harris, and Elliott, 2015). For this reason, the researcher intends to investigate family business and Co-vd 19 imbroglio in 21st Century (A case study of Dangote Group Ltd, Kano, Nigeria).

The speed with which the COVID-19 crisis has erupted, the immediate health hazards for all economic actors and the strict governmental restrictions around it create a unique situation that to date has not been investigated in family business research (Bundy et al., 2017). From this arises the following questions (1) what impact does Self-isolation have on performance of family business in Kano State, Nigeria? (2) What impact does self-care have on performance of family business in Kano State, Nigeria? (3) What impact does Self-efficacy have on performance of family business in Kano State, Nigeria?

1.2 Research Hypotheses

Three hypotheses were formulated to guide the study

i. Self-isolation has a significant positive impact on performance of family business in Kano State, Nigeria.

ii. Self-care has a significant positive impact on performance of family business in Kano State, Nigeria.

iii. Self-efficacy has a positive impact on performance of family business in Kano State, Nigeria.
2.0 LITERATURE REVIEW

2.1 Concept of Family Business

A family business is one which the majority of the shares are in the hands of one family and in which the general management of the business also belongs to the same family (Anderson, Heesterbeek, Klinkenberg and Hollingsworth, 2020). In the words of Amann and Jaussaud (2019), family business is one which is influenced by a family or by family relationship and the family as a body may effectively control business operations because it owns more than 50 percent of the voting shares or because family members fill a significant number of the top management positions. According to Archibugi, Filippetti, and Frenz (2020), family business may be described as a business in which majority equity stake (ownership) or control is vested in a family which has some of its members directly involved in the management of the business. A lot of misconceptions still attend the phenomenon of family. Some think that it must have its premises located in a family residence, that it ought to be small and must be owner managed, or that there are no formal structure in the business and that members of a family must play all sorts of roles in the business. Well, the presences of these might to a reasonable extent indicate that a business is likely a family business but does not create a sufficient condition to allow the express categorization of a business as a family business. Bansal, and Corley (2020), company considered a family business when it has been closely identified with at least two generations of a family and when this link has had mutual influence on company policy and on the interests and objectives of the family.

2.2 Concept of Co-vid 19

According to Beutels, et al (2018), Coronavirus is a large family of zoonotic viruses that cause illness ranging from the common cold to severe respiratory diseases. Zoonotic means these viruses are able to be transmitted from animals to humans. There are several coronaviruses known to be circulating in different animal populations that have not yet infected humans. COVID-19 is the most recent to make the jump to human infection. Common signs of COVID-19 infection are similar to the common cold and include respiratory symptoms such as dry cough, fever, shortness of breath, and breathing difficulties. In more severe cases, infection can cause pneumonia, severe acute respiratory syndrome, kidney failure, and death. In the word of Lau et al (2019), the covid-19 infection is spread from one person to others via droplets produced from the respiratory system of infected people, often during coughing or sneezing. According to current data, time from exposure to onset of symptoms is usually between two and 14 days, with an average of five daysTwo other recent coronavirus outbreaks have been experienced. Middle East Respiratory Syndrome (MERS-CoV) of 2012 was found to transmit from dromedary camels to humans. In 2002, Severe Acute Respiratory Syndrome (SARS-CoV) was found to transmit from civet cats to humans. In 2002, Severe Acute Respiratory Syndrome (SARS-CoV) was found to transmit from civet cats to humans. Although COVID-19 has already shown some similarities to recent coronavirus outbreaks, there are differences and we will learn much more as we deal with this one. SARS cases totaled 8,098 with a fatality rate of 11 percent as reported in 17 countries, with the majority of cases occurring in southern mainland China and Hong Kong (Wenzel et al, 2020). The fatality rate was highly dependent on the age of the patient with those under 24 least likely to die (one percent) and those over 65 most likely to die (55 percent) (Chou, Kuo, and Peng, 2019).
2.3 Concept of Self-isolation

