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# Predictors of Public Behaviour towards Social Media-Based Medical Crowdfunding in Nigeria: A Structural Equation Modelling Approach

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## Abstract

**Background:** The rising burden of out-of-pocket medical expenditures and the prevalence of unmet healthcare needs have driven the growth of social media-based medical crowdfunding in Nigeria. Despite the popularity of this alternative financing model, many campaigns fail to reach their targets, suggesting that outcomes depend on a complex array of social and psychological determinants.

**Objective:** This study investigates the significant predictors of public behaviour towards social media-based medical crowdfunding campaigns in Nigeria.

**Methodology:** Utilising an online survey design, data were collected from 1,035 social media users in Nigeria via snowball sampling. Structural Equation Modelling (SEM) was employed to test the relationships between perceived trust, knowledge, and behavioural intentions.

**Results:** The findings reveal that public behaviour towards medical crowdfunding is strongly predicted by perceived trust in the campaign, the fund seeker's perceived socio-economic status, and the donor's specific knowledge of medical crowdfunding. Other significant predictors include the perceived severity of the patient's condition, general perceptions of online crowdfunding, prior

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unmet financial needs, and existing interpersonal relationships. Notably, the influence of knowledge and perception on behaviour is significantly moderated by perceived social presence.

**Conclusion:** Public engagement with social media-based medical crowdfunding in Nigeria is governed by specific socio-psychological factors. The efficacy of individual knowledge in driving donation behaviour largely depends on the level of social presence experienced in the digital environment.

**Unique Contribution:** The study advances a validated model that identifies the primary drivers of public behaviour in the Nigerian crowdfunding landscape, offering a theoretical framework for understanding alternative healthcare financing in developing economies.

**Key Recommendation:** Social media platforms and crowdfunding intermediaries should implement robust, transparent verification processes to authenticate fund seekers. Enhancing perceived trust and social presence is essential for improving campaign outcomes and ensuring the sustainability of this healthcare financing model.

**Keywords:** healthcare financing, online donation, public health, structural equation modelling, social presence, Nigeria.

## Introduction

Social media has evolved from its initial experimental phase to become an integral part of modern life, dramatically changing the way people communicate, access information, build relationships, and perceive themselves. With about five billion users globally as of May 17, 2024 (Statista, 2024), these technologies have significantly impacted various sectors, including public health where they are being intensively and extensively employed with the expectation of creating three major effects: the learning of correct health information and knowledge, the changing of health attitudes and values and the establishment of new health behaviours.

Globally, health is considered a crucial indicator of human existence, as a society with a healthy citizenry breeds a healthy workforce, which in turn increases national productivity, fosters collective happiness, and reduces disease-related burdens. Arguably, funding is a critical determinant of people's access to healthcare services worldwide, although the associated financial burden varies across countries. Thus, unlike in most developed countries with adequate healthcare insurance and medical subsidy arrangements designed to cushion the inclement effects of healthcare-related expenditures, access to quality healthcare services is implicitly classified as a luxury in many developing countries like Nigeria, where the vast majority of citizens struggle to access medical services through out-of-pocket expenditures (Bishnoi et al., 2022).

For instance, the World Bank's World Development Indicators database for 2025 indicated that 76.4% of total healthcare-related expenditures in Nigeria in 2021 were funded through out-of-pocket arrangements, indicating that a large portion of healthcare expenses in Nigeria are paid

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directly by individuals and families at the point of care. A similar report by the International Trade Administration (2023) showed that Nigeria's total health expenditure as a percentage of its Gross Domestic Product was 3.7% in 2021, far below the 15% benchmark recommended by the WHO. Furthermore, the National Health Insurance Scheme (NHIS), established to address the challenges of health coverage, has not done much, having only covered about 5% of the over 200 million Nigerian population as of 2019 (Shobiye et al., 2021). Thus, the increasing burden arising from out-of-pocket expenditures for consultations, medications, and other healthcare services, as well as the corresponding rise in unmet medical needs, has provided strong impetus for medical crowdfunding (Zhang et al., 2022).

Regrettably, research suggests that only about 10% of medical crowdfunding campaigns reach their fundraising targets on average, and while some may easily meet their goals within a short period, others may struggle to do so over a longer period (Berliner & Kenworthy, 2017). Researchers argue that the outcomes of medical crowdfunding campaigns can be affected by donors' responses, which may be swayed by their pre-existing social and psychological characteristics (Berliner & Kenworthy, 2017). Therefore, our study seeks to advance an appropriate model for the key predictors of public behaviour towards social media-based medical crowdfunding campaigns in Nigeria.

**Literature Review and Hypothesis Building**

Medical crowdfunding is the practice of raising funds for people with health-related issues by soliciting small donations from a large number of donors. Over time, this practice has become a vital alternative for people facing prohibitive medical costs (Burtch et al., 2014). Prior research suggests that people who are knowledgeable about medical crowdfunding are more likely to participate in the fundraising process and/or share campaign information with their networks to encourage others to participate (Huang et al., 2021). As a result, knowledge of crowdfunding may increase overall participation and enhance the perceived legitimacy of the campaign (Burtch et al., 2014).

Accordingly, campaign messages are vital in propelling donors to actually participate. Campaigns with clear, transparent information about the medical condition and financial needs of fund seekers may receive financial support (Gleasure & Feller, 2016). This is because public perception of crowdfunding campaigns is critical in shaping public behaviour towards such campaigns (Mollick, 2014). People often contribute to campaigns they perceive as genuine, necessary, and impactful (Mollick, 2014). Hence, the way a crowdfunding campaign is framed, the credibility of the platform and the perceived sincerity of the fund seekers are key factors that may influence public perception (Mollick, 2014). Therefore, it is expected that positive perception may increase financial support, while perceived exploitation may not (Kim, 2017).

