SARSCOV-19 amidst corruption: Does the civil society matter? – An empirical study

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The pandemic outbreak has dealt consequences on global engagements and structures. With the ongoing search for pandemic-mitigating measures and the excesses (notably corruption) erupted in its wake, concerns have been raised about the decline in public trust, transparency and satisfaction – particularly in Ghana. This situation has spurred multilevel governance discussions regarding pandemic management. Ensuingly characterising policy makers’ propositions in this regard is the civil society’s salience as a control valve to governance deficits like corruption. Therefore, transcending the anecdotal claims on civil society’s efficacy, this study takes a state-society perspective to probe its relevance in fostering trust, transparency and satisfaction, relative to corruption-stricken pandemic governance. The current study engages the general systems theory as a conceptual lens. The structural equation modelling technique was used in analysing data (n = 519) gathered through the questionnaire survey approach. Though results of data analysis affirmed the negative effects of corruption on trust, transparency and satisfaction, the civil society received affirmation as an enhancer of trust, transparency and satisfaction. In view of these study findings, implications and future research suggestions are delimited.

KEYWORDS
citizens’ trust, civil society, corruption, COVID-19, Ghana, transparency and satisfaction

1 | INTRODUCTION

Incontrovertibly, the COVID-19 pandemic outbreak has posed substantial challenges to not only public health structures, but also, individuals, households and populations, as well as the entirety of global economies and corporate governance structures (Arkorful, 2022a; Arkorful, Lugu, Shuliang, 2021; Tuffour et al., 2021). With the pandemic outbreak and the increasing mortality and morbidity cases, in addition to being described as a virulent virus with inestimable ramifications on social structures in both developed and developing polities, COVID-19 is also reported as the 21st Century’s pandemic with life-threatening consequences (Arkorful, 2022b). As of 27 May 2022, there had been 525,467,084 confirmed cases of COVID-19 including 6,285,171 deaths (World Health Organisation, 2021). Given the ramifying effects of COVID-19, governments and other stakeholders have come under intense pressure to incept effective countervailing management structures and measures. As a result, mechanisms including mask wearing, social distancing, contact tracing and mobility restrictions have been enforced.

Profoundly, these arrangements have been in place–prior to, and even after vaccine discovery (i.e., Pfizer-BionNTech, Gamaleya Sputnik V, AstraZeneka, Moderna, Sinovac, Johnson and Johnson etc.). To this end, the urgency to augment and further sustain inroads made thereof, has necessitated the procurement of items including test kits, ventilators, and other personal protective equipment. However, the procurement process and other related pandemic management endeavours have spurred unintended consequences giving rise to irregularities and malfeasance across both developed and developing countries (Bellows, 2020; Bradley et al., 2020). These irregularities come in many forms including awarding contracts to political cronies.
receiving kickbacks and petty theft of COVID-19 resources among others (Harris et al., 2020; Rose-Ackerman, 2021). This situation is not unique to the African context. For example, the Africa Research Bulletin (2020) reports that Corruption Watch (a South African anti-corruption organisation) received a daily average of eleven COVID-19 corruption complaints totalling 4780 as of 25 March 2020 in South Africa, one of the hardest hit countries in Africa. Moreover, featuring prominently in the report are cases of maladministration and procurement-related malfeasance.

Furthermore, Uche et al.’s (2020) research on the negative implications of corruption in Africa (Uche et al., 2020) lists a wide spectrum of corruption incidents, with Ghana, Kenya and South Africa among the worst-affected countries. They report of COVID-19 money misappropriation totalling US $69 million in Kenya. In the case of Ghana, there has been reports of US $1 million corruption regarding the award of contracts to two foreign companies (iQuent technology and Ascend Digital solutions) without recourse to Ghana’s procurement laws, in addition to COVID-19 vaccine theft totalling approximately US $ 1256.4 (Ghana News Agency, 2021). Also, a 67-page paper titled ‘strengthening accountability systems,’ co-authored by the Community Development Alliance and the Commonwealth Foundation, recounts incidents of COVID-19-afflicted corruption in Ghana (Ghanaweb, 2021, 12 May; Transparency International, 2020, 14 September).

The potential for these corruption charges to have far-reaching consequences has sparked debate on radio, television, and social media. With these discussions demonstrating a population-wide dissatisfaction with the situation at hand, it proposes an antidote in the form of civil society participation, while capturing prevailing realities, notably, the sharp decline in citizens’ trust, transparency perceptions, and overall satisfaction with pandemic governance. In this context, civil society is projected as capable and efficient in addressing governance inadequacies while also bolstering and maintaining inroads. Against this backdrop, the current research aims to ascertain the imperative nature of the civil society regarding pandemic management in Ghana.

The growing incidents of corruption has attracted scholarly attention (Arkorful, Abdul-Rahaman, et al., 2021; Arkorful, Lugu, Hammond, Basiru, Afriyie, et al., 2021; Beshi & Kaur, 2020) significantly highlighting contrasting and contested effects of corruption. While some scholars (Aidt, 2003; Grosjean, 2011; Holmes, 2007; Levy, 2007) pin-point corruption’s inherent benefits like its potential to help overcome bureaucratic obstacles, others (Doig & Theobald, 2000; Neshkova & Kalesnikaitė, 2019; Park & Blenkinsopp, 2011) describe its negative effects on populations and governance, including a reduction in trust, transparency and satisfaction.

In light of prior research (Zakaria, 2013) emphasising corruption’s negative effects, Botchway (2018) affirms the civil society’s potency to countervail them. Arkorful, Lugu, Hammond, and Basiru (2021) and Arkorful, Abdul-Rahaman, et al. (2021), in an attempt to probe governance efficiency and effectiveness underpinnings, in a more recent study establish trust and transparency as directly antecedental to citizens’ participation in governance. Christensen and Laegreid (2005) in a similar breadth illuminate key components of governance, such as satisfaction via trust. Against the backdrop of corruption reports precipitating a population wide decline in trust, transparency and satisfaction, and especially in light of the mixed findings on corruption’s impact (Doig & Theobald, 2000; Grosjean, 2011; Levy, 2007; Neshkova & Kalesnikaitė, 2019), the current study responds to the public’s call on civil society incorporation in COVID-19 pandemic governance to unravel the ‘blackbox’ encasing the civil society. In view of the foregoing discourse, the research sets out to provide empirical evidence on the impacts of corruption on citizens’ trust, transparency and satisfaction. Simultaneously, the civil society’s role in pandemic governance is investigated.