The issues of self-isolation was first recorded around 1825–35, isolation ultimately comes from the same root as insulation, the Latin insulātus, “made into an island,” based on insula, “island.”(Baekkeskov and Rubin, 2018). According to Herbane (2020), isolation is when someone or something is set apart or separated from other persons or things. In medical contexts, isolation specifically means “the complete separation from others of a person suffering from contagious or infectious disease.” Again, according to Baldwin et al (2020), the practice of isolation entails the separation of a person or group of people known or reasonably believed to be infected with a communicable disease and potentially infectious from those who are not infected to prevent spread of the communicable disease. Isolation for public health purposes may be voluntary or compelled by federal, state, or local public health order. isolation happens when a person is infected with a communicable disease, and is separated from people who are healthy (Harvey and Haines, 2015). This also helps stop the spread of the disease. Voluntary isolation is sometimes called self-isolation, although everyday people using the latter term may not mean they are actually infected.

2.4 Concept of Self-care

According World health Organization (June, 2020), self-care connotes your ability to promote health, prevent disease, maintain health, and cope with illness and disability with or without the support of a health-care provider. People have been practicing self care for thousands of years. According to Carnahan, (2017), an increase in self-care interventions is shifting the way health care is perceived, understood and accessed, and adding to the many medicines, diagnostics, and technologies available for people to use themselves. Amann and Jaussaud (2019) argue that Physical distancing, good respiratory hygiene and hand washing are important examples of self-care actions you can take every day to protect against COVID-19, and there are many other areas in which self care can make a difference to your health and well-being during the coronavirus disease pandemic, including for your sexual and reproductive health.

2.5 Concept of Self-efficacy

According to Foss and Saebi (2017), Self-efficacy may be defined as a personal belief and attitude towards the control and competencies needed to successfully address the target and challenges involved in creating a new development to solve a problem. Self-efficacy is also described as conviction in one’s capability to succeed in particular job and is affected by performance, achievement, experience and emotional arousal (Carnahan, 2017). A close look at the self-efficacy construct, it glaring that it is appropriate for the study because of its nature (Brand, Tiberius, Bican, and Brem, 2019). It is task-specific construct that includes an assessment of confident beliefs an individual has about internal (personality and external (environment) constraints and possibilities, and it is close to action and actionintentionally (Zhu et al, 2020). Researchers found self-efficacy to have both direct and indirect capacity for co-vid 19 reduction and control in the family business.
2.6 Concept of Crisis Communication

COVID is affecting every industry in one way or another, and by staying silent and not addressing the elephant in the room, you run the risk of your prospects and customers making false assumptions about your business operations, or, worse, being seen as terribly detached from reality (Cohen, 2020). According to Clauss (2017), Crisis Communication refers to a special wing which deals with the reputation of the individuals as well as the organization. Crisis communication is an initiative which aims at protecting the reputation of the organization and maintaining its public image. Various factors such as criminal attacks, government investigations, media enquiry can tarnish the image of an organization.

Crisis Communication specialists fight against several challenges which tend to harm the reputation and image of the organization. Corbin and Strauss (2019) argue that Crisis can have a negative effect on brand image. Crisis Communication experts are employed to save an organization’s reputation against various threats and unwanted challenges. Brand identity is one of the most valuable assets of an organization and the main purpose of Crisis Communication team is to protect the brand identity and maintain the organization’s firm standing within the industry (De Massis, Kotlar, Campopiano and Cassia, 2015). Crisis Communication specialists strive hard to overcome tough situations and help the organization come out of difficult situations in the best possible and quickest way (Clauss, Abebe, Tangpong, and Hock, 2019).

2.7 Empirical Framework

Sammon and Viratyosin (2020) carried out a study on the impact of self-isolation on organizational performance in Dublin, Ireland. 68 employees were selected from the entire workers for the study and data was tested using multiple regression method. He found that self-isolation had a positive and significant impact on organizational performance.