In the same vein, Belleflamme et al. (2014) identified prior interpersonal relationships as a strong predictor of public behaviour towards crowdfunding campaigns. In this regard, the perceived prior social connection between the potential donor and the fund seeker may evoke empathy and tremendously increase support for crowdfunding campaigns, especially where the donor has a

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personal relationship with the fund seeker. It is believed that a good personal relationship between people breeds trust. This partly explains why many campaign initiators and promoters leverage social media to reach out to the friends, families and acquaintances of fund seekers for financial support (Gerber & Hui, 2013).

Furthermore, Zhang et al. (2022) identified perceived trust as a crucial factor that influences public behaviour towards crowdfunding campaigns. The campaign's trustworthiness and authenticity give donors confidence that their funds will not be misused. Conversely, a lack of trust will deter potential donors from participating.

Another factor that determines public behaviour towards medical crowdfunding campaign is perceived socio-economic status of a fund seeker, although scholars differ on the direction of the influence. For example, Burtch et al. (2014) believe that people will likely donate when the fund seeker is perceived to be financially disadvantaged, just as Gleasure and Feller (2016) affirm that the socio-economic narrative in the crowdfunding campaign that highlights the financial hardship of the fund seeker may elicit empathy, provoke urgency from donors and increase financial support. On the contrary, Livingstone et al. (2023) opine that fund seekers with perceived socio-economic advantages benefit more from crowdfunding.

The severity of a patient's medical condition has also been recognised as a predictor of public behaviour towards crowdfunding campaigns. Young (2017) asserts that campaigns detailing life-threatening medical conditions may increase the likelihood of public donations and support. Similarly, Berliner and Kenworthy (2017) affirm that campaigns that provide credible medical evidence to support the severity of the health condition may receive a lot of positive responses.

The reciprocity of helping other is another factor that determines public behaviour towards medical crowdfunding. This concept refers to the practice of giving and/or returning kindness, help or support to others either in appreciation of help received or in expectation of future help. Generally, reciprocity is considered a key psychological motivator of public participation in crowdfunding campaigns given that many people often donate with the expectation that they would receive similar help when they are in the same situation or get some forms of reward after donation (Gerber & Hui, 2013).

Furthermore, previous studies have identified prior unmet financial needs as a significant factor that shape public behaviour towards crowdfunding campaigns because it fosters empathy, donations and content sharing. Specifically, Belleflamme et al. (2014) claim that health-related financial strain influences health-seeking behaviour and increases willingness to adopt alternative healthcare financing mechanisms such as crowdfunding, especially when the campaign resonates with the fund seekers' personal or communal experiences. For instance, Bishnoi et al. (2022) analysed COVID-19-related crowdfunding platforms in India and found that people's knowledge and trust in medical crowdfunding are strongly influenced by their experiences with unmet financial needs, which in turn influence their behaviour.

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Finally, previous studies on the moderators of public behaviour towards crowdfunding initiatives have identified social presence as a moderator. Conceptually, social presence refers to the extent to which people feel connected to others within their social networks. Generally, social media-based medical crowdfunding campaigns thrive on creating personal connections between fund seekers and potential donors, making social presence a critical factor in their success. Thus, researchers argue that perceived social presence may not directly affect the outcomes of medical crowdfunding campaigns but could significantly moderate donors' perceptions, knowledge, engagement, trust, and empathy towards fund seekers (Belleflamme et al., 2014; Zhang et al., 2022). Based on the above discourse, our study assumes that:

**H1:** Knowledge of social media-based medical crowdfunding campaigns will significantly influence public behaviour towards the initiative among Nigerians.

**H2:** Perception of social media-based medical crowdfunding campaigns will significantly influence public behaviour towards the initiative among Nigerians.

**H3:** Interpersonal relationships with fund seekers will significantly influence public behaviour towards social media-based medical crowdfunding campaigns among Nigerians.

**H4:** Perceived trust in donation initiatives will significantly influence public behaviour towards social media-based medical crowdfunding campaigns among Nigerians.

**H5:** Perceived socio-economic status of fund seekers will significantly influence public behaviour towards social media-based medical crowdfunding campaigns among Nigerians.

**H6:** The severity of a patient's medical condition will significantly influence public response to social media-based medical crowdfunding campaigns among Nigerians.

**H7:** Perceived reciprocity of helping others will significantly influence public behaviour towards social media-based medical crowdfunding campaigns among Nigerians.

**H8:** Prior unmet financial needs will significantly influence public behaviour towards social media-based medical crowdfunding campaigns among Nigerians.

**H9:** Perceived social presence will significantly moderate the influence of respondents' knowledge and perception on behaviour towards social media-based medical crowdfunding campaigns.