The current study uses the general systems theory as the theoretical framework to consider pandemic governance as a collective endeavour, with a special emphasis on the varied composition of civil society. The quantitative study analyses data based on the structural equation modelling technique. The study findings provide significant guidelines and policy pointers on the relevance of the civil society to harnessing trust, transparency and satisfaction in corruption afflicted governance situations. This will provide policymakers and stakeholders with a foundation for developing long-term pandemic governance mechanisms. The authors have organised the remaining parts of the study article as follows to improve clarity and comprehension: Section 2 presents the literature review. The theoretical background and research hypotheses is captured under Section 3. Methodology is delineated under Section 4. Data analysis and results is highlighted in Section 5. Discussion of findings and implications is presented in Section 6. The final part presents the conclusion, limitations and future research directions under Section 7.

2 | LITERATURE REVIEW

2.1 | COVID-19 in Ghana – Overview

Ghana’s initial experience with COVID-19 were two cases recorded at the Noguchi Memorial Institute for Medical Research, on 12 March 2020. These two cases recorded from inbound travellers from Turkey and Norway (Odikro et al., 2020) were enough to alert state authorities on the urgency to incept measures to mitigate the pandemic’s crippling impacts (Antwi-Boasiako & Nyarkoh, 2021). Among some of the early measures put in place were the enforcement of mask wearing and a population wide observation of COVID-19 protocols like social distancing. In addition, handwashing came to rank high among hygiene recommendations. Moreover, with the enactment of the ‘Imposition of Restrictions Act 2020,’ by virtue of which an executive instrument (EI 64) was enforced by the President of Republic of Ghana, the imposition of mobility restrictions led to a lockdown imposition in bigger cities like Kumasi and Accra.

With the invocation of the 2012 Public Health Act 851, a health emergency was declared, seeing to restrictions on travelling and general socio-economic activities. With the exclusion of frontline workers defined to include security service workers (i.e., police, military, fire
service etc.), health sector workers (i.e., nurses, doctors and other health sectors) and other essential service providers, all economic engagements were halted (Addadzi-Koom, 2020). The government of Ghana’s commitment to combatting the pandemic and mitigating its deadly effects on its citizens is ostensibly affirmed by these concerted measures. Nonetheless, pandemic governance in Ghana has not been seamless. Not only is it beset by corruption and reports of shady deals, but also, it is saddled with stakeholder clashes, such as the impasse between the Information Ministry and the Community Development Alliance (a civil society organisation) over the $1 million COVID-19 app contract, as cited in the COVID-19 corruption risk assessment report (Myjoyonline, 2021, 21 April). Considering the surge in corruption reports, all against government’s bureaucracy (i.e., Information Ministry) and the civil society (i.e., Community Development Alliance) deadlock, the current study attempts to empirically probe the civil society’s imperativeness to pandemic governance—as public discourses on radio and television programs in Ghana seek to suggest.

2.2 | COVID-19 and corruption manifestations in Ghana

Ghana is one of the leading African countries with a high-democratic governance credentials. It is therefore not surprising that the country has oftentimes earned appreciable scores on Transparency International’s global rankings. The creation and subsequent empowerment of statutory institutions like the Commission for Human Rights and Administrative Justice, Office of the Attorney General, Public Accounts Committees and Office of the Auditor General demonstrates Ghana’s commitment to good governance tenets and principles. In a further demonstration of an unwavering devotion, Ghana has created the Economic and Organised Crimes Office and that of the Office of the Special Prosecutor, which are all responsible for fighting corruption and organised crimes.

Despite these legal provisions, Ghana, like other developing countries, is engulfed in corruption, to some extent driven by the existence of weak and porous institutional structures. This situation, which permeates corporate structures not excluding the health sector, appears more pronounced in the wake of COVID-19 outbreak. Evidence to this include the 36 Covishield vaccine impropriety, totalling US$ 1256.4 (Ghana News Agency, 2021, 16 April). Another evidence of COVID-19 pandemic afflicted corruption is the US$ 1 million COVID-19 tracker app development awarded iQuent technology and Ascend Digital solutions (foreign companies) – reportedly done in contravention to Ghana’s procurement laws. Furthermore, the Community Development Alliance and Commonwealth Foundation report emphasises COVID-19 corruption, later reiterated by the Advocacy and Legal Advice Centre (ALAC) (Ghanaweb, 2021, May 12; Transparency International, 2020, 14 th September). Given Ghana’s status as a model in governance in Africa, these reports of improprieties are disturbing as they have the potential to dent its image and further fuel bad pandemic governance practises in other countries. This has provided the motivation to investigate COVID-19 corruption and the civil society’s role in resolving the imbroglos that have erupted.

3 | THEORETICAL BACKGROUND AND RESEARCH HYPOTHESES

3.1 | The general systems theory

The study draws on the general systems theory as a lens. Within the theory’s context, scholars like Von Bertalanffy (1972) perceive systems as composed of interactive structures. The theory conceives the amalgam of social structures as interdependent entities whose functionality is contingent on relationships between networked grid of actors and entities (Arato & Luhmann, 1994). Importantly, despite acknowledging the importance of interdependent system parts to overall system coordination, it is critical to emphasise that these relationships do not exist in isolation from resource forms like human and financial, which together shape it (Kindyamtima, 2017). As a result, administrators, managers, and persons in positions of corporate governance must endeavour leveraging cross-sectoral resources and strengths to ensure the efficient and successful functioning of corporate systems.

In view of the theory’s relevance, prior studies have employed it as a framework to interrogate system functionality or otherwise. Griffiths (1964), for example, applies the theory to explore relationships and their effect on system functionality in the education sector. The study subsequently identifies system as comprising sub-systems and supra systems with distinct operational boundaries that act as sieves, separating not only inputs from outputs, but also, systems from the general environment. Much as the theory anchors system functionality on the environment, it recommends studying systems taking into consideration relationships between system parts and the environment as well. Considering corporate governance systems as open systems reliant on external environment stimulus, it is inferable that the realisation of system’s goals will largely depend on exogenous influences. In this study, ‘system’ is used with reference to the civil society composed of complexly interwoven elements existing at micro, macro and meso levels.