Musa and Obizere (2020) did a study on the impact of Co-vid 19 on Organizational effectiveness of Marketing firm in Ikeja, Lagos. He employed a research design which was a combination of a survey and an oral interview. Both secondary and primary survey of data were used. A sample of 260 respondents were interviewed using a structural and undisguised questionnaire and an oral interview schedule. The data was analysed using percentages and valid percentages and the Z test of population proportions was used to test the hypotheses. The study found that co-vid 19 pandemic had a positive impact on the Organizational effectiveness of a marketing firm in Ikeja, Lagos he studied.

Ojikwe (2020) carried out a study on the impact of self-care on Productivity in a family business located in Aba, Abia State of Nigeria. The Population of the study was 123 family members (Extended family inclusive). Data were collected from both primary and secondary data. Chi-square tool was used to test the data. At the end of the day, he found that Self-care had a positive and significant impact on the Productivity which is the extent to which total output exceeds the total input in the family business he studied.
Adika (2020) did a study on the impact of Self-efficacy on profitability of a family business located at Osisi-oma in Abia State. He found that the Self-efficacy had a positive impact on Profitability of the family business being studied.

2.9 Coronavirus pandemic impacts on family relations at family businesses

As put by Dane and Pratt (2017), some surveys show a split between members of family business: twenty-nine percent have seen some negative impact on family relationships, while twenty-six percent have seen a positive impact (the rest have seen no change). It’s understandable for those having negative reactions, because this is a stressful moment. If the decisions you are having to make are about laying people off and cutting salaries and cutting dividends, stopping projects — these have a real emotional impact (Coombs, 2018). But we also saw that this is a moment when members of family businesses come together, a rally around the flag effect, where it’s a sense of let’s put aside our differences and focus on saving the business (D’Aveni and MacMillan, 2019).

2.10 The four key areas that family business owners should consider in Co-vid 19 Era

As advised by Chesbrough (2020), the following key points should be considered to overcome the Co-vid 19 tragedy:

i. Governance: Effective governance – both family and corporate – is of critical importance at any time. But it’s even more vital during a crisis when the trust, transparency and clear expectations it creates can be a real differentiator, helping you manage current and future challenges. That said some crises create governance risks that go beyond the usual challenges. So, you should keep leadership’s duties front of mind to avoid any inappropriate action being taken. Be ready to seek external expertise if you’re uncertain.

ii. Ownership continuity: Succession is critical to the success and continuity of any family business. While it’s usually a relatively drawn-out process, a crisis demands some quick and effective decisions. These include establishing emergency plans – both for the business and the family – and clear leadership transitions. This also may be the time to turn to your next generation for leadership. The younger generation has a huge role to play both in the business and the family. In PwC’s latest Global NextGen Survey, they told us they’re ready to make their mark, especially around digital transformation – but don’t yet feel that they have the licence to operate. Now may be the time to bridge the generation gap, hand over that licence – and let them help drive your business through the crisis.

iii. Family wealth: As a family business owner, you may find the COVID-19 pandemic requires you to change your strategy for protecting your personal wealth. You should make a full assessment of the impact on your estate and tax planning, as well as your private investments in the various asset classes. Also, many countries are putting emergency tax provisions in place, and it’s important to establish how you may be affected. PwC is monitoring the changing tax landscape in real time here. You may also want to reconsider your charitable giving/philanthropic activities.
iv.**Purpose and Values:** For a family business, values are the connective tissue – the source of your success, commitment and longevity. But when survival is at stake and these values are challenged, cultivating them may not feel like a priority. It should. Now more than ever, it’s vital to embrace and live your values. Why? Because this can sustain confidence and trust in your business through the crisis and beyond.

2.11 **Challenges of Family Business in Co-vid 19 Era**

It is for most families to have interest in attaining three major goals which are: business prosperity – which is critical since individual and collective financial security depend on it; family harmony – which cannot be ignored because individuals are bound together for life in families; and personal well-being – which is very important since every individual has his or her own goal. According to Chan et al (2020), some of these challenges are:

i. **Challenge due to ownership structure:** The ownership structure of a family business confers a lot of powers to members of a family as it is usual for family members, individually and collectively, to have a controlling stake in a business they are interested in. This results in the family business having access to huge company profits and other benefits where the business becomes successful. The families usually do not want to dilute ownership since it may conflict with the family goal of harmony and individual wellbeing, this can make them to forgo bringing other individuals to board that could complement their efforts. In this way, the contributions of experienced and competent individuals are dispensed off to the detriment of the business.