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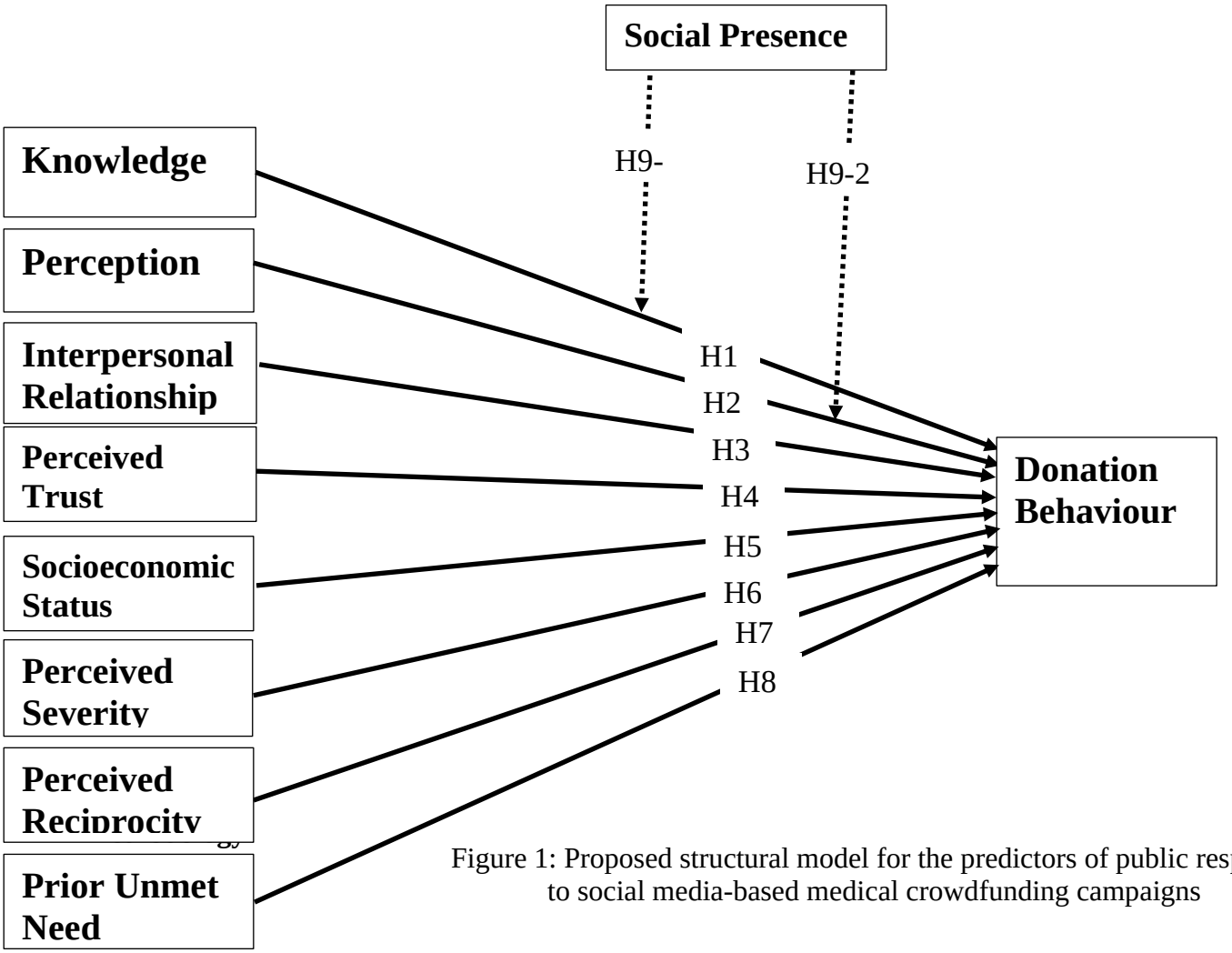


Figure 1: Proposed structural model for the predictors of public response to social media-based medical crowdfunding campaigns

The study adopted the online survey research method to sample the opinion of active social media users in Nigeria, estimated at 36.75 million as of January 2024 (Datareportal, 2024). The survey questionnaire was created via Google Form. To get a suitable sample size for the study, we used the G*power statistical tool to run a priori power analysis calculated with 0.9 power ($1-\beta$), 0.2 effect size ($f^2$), and 0.05 probability value ($\alpha$), yielding a minimum required sample size of 207. However, considering the heterogeneous nature of the study population, we multiplied the obtained sample size by a factor of 5 (to ~1,035) to increase its representativeness (Apuke & Omar, 2020; Hair et al., 2019). The rationale for this increase is grounded in the survey methodology literature, which recommends that greater population heterogeneity increases the required sample size (Memon et al., 2020; Development Monitoring and Evaluation Office, 2022). Specifically,

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Memon et al. (2020) note that even when power analyses are done in SEM studies, additional sample size may be warranted when model complexity or population sub-groups are present. In this regard, Ahmad and Halim (2017) recommend that a minimum sample of 500 is suitable for models with larger numbers of constructs, while Apuke and Omar (2020) recommend the multiplication of the minimum required sample by a factor that raises it to a threshold that can accommodate the extent of population heterogeneity. Thus, the obtained sample size was considered excellent based on the recommendation of Comrey and Lee (1992), as cited in Asemah et al. (2017), who stated that in a multivariate analysis, a sample size of 50 is extremely poor; 100 is poor; 200 is fair; 300 is good; 500 is very good, and 1,000 is excellent. The respondents were recruited using the snowball sampling technique.

The proposed model included ten latent constructs: eight independent variables, one moderating variable, and one dependent variable (crowdfunding behaviour). The variables were assessed using 5-point Likert scales, with possible responses ranging from strongly disagree (1) to strongly agree (5). We used content validity and a pilot test to assess the instrument's validity and reliability, respectively. Thereafter, we used the structural equation modelling technique to evaluate the proposed research model. The Partial Least Squares (PLS) technique was specifically used to analyse the model. According to Hair et al. (2019), the PLS technique is suitable for both small and large sample sizes and can handle both reflective and formative measurement models without significant identification problems. We evaluated the model's pathways using a bootstrap resampling method with 5,000 samples, while the hypotheses were tested at $a < 0.05$ significance level. Consistent with established statistical guidelines (Hair et al., 2019; Erubami et al., 2022), we evaluated both the measurement and structural models.

## Results

A total of 1,096 responses were collected during the survey, but the final analyses were based on 1,029 (99.4%) responses that met the study's inclusion-exclusion criteria. Demographically, 55.7% of respondents were male, the modal age range was 25-34 years (38.3%), and 51.1% were single. Overall, all respondents reported having received some level of formal education; most were engaged in various occupations (97.7%), and the largest share (N = 410, 39.8%) earned between N100,000 and N200,000 per month. Thus, the sample results indicate that the demographic distribution of the study respondents closely aligns with Nigeria's general online social stratification, which is characterised by a higher proportion of male netizens (58.3%), with the modal age range being between 18 and 35 years (Datareportal, 2024).