To avoid over generalisation and over simplification of the civil society which till now remains a contested concept in social science spheres (Edwards, 2014), the current study invokes it with reference to the amalgam of voluntary and non-governmental social forces (i.e., individuals, organisations institutions, etc.) situated at the confluence of state, family and market, pursuing neither for-profit motives nor power within the state precincts. Considering the civil society as a coherent sub-system, and tying it to the various levels (micro, macro and meso), it is reasonable to infer that, although an integrated system will ensure efficiency, a disconnect will impede same (Plomp & Pelgrum, 1993). Predicated on this, we seek to test the salience of the generality of the civil society to COVID-19 pandemic governance in Ghana. Based on the input–output-feedback relationship sequence of Hanson, as cited by Oyebade (2001), the civil society is
conceptualised as comprising actors and structures whose interaction is critical to pandemic governance.

As a result, while testing the theory’s proposition and admitting that interrogating civil society must consider inter-stakeholder relations, the study portrays civil society as an outgrowth of social environment relations that provide inputs towards efficient and effective countervailing of imbroglios like the one caused by the COVID-19. Therefore, against the backdrop of the rising spate of COVID-19 related corruption in Ghana, the reported decline in citizens’ trust, transparency and satisfaction, all against the clarion call for civil society’s incorporation as a control valve to the deficits, the current study sets out to ascertain its potency to pandemic governance. The study does so on the back of the hypothesis that the external environment plays a crucial role in shaping social structures. The study objective goes beyond theoretical replication considerations to determine civil society’s significance in counterbalancing excesses associated with the pandemic, while fostering trust, transparency, and satisfaction. With reference to Ghana, the study findings will help identify the relevance of the civil society, which in recent times has been masked by partisan politics.

3.2 | Hypotheses development

This study proposes a five-construct model composed of ‘corruption,’ ‘citizens’ satisfaction,’ ‘civil society participation,’ ‘trust’ and ‘transparency.’ Following this, 10 hypotheses are proposed, out of which four seeks to verify direct construct correlations, while the remaining examine the moderating impact of civil society on the relationships between trust and satisfaction on the one hand, and transparency and satisfaction on the other (Figure 1).

3.2.1 | Corruption and citizens’ satisfaction

Corruption is one of the challenges afflicting public and private entities in developed and developing countries. Conceptualised as reprehensible behaviour amounting to a deviation from public service ethics and ethos (Rose–Ackermann, 1999), corruption is noted to exert straining effects on service delivery and organisational performance. It is reportedly a precipitant of public cynicism and doubt regarding institutions, with effects catalogued to include erosion in public trust and confidence in state and non-state institutions (Doig & Theobald, 2000; Neshkova & Kalesnikaite, 2019; Park & Blenkinsopp, 2011). Despite the negative repercussions, erstwhile studies (Grosjean, 2011; Levy, 2007) have echoed its positive effects in counteracting strict bureaucratic processes and procedures in organisations. A distillation of these positions reveals not just a lack of consensus on the effects of corruption, but also depicts context-specific consequences – highlighting the necessity to investigate such impacts in many circumstances, including pandemic governance.

The growth in corruption cases, as well as the anecdotal reports of a population-wide reduction in confidence, have provided grounds to investigate the effects of corruption on residents’ satisfaction with COVID-19 pandemic governance in this study. In this vein, based on the anecdotal claims from the Ghanaian public, and particularly predicated on the conflicting scholarly evidence (Neshkova & Kalesnikaite, 2019; Park & Blenkinsopp, 2011) on corruption’s consequences, this study attempts to empirically clarify the stalemate, and avers that, given the pandemic’s debilitating effects and citizens’ expectations for results-oriented responses, stakeholder attempts to leverage the situation for ulterior gains would result in widespread dissatisfaction. In light of the foregoing discourse, we test corruption’s effect on citizens’ satisfaction with government’s COVID-19 pandemic management and hypothesise that:

Hypothesis 1. Corruption has a significant negative relationship with citizens’ satisfaction regarding government’s pandemic management.

3.2.2 | Corruption, trust in government and citizens’ satisfaction

Trust remains complex and amorphous concepts in governance lexicons. Its centrality in governance discourses has recently evoked a more renewed interest-precipitated partly by its perceived decline across civil societies. As abstract as the concept of trust appears, it encompasses elements such as fairness, transparency, accountability and equity among others. The aforementioned variables constitute significant antecedents of citizens’ trust and satisfaction with government and governance (Pellegata & Memoli, 2018; Uslaner, 2004). The growing streams of studies on trust have established a range of underpinnings as comprising citizens’ contentment with policy and economic performance (Cole et al., 2018; Hetherington & Husser, 2012; Newton & Zmerli, 2011). Moreover, other studies outline not only social capital influence, but also, scandals and corruption prevalence as significant determinants of trust and satisfaction (Cole et al., 2018; Grossman & Sauger, 2017).

Owing to the reported decline in citizens’ trust and satisfaction levels, the current study acknowledges these scholarly perspectives, and juxtapose them within the context of Ghana’s corruption-riddled
pandemic governance. To this end, the study re-echoes a similar reasoning to verify the relationships between corruption, citizens’ trust, and satisfaction. Though the relationship between the triple variants of corruption, trust, and satisfaction have been established by prior studies (Chang & Chu, 2006; Weber et al., 2017), it remains unexplored in crises management. Therefore, given the pandemic’s outbreak and the related corruption incidents, this study finds it relevant to broach these relations, and hereby propose the following hypotheses:

**Hypothesis 2.** Corruption has a significant negative relationship with citizens’ trust in government’s pandemic management.

**Hypothesis 3.** Trust has a significant mediating effect on the relationship between corruption and citizens’ satisfaction with government’s pandemic management.

### 3.2.3 | COVID-19 corruption, transparency and citizens’ satisfaction

In the context of governance and administration, transparency refers to qualities such as openness and clarity. Transparency is used in a variety of contexts to refer to citizens’ conviction regarding the existence of governance systems based on honesty. On the other hand, corruption refers to the use of one’s position or influence for personal benefit (Kasser-Tee, 2021). Satisfaction reinforces the notion of a population’s contentment with public goods and service delivery processes and systems. Corruption is noted as capable of precipitating a decline in citizens’ transparency perceptions, as well as their satisfaction and cooperation with administrative structures. In addition to weakening citizens’ trust in governance, corruption is posited to constrain development, while erupting legitimacy crises in polities. Erstwhile studies have explored corruption’s relationship with citizens’ happiness (Chang & Chu, 2006; Pellegrina & Memoli, 2018). Park and Blenkinsopp (2011) have in this regard contributed to the growing literature by probing the moderating effects of transparency in this context. With these observations, this study sets out to explore the impact of corruption and transparency on trust. On the same score, the study also verifies the mediating role of transparency. For our empirical study, the following hypotheses are proposed:

**Hypothesis 4.** Corruption has a significant negative relationship with transparency.

**Hypothesis 5.** Transparency has a significant positive relationship with citizens’ trust.

**Hypothesis 6.** Transparency has a significant positive mediating effect on the relationship between corruption and satisfaction.