ii. **Challenge in allocation of resources:** In a family business, business and family issues may overlap to the extent that business financial issues are inextricably interwoven with that of the family. The result is that some times more pressing financial needs of the business is neglected in the bid to satisfy the personal financial needs of the owner and family members (Huang et al, 2020). In as much as this pattern of allocation may maintain family harmony and promote individual wellbeing, it endangers the goal of business prosperity.

iii. **Challenge during decision making:** The management of the family business as members of the family sentimentally committed to members and relations of the family, especially in line with maintaining family harmony. This can result in suboptimal decision being taken so long as it pleases family members. Unfortunately, non-family members may feel not being carried along. This can cause non-family members to lose confidence and commitment to the business.

iv. **Challenge of succession planning in family business:** During succession planning in a family business, the goal of business prosperity and family harmony may conflict with each other. This derives from the fact that in a family business, the person that is likely to be favoured as successor, over and above everyone else, at the exit or demise of the founder is usually one of his or her offsprings. His is usually the case where family harmony is paramount to every other thing. Unfortunately, such an offspring may be lacking in competence, that has choice may obviously negate the goal of business prosperity. Thus in
succession planning, there is a big challenge in maintaining the delicate business between business prosperity and family harmony.

### 2.12 Tips for Family Business Owners in Covid-19 Tragedy

Foss and Saebi (2017) released the following tips for family business owners across the globe:

1. **Focus on innovation.** Don’t waste this opportunity to have a hard look at the way things are working. One retail firm we have worked with has always talked about having a more direct to consumer approach, but never gotten their eyes to focus on it. By necessity, a lot of the retail stores they have sold through have been closed, so they have had to focus on it.

2. **Start thinking about what your company will look like after Covid-19.** How do we keep things going right now but put more energy on when we come out of this?

3. **Preserve cash.** Cash is never more important than when you are in a crisis. Make sure you are taking steps you can to strengthen the balance sheet, so you can navigate through what is to come. Around sixty percent of our survey respondents say they have reduced or shifted operating expenses to preserve cash.

4. **Live your values.** Who you are as a company, and as people, come out in the decisions you make in a crisis. As a family business, you want to make sure that you anchor yourself in that conversation of who you are as a family and what are the values we bring to this business? Make sure the decisions you are making, if possible, are really reflective of those values. Investing in people and communities is so much a part of who they are.

5. **Communication is the most important part of making a family business work.** Trusted relationships are one of the most valuable assets of a family business. In the absence of communication, people will draw their own conclusions — which are often negative. A dialogue gives people a chance to share concerns and ask questions. It’s amazing how many family businesses that didn’t have any sort of platform like Zoom or Microsoft Teams became very adept at using it, due to necessity. Across the board, the comfort level has gone up and opened up communication better than before. But the pandemic has the potential of making things a lot worse. It puts things on the table you never would have had to worry about, like that brother or cousin who is making a lot of money and not really doing anything. You might have looked at that as a cost of doing business. Now you aren’t able to afford that. Now, you have to deal with them in an environment when people are feeling really tense.

### 2.13 The Impact of Covid-19 Crisis on the World Economy

Research on the economic impact of previous pandemics has shown that countries, industries and companies suffer significantly from the consequences of a global pandemic. This is due to a simultaneous demand and supply shock. Demand declines because consumers reduce their purchases of essential and non-essential goods and services such as entertainment and
travel. And layoffs reduce society's overall spending capacity (Cahyanto et al., 2016). Supply is thrown off course because many firms are simply not prepared to deal with the phenomenon of disrupted supply chains (Simchi-Levi et al., 2018). Many service and manufacturing sectors as a result have had to shut down their operations (Del Rio-Chanona et al., 2020).