## Measurement Model

We used both convergent validity and discriminant validity to assess the psychometric properties of the model's measures. For convergent validity, the study evaluated Cronbach's Alpha (CA), Outer Loading (OL), Average Variance Extracted (AVE), and Composite Reliability (CR) (Hair et al., 2019). Prior to the measurement model evaluation, some items with low indicator loadings (<0.7) were eliminated because their exclusion increased the model's internal consistency reliability and validity (Hair et al., 2021). Therefore, 18 items were eliminated (MCT2, MCT4,

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MCT10, MCT11, MCP4, MCP5, MCP6, MCP7, MCP8, MCP10, MCP13, ITR1, MCT2, PSS5, PSP1, PSP2, PSP6, MCB4). According to the data presented in Table 1, the values for CA and OL were greater than 0.7 and ≥0.708, respectively. Also, AVE and CR values were greater than 0.5 and 0.7, respectively. Therefore, the model's convergent validity was established. For discriminant validity, the study assessed the results of the Fornell and Larcker criterion, as presented in Table 2. The outcome showed that the square root of the AVE for each latent construct was greater than its matching correlations with other constructs, indicating good discriminant validity. Nevertheless, to address the drawback of the Fornell and Larcker criterion in detecting discriminant validity problems, the study further employed the Heterotrait-Monotrait (HTMT) Ratio procedure to evaluate the discriminant validity of the research model. The data presented in Table 3 indicate that the most conservative threshold value of the HTMT Ratio was less than 0.90, indicating that the study model has excellent psychometric properties.

**Table 1: Output for convergent validity**

| Construct | Code | OL | α | CR | AVE |
|---|---|---|---|---|---|
| Medical Crowdfunding Knowledge | MCK1 | 0.785 | 0.837 | 0.786 | 0.662 |
| | MCK3 | 0.754 | | | |
| | MCK5 | 0.831 | | | |
| | MCK6 | 0.730 | | | |
| | MCK7 | 0.903 | | | |
| | MCK8 | 0.883 | | | |
| | MCK9 | 0.722 | | | |
| | MCK12 | 0.764 | | | |
| | MCK13 | 0.924 | | | |
| Medical Crowdfunding Perception | MCP1 | 0.790 | 0.746 | 0.726 | 0.750 |
| | MCP2 | 0.913 | | | |
| | MCP3 | 0.849 | | | |
| | MCP9 | 0.740 | | | |
| | MCP11 | 0.916 | | | |
| | MCP12 | 0.903 | | | |
| Medical Crowdfunding Behaviour | MCB1 | 0.807 | 0.879 | 0.901 | 0.671 |

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| | | | | | |
|---|---|---|---|---|---|
| | MCB2 | 0.820 | | | |
| | MCB3 | 0.758 | | | |
| | MCB5 | 0.853 | | | |
| | MCB6 | 0.838 | | | |
| Interpersonal Relation | ITR2 | 0.765 | 0.894 | 0.907 | 0.724 |
| | ITR3 | 0.878 | | | |
| | ITR4 | 0.816 | | | |
| | ITR5 | 0.849 | | | |
| | ITR6 | 0.811 | | | |
| Crowdfunding Perceived Trust | MCT1 | 0.765 | 0.761 | 0.778 | 0.878 |
| | MCT3 | 0.878 | | | |
| | MCT4 | 0.751 | | | |
| | MCT5 | 0.771 | | | |
| Perceived Socioeconomic Status | PSS1 | 0.769 | 0.865 | 0.795 | 0.633 |
| | PSS2 | 0.767 | | | |
| | PSS3 | 0.771 | | | |
| | PSS4 | 0.729 | | | |
| | PSS6 | 0.792 | | | |
| Perceived Severity of Condition | PSC1 | 0.792 | 0.839 | 0.846 | 0.632 |
| | PSC2 | 0.727 | | | |
| | PSC3 | 0.724 | | | |
| | PSC4 | 0.746 | | | |
| | PSC5 | 0.789 | | | |
| Reciprocity of Helping Others | RHO1 | 0.795 | 0.876 | 0.901 | 0.646 |

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| | | | | | |
|---|---|---|---|---|---|
| | RHO2 | 0.716 | | | |
| | RHO3 | 0.868 | | | |
| | RHO4 | 0.885 | | | |
| | RHO5 | 0.749 | | | |
| Prior Unmet Need | PUN1 | 0.751 | 0.821 | 0.895 | 0.634 |
| | PUN2 | 0.734 | | | |
| | PUN3 | 0.727 | | | |
| | PUN4 | 0.827 | | | |
| | PUN5 | 0.717 | | | |
| Perceived Social Presence | PSP3 | 0.826 | 0.735 | 0.797 | 0.614 |
| | PSP4 | 0.804 | | | |
| | PSP5 | 0.787 | | | |
| | PSP7 | 0.784 | | | |
| | PSP8 | 0.903 | | | |

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**Table 2: Fornell-Larcker Criterion for Discriminant Validity**

| Construct | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Crowdfunding Knowledge | **0.76** | | | | | | | | | |
| Crowdfunding Perception | 0.41 | **0.81** | | | | | | | | |
| Interpersonal Relation | 0.44 | 0.61 | **0.77** | | | | | | | |
| Crowdfunding Perceived Trust | 0.63 | 0.57 | 0.43 | **0.72** | | | | | | |
| Socioeconomic Status | 0.58 | 0.53 | 0.68 | 0.58 | **0.79** | | | | | |
| Severity of Condition | 0.43 | 0.48 | 0.62 | 0.63 | 0.59 | **0.82** | | | | |
| Reciprocity of Helping Others | 0.54 | 073 | 0.66 | 0.69 | 0.43 | 0.61 | **0.80** | | | |
| Unmet Financial Need | 0.60 | 0.66 | 0.59 | 0.61 | 0.46 | 0.60 | 0.63 | **0.74** | | |
| Perceived Social Presence | 0.57 | 0.69 | 0.45 | 0.54 | 0.61 | 0.58 | 0.59 | 0.66 | **0.78** | |
| Crowdfunding Behaviour | 052 | 0.49 | 0.61 | 0.70 | 0.50 | 0.62 | 0.66 | 0.49 | 0.71 | **0.74** |