### 3.2.4 | Citizens’ trust, satisfaction and civil society participation

The composition of trust as a multidimensional concept notwithstanding, scholars have endeavoured to furnish a panoply of conceptualizations, with Rawlins (2008) relating it to individual confidence in an entity. Arkorful, Lugu, and Shuliang (2021) illuminate trust as subsisting on an admixture of beliefs and expectations. Establishing trust as a raw material for laying a strong foundation, Arkorful, Lugu, and Shuliang (2021) seem to concur with the notion of trust as an indispensable fuel for corporate governance machinery. According to these scholars, trust enhances satisfaction and participation. Nonetheless, deriving inherent benefits cannot be treated in isolation from good governance measures (Park & Blenkinsopp, 2011; Rawlins, 2008) that enables the creation of a conducive atmosphere for civil society participation and overall, government engagements (Arkorful, Lugu, & Shuliang, 2021). In their trust elucidation, Arkorful, Lugu, and Shuliang (2021) emphasise civil society incorporation as a linchpin to expanding the civic space, and at the same time, forging social cohesion. Gramsci (1971), proposes the civil society as a super structure on which social entities subsist and thrive. Conceived as emblematic of the amalgam of society, he underscores the civil society in light of its capability to maintain national stability by way of alternating ‘power currents’ between states and their ancillary parts. Bawa (2011) recounts the civil society’s role as principally entailing the pursuit of social sanity including, fighting corruption. Relying on Bawa (2011), this study takes a state-society viewpoint to examine the civil society’s nuanced role relative to improving citizens’ contentment in the context of pandemic management. The study hereby delineates the hypotheses below:

**Hypothesis 7.** Citizens’ trust has a significant positive relationship with their satisfaction levels with government.

**Hypothesis 8.** Transparency has a significant positive relationship with citizens’ satisfaction with government.

**Hypothesis 9.** Civil society participation has a significant moderating effect on the relationship between transparency and citizens’ satisfaction.

**Hypothesis 10.** Civil society participation has a significant moderating effect on the relationship between citizens’ trust and satisfaction.

### 4 | METHODOLOGY

#### 4.1 | Study area, sample determination and data collection

From the onset, the study prioritised the need to gather sufficient data. This made it important to prioritise a heterogeneous population,
given that, in addition to helping to unravel the nuances and complexities in behaviour across populations, study outcomes anchored on such populations augment and strengthen the replicability, reliability and validity of findings. Hence, the research utilised the cross-sectional survey approach to draw data from 1 April 2021 to 3 June 2021. With recourse to cosmopolitan characteristics, the research selected three areas in Ghana composed of the Greater Accra (Accra), Northern (Tamale) and Ashanti (Kumasi) Region. The study participants were selected randomly based on their readiness, availability and willingness to partake in the research. The study used a questionnaire survey to elicit data. Before data collection, the researchers briefed participants on the purpose of the study and the reason why they should participate. The researchers informed participants about their liberty to withdraw from the study at any time they deem appropriate (thus, before, during and even after data collection). This study however recorded no withdrawal. The research guaranteed participants anonymity regarding any information provided. The researchers spent an average of 30 min in administering questionnaires.

The sample for the study was determined according to the recommendations of Hair et al. (1998) and Kline (2010). The ideal sample size for structural equation modelling-based investigations, according to these experts, should be between 200 and 300. The study increased the sample size beyond this criterion. The authors set a sample size of more than 500. Using large samples in studies, according to Green (1991), aids in generalising findings. Following this, the researchers established a 95% confidence interval (implying a 5% sampling error assumption) and distributed 550 questionnaires, of which 530 were returned, representing a 96 percent response rate. After sorting and discarding questionnaires with incomplete responses, 519 questionnaires remained. Table 1 captures study participants’ composition. The researchers adhered to strict rigours, to ensure accuracy in reporting findings. Because the study drew data from across three areas, T-tests and Chi-square tests were conducted to ascertain sample differences. Results however revealed no significant differences (Armstrong & Overton, 1977). To avoid threats of research bias that often times characterise mono methodological studies (Arkorful, Hammond, et al., 2022), the researchers considered the potential effects of common method bias (CMB) and used the Harman’s one factor test, which revealed scores less than 50.0, confirming that CMB is not a problem (Harman, 1976). To eschew bias in the current study, the researchers restrained themselves from offering gifts to respondents because of its tendency to influence and skew responses.

### Table 1: Demographic characteristics of respondents

| Demographics          | Frequency | Percentage |
|-----------------------|-----------|------------|
| **Gender**            |           |            |
| Male                  | 244       | 47.0       |
| Female                | 275       | 53.0       |
| **Age**               |           |            |
| 41+                   | 62        | 11.9       |
| 36-40                 | 91        | 17.5       |
| 31-35                 | 120       | 23.1       |
| 26-30                 | 131       | 25.2       |
| 18-25                 | 115       | 22.2       |
| **Area of Residence** |           |            |
| Rural                 | 130       | 25.0       |
| Urban                 | 199       | 38.3       |
| Peri-urban            | 190       | 36.6       |
| **Education level**   |           |            |
| Primary school        | 78        | 15.0       |
| High school           | 106       | 20.4       |
| Diploma               | 128       | 24.7       |
| Bachelor              | 108       | 20.8       |
| Post graduate         | 99        | 19.1       |
| **Total**             | 519       | 100        |

Piloting also aided in gathering feedbacks targeted at refining the questions. This was intended to enhance participants’ understanding. The researchers conducted three rounds of piloting in accordance with the research design. The first round included academics with governance research interests. The second round was conducted using a sample of the targeted population. The final round involved both academics and a segment of the targeted population. These engagements took the form of face-to-face and focus group discussion. Adhering to these guidelines most importantly, aided in refining the study instruments to draw the necessary data to meet the study objectives.

### 4.2 Scale development and instrument piloting

Prior to the commencement of data collection, the researchers designed a questionnaire and subjected it to a pilot study. Piloting was to help verify the study constructs and the respective items employed in the study (refer to Appendix A). Piloting helped the researchers to determine the study items’ robustness, consistency in drawing results, content validity and relevance to the study context.