The COVID-19 crisis has and will have an enormous influence on businesses worldwide. Governments across Europe, US and Africa have implemented financial first-aid and stimulus packages for businesses. While a few industries such as healthcare have faced increased demand and are actually benefiting from the crisis, many industries have been severely affected. Governmental restrictions caused the closure of restaurants and hotels, along with a very noticeable drop in revenues in the hospitality and tourism industries. In the restaurant industry, only food delivery or pickup has been allowed. The closure of leisure activities (cinemas, sports facilities, theatres, museums, etc.) has led to severe setbacks in this industry. Worldwide landing and birthing bans for aircrafts and ships have created a sharp decline in these industries.

It is already clear that the total state aid, especially in Western countries, will be at levels exceeding those of all previous crises. By April 21st, the EU and its member states had tied together rescue/stimulus packages worth €3.4 trillion. These enormous measures have been taken based on first estimates of economic development; their sums predict a significant economic downturn “shaping up as the deepest dive on record for the global economy for over 100 years” (Coombs, 2018).

2.14 Family Business and COVID-19 Crisis

Family ownership reduces the likelihood that firms follow formal crisis procedures (Faghfouri et al., 2015). Several particularities may make family firms apt to instead navigate through crises based on their focus on family, ownership and business continuity.

Family firms usually have a long-term horizon (Coombs, 2018), intending to pass a “clean and sustainable company onto subsequent generations” (Bauweraets, 2019). Consequently, family members tend to be willing to sacrifice short-term financial gains for the long-term survival of their family's legacy (Lin et al., 2017; Minichilli et al., 2016). Reflecting family firms' typical long-term orientation (Coombs, 2018), Giovanni Agnelli, the patriarch of the Italian multi-industry business primarily known for its activities in the automotive industry, and owner of Ferrari, Lancia, Alfa Romeo and Chrysler states, “the [family] company is an inheritance to be protected and handed on. It is the outcome of the next and each generation's commitment to the last” (Baker et al., 2020).

As a consequence of long-term family ownership, family members are typically emotionally attached to their firm (Berrone et al., 2020). This may affect their performance during a crisis (Arrondo-Garcia et al., 2016). Further, they tend to build up and maintain long-term relationships with internal and external stakeholders, including their employees (Carney, 2015; Miller and Le Breton-Miller, 2015). They behave more responsibly toward their employees and their environment, closely aligning strategic decisions with their firm's values and non-economic goals (Bretts, 2019). As such, family firms focus more on the
bigger picture and long-term relations and commitments than immediate, short-term outcomes. Put differently, family firms tend to be less driven by short-term goals, and give priority to the longevity of the family firm (Dane and Pratt, 2017).

Family firms also tend to be able to leverage their liquidity, have lower costs of debt (Lins et al 2017) and build on their so-called patient capital, that is, financial resources that can be invested without any threat of liquidation (Coombs, 2018). As a consequence, during times like an economic downturn or a financial crisis, family firms can better mobilize their resources to maintain their activities are more resilient (Herbane, 2020) and tend to financially outperform non-family firms (Minichilli et al, 2020). Furthermore, crisis situations come along with unexpected challenges that typically require fast and decisive strategic decision-making (Cahyanto et al, 2016). And yet, family firms have always been particularly good at reacting quickly, decisively and creatively (Dane and Pratt, 2017) to acute situations. Stemming from family firms' centralized decision-making and their owners' simultaneous stock of ownership, family and business information, procedures and processes are less complicated and decision-makers can react quickly and discretely focus on both firm and the family interests (Boddy, 2016). Moreover, owning families influence and control key decision-making processes (Carney, 2015), which leads to increased strategic flexibility through fewer formalizations and procedures.

In this vein, many family firms have responded decisively and quickly to the ongoing pandemic by, for example implementing preventative measures to mitigate contagion and safeguard their business activities forthwith.