**Table 3: Heterotrait Monotrait Ratio for Discriminant Validity**

| Construct | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|
| Crowdfunding Knowledge | | | | | | | | | |
| Crowdfunding Perception | 0.66 | | | | | | | | |
| Interpersonal Relation | 0.59 | 0.75 | | | | | | | |
| Crowdfunding Perceived Trust | 0.58 | 0.74 | 0.81 | | | | | | |
| Perceived Socioeconomic Status | 0.71 | 0.67 | 0.67 | 0.68 | | | | | |
| Perceived Severity of Condition | 0.64 | 0.78 | 0.66 | 0.76 | 0.77 | | | | |
| Reciprocity of Helping Others | 0.58 | 0.75 | 0.63 | 0.72 | 0.58 | 0.65 | | | |
| Unmet Financial Need | 0.79 | 0.79 | 0.59 | 0.78 | 0.52 | 0.64 | 0.80 | | |
| Perceived Social Presence | 0.71 | 0.82 | 0.64 | 0.81 | 0.65 | 0.64 | 0.73 | 0.57 | |
| Crowdfunding Behaviour | 0.74 | 0.74 | 0.74 | 0.65 | 0.72 | 0.57 | 0.59 | 0.64 | 0.50 |

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**Structural model**

In assessing the structural model, the study considered the path coefficients (ββ), the results of the t-test, the summative effects of the hypothesised relationships on the endogenous construct ($f^2$), the coefficient of determination ($R^2$), and the model's predictive power ($Q^2$). The outcome of the analyses presented in Table 4, show significant support for eight hypothesised relationships: Medical crowdfunding knowledge (*β=0.562, t=8.043, p<0.05*), Medical crowdfunding perception (*β=0.466, t=9.116, p<0.05*), Interpersonal relationship (*β=0.312, t=7.561, p < 0.05*), Perceived trust (*β=0.719, t=11.31, p <0.01*), Perceived socio-economic status (*β=0.635, t=8.242, p<0.05*), Perceived severity of condition (*β=0.489, t=3.074, p<0.05*) and Prior unmet need (*β=-0.406, t=7.933, p<0.05*). Also, the results supported the hypothesised moderation influence of perceived social presence on medical crowdfunding knowledge (*β=-0.0221, t=8.682, p<0.05*) and medical crowdfunding perception (*β=-0.421, t=4.615, p<0.05*). However, the result did not support one hypotheses: Perceived reciprocity of helping others (*β=0.341, t=1.931, p>0.05*).

**Table 4: Output for Structural Model**

| $H_a$ | Variables | β /O | M | SD | T values | $f^2$ | P values | Decision |
|---|---|---|---|---|---|---|---|---|
| **H1** | MCK -> CB | 0.562 | 0.652 | 0.072 | 8.043 | 0.09 | 0.025 | Accepted |
| **H2** | MCP -> CB | 0.466 | 0.406 | 0.065 | 9.116 | 0.13 | 0.031 | Accepted |
| **H3** | ITR -> CB | 0.312 | 0.591 | 0.081 | 7.561 | 0.15 | 0.043 | Accepted |
| **H4** | MCT -> CB | 0.719 | 0.615 | 0.057 | 11.31 | 0.05 | 0.000 | Accepted |
| **H5** | PSS -> CB | 0.635 | 0.584 | 0.065 | 8.242 | 0.08 | 0.039 | Accepted |
| **H6** | PSC -> CB | 0.489 | 0.655 | 0.068 | 3.074 | 0.14 | 0.004 | Accepted |
| **H7** | RHO -> CB | 0.341 | 0.236 | 0.073 | 1.931 | 0.11 | 0.247 | Rejected |
| **H8** | PUN -> CB | -0.406 | 0.491 | 0.089 | 7.933 | 0.07 | 0.044 | Accepted |
| **H9-1** | PSP x MCK -> CB | 0.221 | 0.557 | 0.06 | 8.682 | 0.14 | 0.042 | Accepted |
| **H9-2** | PSP x MCP -> CB | 0.421 | 0.468 | 0.395 | 4.615 | 0.08 | 0.022 | Accepted |

*β/O = Beta/Original sample (representing the standardized path coefficient obtained from the original data sample); M = Sample mean (the average value of the path coefficients obtained through bootstrapping); STDEV = Standard Deviation (the variability or dispersion of the estimated coefficients across bootstrap samples); T = T statistics (tests whether the path coefficient is significantly different from zero); $F^2$ = Effect size (the impact or contribution of an independent variable on the dependent variable); P value = Probability values (the significance level indicating whether the observed relationship is statistically significant or < 0.05).*

Furthermore, the study evaluated the $R^2$ value to measure the model's in-sample predictive power. The results presented in Table 5 show a value of 0.785, indicating 78.5% of the variance in the respondents' crowdfunding-related behaviour is explained by the interactive influence of the exogenous variables. The adjusted R-squared of 0.781, which accounts for the number of predictors and potential overfitting, is close to this value, indicating that the variance is statistically robust and significant. Finally, the study estimated the model's predictive relevance by utilising a blindfolding procedure to obtain the model's $Q^2$ value. The obtained $Q^2$ value of 0.539 (53.9%) was positive, indicating that the model's predictive power was high.