### 4.3 Research instrument and construct measurement

The conceptual framework (Figure 1) for the study was constructed using five constructs. For our study purposes, constructs and measurement items were chosen in accordance with literature propositions. In total, 20 closed-ended questions were used to elicit quantitative data for the study. These questions measured on a five-point Likert scale ranging from ‘strongly disagree’ (1) to ‘strongly agree’ (5) to ‘strongly agree’ (1) were adapted from previous studies that had used and proven their reliability and validity. Given the various contexts in which these items were used, the researchers significantly refined them to fit the context, making them relevant and functional. Accordingly, the five items for measuring ‘satisfaction’ were adapted from...
Park and Blenkinsopp (2011). Similarly, the other four items for measuring ‘corruption’ were also adapted from the prior studies of Park and Blenkinsopp (2011). Moreover, the four items for measuring ‘trust’ were also adapted from Arkorful, Lugu, and Shuliang (2021) who had used it in probing local governance in Ghana. Additionally, the four items for ‘transparency’ were adapted from Arkorful, Lugu, and Shuliang (2021). Finally, the three items for ‘civil society participation’ were also adapted from Arkorful, Lugu, and Shuliang (2021). These constructs and their respective items are presented in the Appendix A.

| Constructs         | Indicators | Loadings | CA   | CR   | AVE  |
|--------------------|------------|----------|------|------|------|
| Satisfaction (SAT) | SAT1       | 0.769    | 0.852| 0.849| 0.544|
|                    | SAT2       | 0.906    |      |      |      |
|                    | SAT3       | 0.746    |      |      |      |
|                    | SAT4       | 0.811    |      |      |      |
|                    | SAT5       | 0.727    |      |      |      |
| Trust (TRU)        | TRU1       | 0.899    | 0.837| 0.843| 0.578|
|                    | TRU2       | 0.872    |      |      |      |
|                    | TRU3       | 0.763    |      |      |      |
|                    | TRU4       | 0.780    |      |      |      |
| Corruption (COR)   | COR1       | 0.843    | 0.835| 0.840| 0.577|
|                    | COR2       | 0.837    |      |      |      |
|                    | COR3       | 0.738    |      |      |      |
|                    | COR4       | 0.799    |      |      |      |
| Transparency (TRA) | TRA1       | 0.749    | 0.778| 0.791| 0.501|
|                    | TRA2       | 0.741    |      |      |      |
|                    | TRA3       | 0.828    |      |      |      |
|                    | TRA4       | 0.859    |      |      |      |
| Civil Society Participation (CSP) | CSP1 | 0.769    | 0.753| 0.770| 0.533|
|                    | CSP2       | 0.835    |      |      |      |
|                    | CSP3       | 0.872    |      |      |      |

Abbreviations: AVE, average variance extracted; CA, Cronbach alpha; CR, composite reliability.

The Analysis of Moment of Structures (AMOS) and Statistical Package for Social Scientists (SPSS) software packages were used to analyse qualitative data in this study. SEM analysis was based on a two-step approach comprising the measurement and structural model (Anderson & Gerbing, 1988; Arkorful & Lugu, 2021). The structural model evaluates construct relationships. The measurement model on the other breadth verifies construct and item correlations (Arkorful, Shuliang, & Lugu, 2022). The study presents data analysis, including measurement estimates and assessments of construct validity and reliability, in the following section.

5 | DATA ANALYSIS AND RESULTS

Considering the researchers’ intention to verify the predictive efficacy of the proposed conceptual framework and hypotheses proffered, the study employed a quantitative approach. The structural equation modelling technique was used to analyse data in the study. The reason for relying on this was because of its efficacy in:

a. Concurrently evaluating series of direct and indirect relationships within a model;
b. Probing relationships between latent and observed variables;
c. Interrogating latent variables utilising a cluster of indicators while testing their respective hypothesis at construct levels;
d. Providing precise measurements by modelling random errors in observed variables (Arkorful, Hammond, et al., 2022; Arkorful, Lugu, Hammond, & Basiru, 2021; Arkorful, Shuliang, Lugu, & Jianxun, 2022).

5.1 | Measurement model analysis

In analysing the measurement model, the researchers commenced by conducting exploratory factor analysis (EFA) to signify results of factor loadings greater than the minimum threshold of 0.7 (Arkorful, 2022c; Fornell & Larcker, 1981; Hair et al., 2010). The results of EFA revealed outcomes concomitant with benchmark values established by prior studies (Bondzie-Micah et al., 2020; Jianxun et al., 2021). Results were between 0.769 and 0.872 (Table 2). Consequently, Cronbach alpha and composite reliability scores were used to establish our test of reliability. Results in this regard confirmed values greater than the required 0.7 threshold (Arkorful, Shuliang, et al., 2020; Jianxun...
To ascertain measurement model validity, scores of convergent validity, average variance extracted and discriminant validity (precisely, the Fornell-Larcker criterions and the Heterotrait-Monotrait ratio) were used accordingly.

AVE values were affirmed to be greater than 0.5, indicating a good convergent validity for the questionnaire (Arkorful, Lugu, & Shuliang, 2021). When using the Fornell-Larcker criterion, the square root of each construct’s AVE score (diagonally bolded) must be greater than inter-construct correlations. In accordance with this principle, our study documented the required outcomes (refer to Table 3). Also, in line with the Heterotrait-Monotrait criterion (which is another dimension for assessing discriminant validity), benchmark scores according to Kline (2010) are required to be less than 0.850. Henseler et al. (2015) however proposes a threshold of less than 0.90. With respect to both propositions, the results of data analysis (Table 4) indicates that the current study meets the measurement model requirements.

### 5.2 Measurement and structural model evaluation

The study went on to evaluate the goodness of fit of both the measurement and the structural model. This was done primarily to examine the significance of the various hypotheses paths. Degree of freedom (df), comparative fit index (CFI), normed fit index (NFI), incremental fit index (IFI), and other indices were used to test the model’s overall fitness. These were used to demonstrate a diversity of model fitness. Table 5 displays various fitness scores as well as their acceptance levels, confirming that measurements have appropriate fits in tandem with prior studies’ proposed criterion (Arkorful, Lugu, et al., 2020; Arkorful, Lugu, Hammond, & Basiru, 2021).