### Table 1

**Overview of historical diseases, Worldwide**

<table>
<thead>
<tr>
<th>When</th>
<th>Epidemic</th>
<th>Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>14th Century</td>
<td>Bubonic plague</td>
<td>25 million</td>
</tr>
<tr>
<td>1918–1920</td>
<td>Spanish flu</td>
<td>50 million or more</td>
</tr>
<tr>
<td>1981–ongoing</td>
<td>AIDS</td>
<td>&gt;25 million</td>
</tr>
<tr>
<td>2002–2004</td>
<td>SARS</td>
<td>774</td>
</tr>
<tr>
<td>2009</td>
<td>Avian flu</td>
<td>151,000–575,000</td>
</tr>
<tr>
<td>2014–2016</td>
<td>Ebola</td>
<td>&gt;11,000</td>
</tr>
<tr>
<td>2020</td>
<td>Corona/COVID-19</td>
<td>185,500 (as of April 23rd, 2020) (Johns Hopkins University)</td>
</tr>
</tbody>
</table>
Table 2

Overview of natural disasters and their costs

<table>
<thead>
<tr>
<th>Event</th>
<th>Countries, year</th>
<th>Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tsunami</td>
<td>Japan, 2011</td>
<td>$235 billion</td>
</tr>
<tr>
<td>Hurricane</td>
<td>USA, 2005</td>
<td>$81.2 billion</td>
</tr>
<tr>
<td>Earthquake</td>
<td>Haiti, 2010</td>
<td>$8 billion</td>
</tr>
<tr>
<td>Tsunami</td>
<td>India, Indonesia, Sri Lanka, Thailand, 2004</td>
<td>$9.5 billion</td>
</tr>
<tr>
<td>Coronavirus</td>
<td>Worldwide pandemic, origin in China, 2019</td>
<td>TBD</td>
</tr>
</tbody>
</table>

Source: Amannet al., 2019

3.0 Methodology

The study adopted a survey design method. This is because it is appropriate for an academic research of this sort, which studies a large population and generalizes the findings of the population.

3.1 Population of the Study

The population of the study has workers of Dangote Group (comprising Dangote Floor, Dangote Sugar and Dagote Pasta), the family business under study in Kano State. Each of the workers belong to different levels which include one hundred and thirteen top level management, three hundred and forty seven middle level management and five hundred and thirty five lower level management, which made up the total population of nine hundred and ninety five workers of the family business under study in Kano, Nigeria.

Dangote Group

<table>
<thead>
<tr>
<th>Dangote Flour Ltd, Kano</th>
<th>Top level Management</th>
<th>Middle Level Management</th>
<th>Lower level Management</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>41</td>
<td>130</td>
<td>235</td>
</tr>
</tbody>
</table>

Source: Baldwin and Weder di Mauro, 2020
<table>
<thead>
<tr>
<th>Dangote Sugar Industry, Kano</th>
<th>37</th>
<th>115</th>
<th>160</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dangote Pasta Industry, Kano</td>
<td>35</td>
<td>102</td>
<td>140</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>113</td>
<td>347</td>
<td>535</td>
</tr>
</tbody>
</table>

**Source**: Dangote Group Bulletin, 2019

### 3.2 Determination of Sample size

The sample size for the study was determined using Freund and Williams formula as demonstrated underneath.

\[
n = \frac{Z^2pq}{e^2}
\]

where 

- \(n\) is the sample size,
- \(Z\) is the table Z value of a two tailed test in which the level of the significance is 5%,
- \(p\) is the proportion of the respondents that agree with a statement corresponding to the objective in a pilot study, \(p + q = 1\),
- \(e\) is the error term.

For \(Z = 1.96\), and \(p = .9\), \(q = .1\) and \(e = 0.25\), \(n = 553\).

\[
n = \frac{1.96^2.9(1)}{0.25^2} \approx 553
\]

### 3.3 Description of Research Instruments

There were two research instruments. The first was a questionnaire containing 40 questions. The questionnaire had two sections namely the personal data section and the section that addressed the data on the analysis of the family business and covid 19 imbroglio in 21st
century: the Dangote Group, Nigeria. The personal section was made up of such demographic characteristics as sex, marital status, highest educational qualification, age, status and durations worked in years. The respondents were given alternative answers to tick. The second section was on the analysis of family business and co-vid 10 imbroglio in 21st century: the Nigerian chapter, the designed questionnaire was on a 5- points likert scale arranged according to the objective. The responses are Strongly Agree, Agree, Undecided, Disagree and Strongly Disagree. For positive statements the scores are 5, 4, 3, 2 and 1. Secondly an oral interview guide was used..