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**Table 5: Coefficient of Determination and Predictive Relevance**

| $R^2$ | $R^2$ adjusted | $Q^2$ |
|---|---|---|
| 0.785 | 0.781 | 0.539 |

*$R^2$ = Coefficient of Determination; $Q^2$ = predictive relevance*

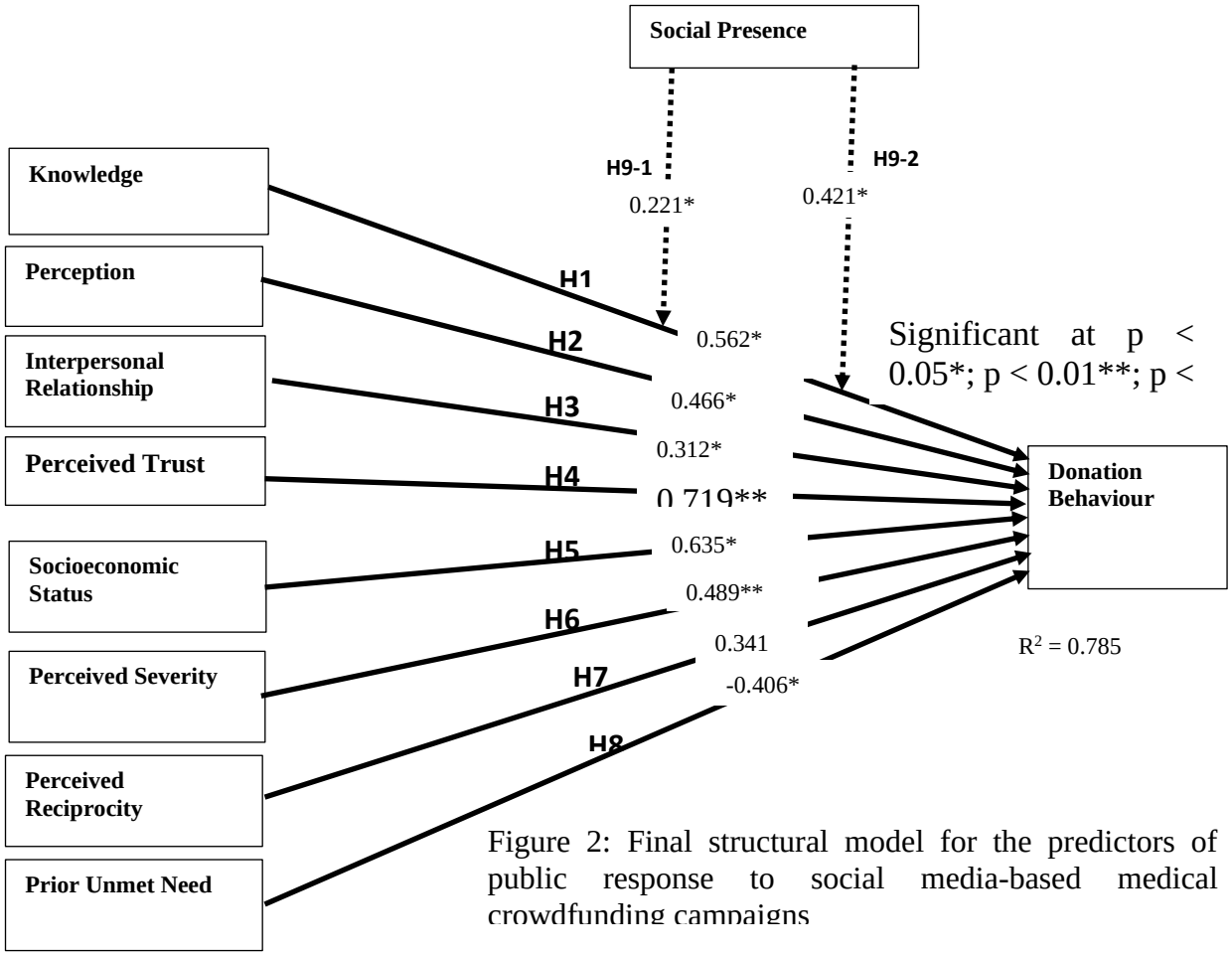


Figure 2: Final structural model for the predictors of public response to social media-based medical crowdfunding campaigns

## Discussion

Analysing data collected from social media users in Nigeria, this study sought to advance empirical knowledge of the predictors of public behaviour towards social media-based medical crowdfunding campaigns. The study's findings showed that perceived trust in crowdfunding campaigns, perceived socio-economic status of fund seekers, and medical crowdfunding knowledge are the three strongest predictors of public behaviour towards medical crowdfunding campaigns on social media.

Specifically, trust in crowdfunding campaigns was found to be the most significant predictor of public behaviour towards online donation, indicating that people who trust the initiators, process and purpose of social media-based medical crowdfunding campaigns would likely support the initiative. This finding is in correlation with the conclusion of Zhang et al. (2022),

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who also found that increased trust enhances individuals' participation in crowdfunding campaigns. On a general note, trust fosters donor confidence, which is vital for mitigating concerns about fraud and fund misuse, and campaigns that incorporate mechanisms for transparency and accountability (such as regular updates on campaign processes and outcomes) may show a higher success rate than those clouded in secrecy and public speculation. High levels of trust increase the likelihood of donations because it could make individuals feel more confident that their contributions will be used appropriately; conversely, a lack of trust, due to concerns about fraud or mismanagement, can deter potential donors from participating in crowdfunding campaigns (Zhang et al., 20122).

Likewise, the study found that the perceived socio-economic status of fund seekers or campaign initiators can significantly influence donor behaviour, suggesting that campaigns initiated for or by individuals from perceived economically advantaged backgrounds often receive greater support. This finding disagrees with the conclusion of Burtch et al. (2014), but supports previous research indicating that fund seekers with perceived socio-economic advantages tend to benefit more from the phenomenon (Livingstone et al., 2023). Importantly, scholars believe that the socio-economic narrative deployed in crowdfunding campaigns often influences the level of empathy and the urgency of the need as perceived by potential donors, and campaigns that highlight the financial hardship of the fund seeker tend to elicit more compassionate responses and higher levels of financial support (Gleasure & Feller, 2016). Perhaps this partly explains why most successful medical crowdfunding campaigns were initiated for and/or by celebrities and other prominent members of society. In all, the findings further raise the ethical issue of inequity inherent in online medical crowdfunding. As contended by Bassani (2019), the existential digital divide that limits the capacity of individuals from lower socio-economic backgrounds or those with limited access to technology to create and promote crowdfunding campaigns can perpetuate existing healthcare inequalities, as those who are less tech-savvy or lack extensive social networks may struggle to raise funds.