### 5.3 Results of hypotheses testing and effects

The study then tested the various proposed hypotheses after assessing the model’s validity. Data analysis revealed the negative relationships between ‘corruption’ and ‘satisfaction’ ($\beta = -0.192^{***}$, $t = -0.4.121$, $p < 0.001$) and ‘trust’ ($\beta = -0.419^{***}$, $t = -8.845$, $p < 0.001$). These confirmed hypotheses 1 and 2 respectively (refer to Table 6). In agreement with hypothesis 3, the mediating effect of ‘trust’ on the relationship between ‘corruption’ and ‘citizens’ satisfaction’ was also corroborated (refer to Table 7). Consistent with hypothesis 4, the negative relationship between ‘corruption’ and ‘transparency’ was highlighted ($\beta = -0.241^{***}$, $t = -6.106$, $p < 0.001$). In addition, ‘transparency’ was revealed to be significantly related to ‘trust’ ($\beta = 0.403^{***}$, $t = 6.686$, $p < 0.001$) as captured under hypothesis 5 (refer to Table 6). As captured under hypothesis 6, ‘transparency’ was revealed to significantly mediate the relationship between ‘corruption’ and ‘citizens’ satisfaction’ (refer to Table 7). Captured under hypotheses 7 and 8, ‘trust’ ($\beta = 0.141^{***}$, $t = 2.590$, $p < 0.001$) and ‘transparency’ ($\beta = 0.418^{***}$, $t = 6.915$, $p < 0.001$) were affirmed to be significantly related to ‘citizens’ satisfaction’ (refer to Table 6). Moreover, ‘civil society participation’ was confirmed to significantly moderate the relationship between ‘transparency’ and ‘satisfaction,’ confirming hypotheses 9 (Figure 2). As captured under hypotheses 10, ‘civil society participation’ was revealed to moderate the relationship between ‘trust’ and ‘satisfaction’ (Figure 3). A summary of these outcomes are presented in Table 8. The overall SEM paths are captured in Figure 4.

### 6 Conclusion, limitations and suggestion for future research

By re-echoing state-society relations perspectives similar to the ones advanced by Evans (1997) and Sellers (2011), this study attempts to unravel state-society interactions to shaping policies. In this regard, the current study investigates the impact of corruption on citizens’

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**Table 3** Mean, SD and correlation

| Constructs | SAT  | TRU  | TRA  | COR  | CSP  |
|------------|------|------|------|------|------|
| SAT        | 4.269| 0.628| 0.737|      |      |
| TRU        | 4.030| 0.707| 0.475| 0.760|      |
| TRA        | 4.245| 0.571| 0.554| 0.470| 0.708|
| COR        | 2.064| 0.748| -0.420| -0.549| -0.315| 0.760|
| CSP        | 4.243| 0.713| 0.371| 0.274| 0.421| -0.101†| 0.730|

Note: Significance interpretation: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Off-diagonal elements are the correlations among constructs.

Abbreviations: COR, corruption; CSP, civil society participation; SAT, satisfaction; TRA, transparency; TRU, trust.

**Table 4** Heterotrait-Monotrait analysis

| Constructs | SAT | TRU | TRA | COR | CSP |
|------------|-----|-----|-----|-----|-----|
| SAT        | 0.436|     |     |     |     |
| TRU        | 0.499| 0.446|     |     |     |
| TRA        | 0.343| 0.560| 0.285|     |     |
| COR        | 0.382| 0.294| 0.441| 0.103|     |
| CSP        |      |     |     |     |     |

Abbreviations: COR, corruption; CSP, civil society participation; SAT, satisfaction; TRA, transparency; TRU, trust.
TABLE 5  Model fit measures

| Measurements                  | Indices | Criterion | Structural model | Measurement |
|------------------------------|---------|-----------|------------------|-------------|
| Absolute fit measures        | AGFI    | >0.80     | 0.912            | 0.928       |
|                              | GFI     | >0.90     | 0.929            | 0.945       |
|                              | RMSEA   | <0.08     | 0.045            | 0.043       |
| Incremental fit measures     | NFI     | >0.90     | 0.903            | 0.937       |
|                              | CFI     | >0.90     | 0.948            | 0.968       |
|                              | IFI     | >0.90     | 0.948            | 0.968       |
|                              | CMIN/DF | <3.00     | 2.035            | 1.950       |

Abbreviations: AGFI, adjusted goodness of fit index; CFI, comparative fit index; CMIN/DF, degree of freedom; GFI, goodness of fit index; IFI, incremental fit index; NFI, normed fit index; RMSEA, root mean square error of approximation.

TABLE 6  Path coefficients

| Path         | Estimate | T value | Hypothesis | Decision |
|--------------|----------|---------|------------|----------|
| COR → TRA    | −0.241***| −6.106  | H4         | Accepted |
| COR → TRU    | −0.419***| −8.845  | H2         | Accepted |
| TRA → TRU    | 0.403*** | 6.686   | H5         | Accepted |
| COR → SAT    | −0.192***| −4.121  | H1         | Accepted |
| TRU → SAT    | 0.141*** | 2.590   | H7         | Accepted |
| TRA → SAT    | 0.418*** | 6.915   | H8         | Accepted |
| Gender → SAT | −0.010   | −0.202  |            | Insignificant |
| Age → SAT    | −0.031   | −1.528  |            | Insignificant |
| Education → SAT | 0.025 | 1.285   |            | Insignificant |
| Residence → SAT | 0.042 | 1.334   |            | Insignificant |

Note: Interpretation: ***p < 0.001.
Abbreviations: COR, corruption; SAT, satisfaction; TRA, transparency; TRU, trust.

TABLE 7  Hypothesised indirect effect analysis

| Path         | Estimate (95% BCI) | Hypothesis | Decision |
|--------------|--------------------|------------|----------|
| COR → TRU → SAT | −0.117 (−0.174, −0.070) | H3         | Accepted |
| COR → TRA → SAT | −0.072 (−0.118, −0.035) | H6         | Accepted |

Abbreviations: BCI, bootstrap confidence interval; COR, corruption; SAT, satisfaction; TRA, transparency; TRU, trust.

FIGURE 2  Moderation effect of civil society participation (CSP) on the relationship between transparency and satisfaction (SAT)

FIGURE 3  Moderation effect of civil society participation (CSP) on the relationship between trust and satisfaction (SAT)
trust, transparency, and satisfaction in relation to COVID-19, as well as the role of civil society in offsetting deficits. The study draws data from a sample of 519 and uses general system theory as its theoretical foundation. A five-construct conceptual model delineating 10 hypotheses was proposed for this study. In addition to revealing the negative effects of corruption on citizens' trust, transparency, and satisfaction levels, data analysis attested to the salience of trust and transparency on the relationship between corruption and satisfaction. The significant change in relationship (upon the intervening role of civil society construct), underscores the civil society participation as gravid with potentials to facilitate satisfaction, trust and transparency. This suggests a dearth of civil society as likely to culminate in a void in governance. Therefore, related to the general systems theory's central proposition, our outcomes highlight the need to integrate civil society into mainstream policy policymaking to ensure a better coordination between stakeholder entities.