4.0 Test of Hypotheses
The result from the test of hypotheses is presented in this section.

4.1 Test of Hypothesis One

There is a significant positive impact of Self-isolation on Performance of family business in Kano State, Nigeria.

The data presented were tested using the linear regression analysis. The results are presented in Table 4.1

Table 4.1: Summarized Regression Results for Hypothesis One

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>5.801</td>
<td>95.156</td>
<td>0.000</td>
</tr>
<tr>
<td>Self-isolation (SI)</td>
<td>0.936</td>
<td>61.347</td>
<td>0.000</td>
</tr>
</tbody>
</table>

$r = 0.957; r^2 = 0.916; RegSS = 350.636; ResSS = 31.143; F-value = 3763.432; sig. = 0.00$

Source: SPSS Results

The result of the regression analysis summarized in Table 4.1 shows that the model for the relationship between self isolation (S) and family business in Kano State is:

$$FB = 5.801 + 0.936SI$$

This reveals that self-isolation (S) has a positive impact on family business (F). Furthermore, as t-value > 1.96 (t-critical) and p-value < 0.05, this impact is significant.
Also, the regression coefficient (r) of 0.957 indicates a strong relationship between the independent variable (self-isolation) and the dependent variable (family business). The coefficient of determination (r²) of 0.916 reveals that 91.6% of the variation observed the dependent variable is caused by the independent variable. Having a regression sum of square of 350.636 > the residual sum of squares of 31.143, this variation is not due to chance. The F-value and corresponding significance value of 3763.432 (0.000) shows that these results are significant.

Based on this, the results indicate that Self-isolation has significant positive impacts on performance of family business.

4.2 Hypothesis Two
Self-care has a significant positive impact on performance of family business in Kano State, Nigeria

In testing this hypothesis, the data were tested using the regression analysis. The results are presented in table below.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>6.773</td>
<td>82.705</td>
<td>0.000</td>
</tr>
<tr>
<td>Self-care(SC)</td>
<td>1.009</td>
<td>48.122</td>
<td>0.000</td>
</tr>
</tbody>
</table>

\[ r = 0.905; \ r^2 = 0.819; \ \text{RegSS} = 389.521; \ \text{ResSS} = 85.953; \ F-value = 2315.746; \ \text{sig.} = 0.00 \]

Source: SPSS Results

The result of the regression analysis summarized in Table 4.2 shows that the model for the relationship between Self-care (SC) and family business (FB) in Kano State is:

\[ FB = 6.773 + 1.009SC \]

This reveals that Self-care has a significant positive impact on performance of family business in Kano State.

Furthermore, as \( t \)-value > 1.96 (t-critical) and \( p \)-value < 0.05, this impact is significant.

Also, the regression coefficient (r) of 0.905 indicates a strong relationship between the independent variable (Self-care) and the dependent variable (family business). The coefficient of determination (r²) of 0.819 reveals that 81.9% of the variation observed the dependent variable is caused by the independent variable. Having a regression sum of square of 389.521 > the residual sum of squares of 85.953, this variation is not due to chance. The F-value and corresponding significance value of 2315.746 (0.000) shows that these results are significant.
Based on this, the results indicate that Self-care has a significant positive impact on performance of family business in Kano State, Nigeria.

### 4.3 Hypothesis Three

**Self-efficacy has a significant positive impact on performance of family business in Kano State, Nigeria.**

In testing this hypothesis, the data presented were tested using the regression analysis. The results are presented in table 4.3.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>6.291</td>
<td>72.596</td>
<td>0.000</td>
</tr>
<tr>
<td>Crisis Communication</td>
<td>0.882</td>
<td>41.482</td>
<td>0.000</td>
</tr>
</tbody>
</table>

\[ r = 0.879; r^2 = 0.772; \text{RegSS} = 322.430; \text{ResSS} = 95.290; \text{F-value} = 1729.047; \text{sig.} = 0.00 \]

Source: SPSS Results

The result of the regression analysis summarized in Table 4.3 shows that the model for the relationship between Self-efficacy (SE) and family business (FB) in Kano State is:

\[ FB = 6.291 + 0.882SE \]

This reveals that Self-efficacy (SE) has a positive impact on performance of family business.