Also, our study confirmed a strong positive relationship between knowledge of medical crowdfunding campaigns and public behaviour, indicating that individuals with adequate knowledge of a given crowdfunding campaign are likely to display more supportive behaviours towards it than those with little or no knowledge. For instance, better-informed individuals are more likely to understand the mechanisms of crowdfunding, assess the legitimacy of campaigns, and take coveted actions such as sharing campaigns, liking, leaving supportive comments, and even making actual donations. This aligns with Huang et al. (2021), who submitted that individuals who are more informed about crowdfunding are more likely to participate in campaigns, either by donating or sharing them within their networks. Thus, it is reasonable to argue that increasing public knowledge through targeted educational campaigns can significantly influence the desired donor behaviour by addressing misconceptions and fostering trust.

Similarly, the perceived severity of fund seekers' medical conditions was found to significantly influence donors' behaviour in social media-based medical crowdfunding campaigns, suggesting that social media users may be more willing to donate to patients with very severe medical conditions. This finding lends credence to the conclusion of previous research (Hase et al., 2022; Young, 2017) and further shows the importance of emotional appeals in decision-making related to crowdfunding campaigns. Therefore, campaign initiators should consider utilising emotion-eliciting documentaries that capture the life struggles of fund seekers facing

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severe health conditions to attract greater public support and encourage positive crowdfunding behaviours.

As expected, the perception of online crowdfunding also had a significant positive impact on public behaviour towards social media-based medical crowdfunding campaigns, suggesting that campaigns that receive favourable perceptions from potential donors are likely to succeed more than others. The finding supports Kim's (2017) conclusion that a positive perception of an online crowdfunding campaign can lead to increased engagement, whereas scepticism or perceived exploitation of the platform can result in a lack of support. Given that campaigns that prioritise clarity, accountability and emotional appeal ultimately enhance public perception and engagement, it is logical to infer that the framing of a crowdfunding campaign, the credibility of the adopted platform, and the perceived sincerity of the fund seeker will shape the overall public perception of crowdfunding campaigns.

Consistent with previous research (Hase et al., 2022), our study found that interpersonal relationships with fund seekers significantly predict public behaviour towards social media-based medical crowdfunding campaigns, meaning that campaigns initiated by individuals within close social networks tend to enjoy higher levels of support because of the trust and familiarity associated with such relationships. This finding underscores the need for crowdfunding campaigners to prioritise direct communication with potential donors through personalised messages rather than making a one-for-all public post that is rarely impactful.

Contrary to the study's hypothesis, the findings showed that prior unmet financial needs negatively affected donor behaviour, suggesting that social media users who have previously experienced an unmet financial need (especially for health-related purposes) are less likely to support online medical crowdfunding campaigns. This finding is consistent with observations by Huang et al. (2021), who noted that socio-economic barriers limit individuals' capacity to engage in philanthropic activities. Notably, this finding runs counter to the natural expectation that individuals who have previously experienced unmet needs would be more likely to support others in similar financial circumstances. While this appears to be counter-intuitive, a number factor could be responsible. First, there is the issue of potential resource scarcity or limited finances, given that individuals with prior unmet financial needs are likely to have limited disposable income, which will negatively affect their ability to support (especially donate to) crowdfunding campaigns, even when they seem motivated to help. Besides, having experienced financial setbacks themselves, some individuals may lack the willingness, the financial wherewithal, or both, to support online donation campaigns for health purposes, especially since they received no help in the past. Similarly, there is the factor of donor (compassion) fatigue, which stems from potential donors' repeated exposure to chronic unmet needs within their social networks. The accumulation of emotional exhaustion or compassion fatigue could inadvertently foster learned helplessness. Prompted by this feeling, individuals who previously endured unmet financial needs without public support might not only become doubtful about the perceived effectiveness of social media-based medical crowdfunding campaigns but also be less willing to donate to such campaigns.

As a follow-up to this finding, the study results also demonstrated that perceived reciprocity of helping others did not significantly influence the respondents' behaviour towards social media-based medical crowdfunding campaigns, indicating that individuals are not essentially motivated by a sense of obligation to reciprocate acts of kindness or give to others with the

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expectation of receiving similar gestures in the future. This finding refutes the conclusion of Gerber and Hui (2013), who averred that individuals often donate with the expectation that others would do the same for them in a similar situation. Instead, our findings indicate that while reciprocity may be relevant in other philanthropic contexts, it is less impactful in medical crowdfunding, possibly because of cultural differences and the emotional nature of crowdfunding appeals. For example, many crowdfunding campaigns, especially social media-based ones, are often couched in urgent, episodic, and emotionally salient tones. This could make potential donors' behaviour more likely to be guided by personal empathy, impulse and perceived urgent needs than by their calculations of future reciprocal help. Furthermore, it would be useful to note that donations in many social media-based medical crowdfunding campaigns are made to semi-anonymous fundraisers and/or through donation intermediaries, which makes direct reciprocity somewhat unlikely. Thus, this could mean that a potential donor may not necessarily expect reciprocity for their offered help, given the likely weak-to-no personal relationship they may have with the actual fund seekers. Besides, many people may simply regard their supportive behaviour towards medical crowdfunding as a moral or charitable act rather than as a social exchange with expected return of future rewards.