Ensuring this is very critical to promoting, augmenting and sustaining system sustainability and functionality. For pandemic management efficiency purposes, in the context of cross-fertilisation of knowledge and resources, the incorporation of the media, health sector, indigenous institutions, community-based, and other voluntary bodies into policy making and corporate governance spaces is crucial. Going beyond these, they must be sufficiently empowered to be able to leverage their capacity for a meaningful national engagement.

There is no doubt that the researchers conducted an empirical study based on their findings. Nonetheless, the study has flaws that the researchers believe are important to highlight for policymaking and future research. A quantitative approach was used in our study. As a result, we strongly advise future studies to employ qualitative or mixed methods to investigate the subject under investigation. Considering Ghana as the study context, we strongly recommend future studies to consider expanding the sample to include a multinational population to help tease out possible behaviour nuances and complexities. Though the researchers promise to address these shortcomings in the next study, we however stress that, they do not invalidate the study outcomes.

7 | DISCUSSION OF FINDINGS AND IMPLICATIONS

The current empirical study seeks to investigate the importance of civil society participation in fostering trust, transparency, and satisfaction while fighting the COVID-19 pandemic amidst corruption. Ghana is the study location. Precisely, areas with cosmopolitan characteristics (i.e., Accra, Tamale and Kumasi) were selected. The study engages the general systems theory as a theoretical lens. The structural equation modelling technique was used to analyse data in this study. To the best of the authors' knowledge, this is the first study to investigate COVID-corruption and citizens’ satisfaction antecedents in Ghana. This study, in fact, sets the tone for future research and policy engagements. The data analysis results reveal interesting, yet significant outcomes with implications for pandemic government, stakeholder relationships, and policy design and implementation.

First, results of data analysis affirm the negative relationship between corruption and citizens’ satisfaction ($\beta = -0.192$, $t = -4.121, p = 0.001$), corroborating our proposed hypothesis 1. A statistical interpretation of this result implies that, a one standard deviation increase in corruption, will correspondingly elicit $-0.192$
increase in satisfaction. Similarly, as captured under hypothesis 2, results of data analysis affirmed the negative relationship between corruption and trust. This was recorded at a significance level of ($\beta = -0.419, t = -8.845, p = 0.001$), which suggests that a one SD increase in corruption will attract a $-0.419$ increase in trust. In same vein, as highlighted under hypothesis 4, results of data revealed the negative relationship between corruption and transparency ($\beta = -0.241, t = -6.106, p = 0.001$). This score indicates that, any one standard deviation increase in corruption will simultaneously trigger $-0.241$ increase in transparency. Taken together, these outcomes crack open, and lay bare the extent of the detrimental consequences of corruption on citizens' trust, transparency and satisfaction perception levels. Much as these results find credence in the scholarly works of Habibov (2016) and Habibov and Cheung (2016) who reiterate the haemorrhagic impacts of corruption across populations, these findings plausibly expose the potential impacts of the canker of corruption on populations in transitional polities like Ghana. Therefore, juxtaposing these findings in the Ghanaian context could be a testimony to Ghanaians’ disapproval of, dissatisfaction with and aversion for corruption.

Moreover, as anticipated under hypothesis 3, results of data analysis established the significant mediating effect of trust on the relationship between corruption and citizens' satisfaction. In addition, consistent with hypotheses 5, the relationship between transparency and citizens' trust was certified ($\beta = 0.403, t = 6.686, p = 0.001$). A plausible elucidation of this finding is that, a one standard deviation increase in transparency will generate $0.403$ increase in citizens' trust. Moreover, empirical findings illuminated the significant mediating effect of transparency on the relationship between corruption and citizens' satisfaction, verifying proposed hypothesis 6. As proposed under hypothesis 7, citizens' trust was confirmed to be positively related to satisfaction ($\beta = 0.141, t = 6.915, p = 0.001$), indicating that a one standard deviation increase in trust will attract $0.141$ increase in satisfaction. A similar positive relationship was revealed between transparency and citizens' satisfaction, as delimited under hypothesis 8 ($\beta = 0.418, t = 6.915, p = 0.001$). The statistical significance attests that, a one SD transparency will draw $0.418$ increase in satisfaction. These outcomes testify satisfaction as predicated on trust and transparency. According to the preceding findings, satisfaction does not occur in a vacuum; rather, it can be argued as hinged on trust and transparency—both of which constitute a sine qua non for offsetting governance deficits like corruption (Arkorful, Lugu, & Shuliang, 2021).

In sync with hypotheses 9 and 10 respectively, results of data analysis substantiate the moderating effect of the civil society on the relationship between transparency and citizens' satisfaction on one hand, and citizens' trust and satisfaction on the other. These outcomes confirm voluntary self-motivated groups' relevance to democratisation and corporate governance processes including pandemic governance. Scholars (Arthur, 2010; Debrah & Graham, 2015; Gildemyn, 2014; Newton, 2001) have clarified civil society’s potency to entail, acting as agents of social, economic and political change—more especially in uncertain settings like pandemic-stricken environment. For this reason, it is incumbent for state development actors to advance efforts towards creating a germane space for civil society engagement. Civil society activism could aid inject an appreciable dosage of openness and confidence among citizens. Against the backdrop of the civil society’s seminal contribution to Ghana’s democratisation process and its consolidation thereof, scholars (Arthur, 2010; Whitfield, 2003) agree with its entrenchment as an innovative conduit to empowering society. With this as a point of departure, government must endeavour incorporating civil society organisations in policy design and implementation. Importantly, the existence of non-governmental organisations and other community-based organisations in Ghana provides a wealth of opportunity for government and stakeholders to leverage them to their advantage. The proximity of the civil society to the people and its embeddedness in the general society underscores their indispensability in taking initiatives targeted at promoting trust, transparency and satisfaction among the citizenry (Arkorful, Lugu, & Shuliang, 2021). Finally, the study proceeded to verify the significance of control variables (i.e., age, gender, education and area of residence). However, results revealed no significant effect, thereby confirming the generalizability of the findings relative to gender, age, education and residential area.