Furthermore, as t-value > 1.96 (t-critical) and p-value < 0.05, this impact is significant.

Also, the regression coefficient (r) of 0.879 indicates a strong relationship between the independent variable (Self-efficacy) and the dependent variable (family business). The coefficient of determination (r^2) of 0.772 reveals that 77.2% of the variation observed in the dependent variable is caused by the independent variable. Having a regression sum of square of 322.430 > the residual sum of squares of 95.290, this variation is not due to chance. The F-value and corresponding significance value of 1729.047 (0.000) shows that these results are significant.

Based on this, the results indicate that Self-efficacy has a significant positive impact on performance of family business.

### 4.4 Discussion of Findings

The findings of this study are discussed under the various objectives of the study.
4.4.1 Determine the impact of Self-isolation on performance of family business in Kano State, Nigeria

With regards to the objective one, to determine the impact self-isolation on performance of family business. The finding of Hypothesis 1 shows that self-isolation has significant positive impacts on performance of family business \((r = 0.957, p = 0.000, t \text{ value} = 95.156 > t\text{-critical} = 1.96)\). This is in line with Sammon and Viratyosin (2020) who carried out a study on the impact of self-isolation on organizational performance in Dublin, Ireland. 68 employees were selected from the entire workers for the study and data was tested using multiple regression method. He found that self-isolation had a positive and significant impact on organizational performance.

4.4.2 Ascertain the impact of self-care on performance of family business in Kano state, Nigeria

With regards to the objective two, to ascertain impact of self-care on performance of family business in Kano state, Nigeria. The finding of Hypothesis 2 shows that self-care has significant positive impact on performance of family business in Kano State, Nigeria. Ojikwe (2020) carried out a study on the impact of self-care on Productivity in a family business located in Aba, Abia State of Nigeria. The population of the study was 123 family members (Extended family inclusive). Data were collected from both primary and secondary data. Chi-square tool was used to test the data. At the end of the day, he found that Self-care had a positive and significant impact on the Productivity which is the extent to which total output exceeds the total input in the family business he studied.

4.4.3 Evaluate the impact of Self-efficacy on performance of family business in Kano State, Nigeria

With regards to the objective three, to evaluate the impact of Self-efficacy on performance of family business in Kano State, Nigeria. The finding of Hypothesis 3 shows that Self-efficacy has a significant positive impact on performance of family business in Kano, Nigeria. Adika (2020) did a study on the impact of Self-efficacy on profitability of a family business located at Osisi-oma in Abia State. He found that the crisis communication had a positive impact on Profitability of the family business being studied.

5.0 Conclusion

This study concludes that the advert of Co-vid 19 has tremendously exposed family businesses to online transactions and also several opportunities. This implies that there is a need for family businesses to pay attention to self-isolation, self-care, self-assessment, self-efficacy and crisis communication as well as other measures internally and externally available in order to reduce the spread of Co-vid 19, have an edge over their competitors and achieve a high productivity.
5.1 Recommendations

Based on the findings of this study, it is recommended that:

i. Family businesses should create strategic alliance with their foreign counterpart so as to gain new and practical knowledge on the modern fight against co-vid 19.

ii. Family businesses should adopt modern measures internally and externally available so as to demote the spread of covid 19 in Kano State, Nigeria.

iii. There should be constant upgrading of proper awareness such as new programmes and new method of co-vid 19 avoidance in order to arrest the novel disease.

iv. Appropriate modern organizational information, communication and technical knowledge should be adopted.

5.2 Suggestion for Further Studies

This study suggests that, since the issue of co-vid 19 is a new development, studies should not be restricted to family business alone but be carried out in all fields of life not only in Kano State, Nigeria as a country but across the globe.
References