**CONFLICT OF INTEREST**

The researchers declare no conflict of interest with respect to the research, authorship and/or publication of this article.

**DATA AVAILABILITY STATEMENT**

Data is available from the first author upon reasonable request.

**ETHICS STATEMENT**

All procedures performed in this study were reconcilable with the ethical standards of the institutional and/or national research committee and the 1964 Helsinki declaration and its later amendments or comparable ethical standards. In line with this declaration, which was amended in 2008, study sample participants were informed about the study purpose.

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**REFERENCES**

Addazdi-Koom, M. E. (2020). Quasi-state of emergency: Assessing the constitutionality of Ghana’s legislative response to Covid-19. *The Theory and Practice of Legislation*. 8(3), 311–327.

Africa Research Bulletin: Economic, Financial and Technical Series (2020) Africa: Corruption and its Effect on Economies. 57(8).

Aidt, T. S. (2003). Economic analysis of corruption: A survey. *The Economic Journal*. 113(491), F632–F652.

Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*. 103(3), 411–423.

Antwi-Boasiako, J., & Nyarkoh, E. (2021). Government communication during the Covid-19 pandemic in Ghana. *International Journal of Public Administration*. 44(13), 1175–1188.
Hetherington, M. J., & Husser, J. A. (2012). How trust matters: The changing political relevance of political trust. American Journal of Political Science, 56(2), 312–325.

Holmes, L. (Ed.). (2007). Terrorism, organised crime and corruption: Networks and linkages. Edward Elgar Pub.

Jianxun, C., Arkorful, V. E., & Shuliang, Z. (2021). Electronic health records adoption: Do institutional pressures and organizational culture matter? Technology in Society, 65, 101–331.

Kasser-Tee, C. (2021). The role of women in the fight against corruption in Ghana. Development in Practice, 31(4), 477–483.

Kindyamtima, E. M. (2017). Challenges facing schools management on the Transparency International, (2020). Citizens report corruption in humanitarian aid, quarantine and healthcare. https://www.transparency.org/en/press/citizens-report-corruption-in-humanitarian-aid-quarantine-health-care.

Pellegata, A., & Menotti, V. (2018). Corruption and satisfaction with transparency and employee trust. Public Relations Journal, 1(1), 36–49.

Park, H., & Blenkinsopp, J. (2011). The roles of transparency and trust in the relationship between corruption and citizen satisfaction. International Review of Administrative Sciences, 77(2), 254–274.

Plomp, T., & Pelgrum, J. (1993). Implementation of innovation in 21 education systems the study of computers in education. Educational Administration and Planning, 10(1), 16–36.

Sellers, J. M. (2011). State-society relations. In M. Bevir (Ed.), The sage handbook of governance (pp. 124–141). Sage.

Transparency International, (2020). Citizens report corruption in humanitarian aid, quarantine and healthcare. https://www.transparency.org/en/press/citizens-report-corruption-in-humanitarian-aid-quarantine-health-care.

Tuffour, P., Opoku-Mensah, E., Asiedu-Ayeh, L. O., & Darko, D. (2021). Assessing governments response to exogenous shocks: Considering the COVID-19 pandemic in the Ghanaian context. Journal of Public Affairs, e2755.

Uche, R., Kokutse, F., Ogodo O., Makoni, M., & Nakweya, G., (2020). Procurement corruption darkens Africa’s COVID-19 fight. https://www.scidev.net/sub-saharan-africa/briefing-items/coronavirus-africa/corruption-darks-africas-covid-19-fight/.

Word Health Organization (2021), https://covid19.who.int/.

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## APPENDIX A

Constructs and measurement items

| Constructs                  | Items                                                                                   | Source(s)                                      |
|-----------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------|
| Corruption                  | Acts of malfeasance associated with COVID-19 impairs the whole process.                 | Park and Blenkinsopp (2011)                    |
|                             | To some extent, there is unfairness in the COVID-19 fight.                               |                                               |
|                             | There are malpractices afflicting the contracts and other COVID-19 management issues.  |                                               |
|                             | There is the perception of substandard service providers associated with COVID-19 pandemic fight. |                                               |
|                             | There is the notion that essential service providers resort to illicit medium to supply COVID-19 equipment. |                                               |
|                             | There is the notion of authorities' tendency to liaise with service providers to dispense substandard services. |                                               |
| Satisfaction                | I am satisfied with state authorities' handling of the COVID-19 pandemic.                | Park and Blenkinsopp (2011)                    |
|                             | I am satisfied with the competence of state authorities to handle the COVID-19 pandemic. |                                               |
|                             | I am satisfied with the way authorities have handled the pandemic.                       |                                               |
|                             | I am satisfied with the outcome of the COVID-19 pandemic measures.                       |                                               |
|                             | I am content looking at the way and manner authorities have responded to COVID-19.       |                                               |
|                             | I am content with the way authorities have instituted measures to contain COVID-19.      |                                               |
| Civil society participation | Civil society is germane to social engagements.                                          | Arkorful, Lugu, Hammond, and Basiru (2021)     |
|                             | Civil society engagement forges population-wide confidence.                            |                                               |
|                             | Civil society is imperative for social cohesion                                          |                                               |
|                             | Civil society is healthy for policy decision.                                            |                                               |
|                             | Civil society constitutes a reliable conduit for citizens' contentment and engagement.  |                                               |
| Trust in government         | State authorities handling the COVID-19 pandemic will not deceive citizens.              | Arkorful, Lugu, Hammond, and Basiru (2021)     |
|                             | State authorities handling the COVID-19 pandemic will put the interest of the masses first before their narrow parochial interest. |                                               |
|                             | State authorities will not engage in acts that would expose people to risk and harm.    |                                               |
|                             | State authorities will not be negligent in its handling of the pandemic.                 |                                               |
|                             | I wholly trust designated state authorities in handling the pandemic situation.          |                                               |
| Constructs  | Items                                                                 | Source(s)                                                                 |
|------------|-----------------------------------------------------------------------|---------------------------------------------------------------------------|
| Transparency | Clarity in COVID-19 management is satisfactory.                        | Arkorful, Lugu, Hammond, and Basiru (2021)                                 |
|            | Openness in matters of COVID-19 boosts confidence.                    |                                                                           |
|            | Sufficient disclosures regarding COVID-19 augments trustworthiness.    |                                                                           |
|            | Relevant and plain communication about COVID-19 increases contentment. |                                                                           |
|            | Reliable information regarding COVID-19 is germane to participation.  |                                                                           |