Finally, the study found that, consistent with Zhang et al. (2022), respondents' perceived social presence significantly moderated the positive effects of knowledge and perception on their overall behaviour towards social media-based medical crowdfunding campaigns, meaning that individuals with higher perceived social presence in the virtual space would likely have improved knowledge and a more favourable perception of online crowdfunding. Specifically, the results show that perceived social presence strengthens the relationship between respondents' knowledge and behaviour as well as respondents' perception and behaviour related to social media-based medical crowdfunding campaigns. As such, people with higher perceived social presence will tend to have greater knowledge and a more positive perception of social media-based medical crowdfunding and, by extension, more favourable behaviour towards such campaigns, which could manifest as liking, commenting, sharing, and actual donations towards crowdfunding campaign goals. In a more practical sense, the findings show that knowledgeable individuals who feel socially connected to or close to crowdfunding campaigns are more likely to donate to such campaigns or take actions to increase their visibility. The same also applies to individuals with a high positive perception of social media-based crowdfunding campaigns. Generally, social media-based medical crowdfunding campaigns thrive on creating personal connections between fund seekers and potential donors (whether strong or weak), making social presence a critical factor in their success. Campaigns often include emotional narratives, images and videos of the individuals in need, which may humanise the cause and create a sense of presence for the patient. These elements work together to increase the campaign's visibility and make potential donors feel emotionally involved and connected to the cause.

## Limitations, Conclusion and Recommendations

Before drawing conclusions, it is germane to acknowledge the inherent limitations of our study. First, our study utilised an online survey and a snowball sampling technique to recruit participants. Generally, only surveys tend to have the inherent drawback of unequal chances of inclusion among all members of the study population. Besides, our study adopted a self-reported measure of respondents' behaviour towards social media-based medical crowdfunding. While this method is popular in behavioural research (De Vreese & Neijens,

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2016), its measurement accuracy is influenced by respondents' disposition and capacity to correctly report their past crowdfunding-related behaviours. Similarly, using the snowball sampling technique means that the study participants were largely drawn through referrals within the existing social network of the initial seeds, and these selected respondents could potentially have related demographic and psychographic characteristics that may tilt the study sample towards homogeneity. These identified drawbacks could affect the generalisability of the study findings; therefore, future research could adopt a more robust research design and sampling technique to address these limitations. Nevertheless, the demographic distribution of our study respondents closely aligns with Nigeria's general online social stratification and we used the correlation matrix technique to ensure there was no Common Method Bias (CMB) problem, considering that the data were collected from the same set of survey respondents.

Despite the above potential limitations, our study has established that the predictors of public behaviour towards social media-based medical crowdfunding campaigns are perceived trust in crowdfunding campaigns, perceived socio-economic status of the fund seeker, the potential donor's knowledge of medical crowdfunding, the perceived severity of a patient's medical condition, general perception of online crowdfunding and interpersonal relationships with fund seekers. Furthermore, whereas prior unmet financial needs negatively impact donors' behaviour, perceived social presence significantly enhances (moderates) the positive effects of knowledge and perception on their overall behaviour towards such campaigns, but perceived reciprocity of helping others does not significantly impact public behaviour towards social media-based medical crowdfunding campaigns.

Therefore, we recommend that initiators and promoters of social media-based medical crowdfunding campaigns collaborate to create awareness and public education initiatives that address the financial, ethical, and operational aspects of these campaigns, thereby improving public knowledge of the phenomenon. Also, to address the pertinent issue of trust in crowdfunding campaigns, social media platforms hosting them should implement robust verification processes to authenticate fund seekers and, perhaps, request periodic updates on how received funds are used. Besides, policymakers should establish legal frameworks to protect donors and ensure ethical fundraising practices by creating tax incentives for verified donations and introducing penalties for fraudulent campaigns.

## Declarations

**AI Use Statement**: The authors confirm that no Artificial Intelligence tools were used in the writing or production of this manuscript.

**Data Availability Statement**: The data that support the findings of this study are available from the corresponding author, Omanwa Ifeoma Muobike, upon reasonable request.

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**Ethical Approval**: This study was conducted in accordance with the Declaration of Helsinki and was approved by the Institutional Review Board of Faculty of Communication and Media Studies, Delta State University, Abraka (Protocol code DELSU/FCM/FCMREC/13122024 on December 13th 2024).

**Authors' Contributions**: JAE conceived and designed the study; OIM and JAE performed the data collection; EU analysed the data; EUO wrote the paper. All authors have read and agreed to the published version.

## References

Ahmad, H. B., & Halim, H. B. (2017). *Determining sample size for research activities: The case of organizational research. Selangor Business Review, 2*(1), 20–34. Retrieved from https://sbr.journals.unisel.edu.my/index.php/sbr/article/download/12/20

Apuke, D. O., & Omar, B. (2020). Fake news and COVID-19: Modelling the predictors of fake news sharing among social media users. *Telematics and Informatics, 56*, 101475. https://doi.org/10.1016/j.tele.2020.101475

Asemah, E. S., Gujbawu, M., Ekhareafo, D. O., & Okpanachi, R. A. (2017). Research methods and procedures in mass communication (2nd ed). Jos, Nigeria: Matkol Press

Bassani, G. (2019). The ethics of medical crowdfunding. *Journal of Medical Ethics, 45*(4), 223-224.

Belleflamme, P., Lambert, T., & Schwienbacher, A. (2014). Crowdfunding: Tapping the right crowd. *Journal of Business Venturing, 29*(5), 585-609 https://doi.org/10.1016/j.jbusvent.2013.07.003

Berliner, L. S., & Kenworthy, N. J. (2017). Producing a worthy illness: Personal crowdfunding amidst financial crisis. *Social Science & Medicine, 187*, 233-242. https://doi.org/10.1016/j.socscimed.2017.02.008

Bishnoi, P., Shukla, S. K., Khana, S. Sheetal, S., Singh, V. K., & Bnerjee, R. (2022). Medical crowdfunding and COVID-19: Awareness and perception of healthcare professionals and role of crowd funding platforms in India. *International Journal of Community Medicine and Public Health, 9*(4), 1884-1889.

Burtch, G., Ghose, A., & Wattal, S. (2014). Cultural differences and geography as determinants of online prosocial lending. *MIS Quarterly*, *38*(3), 773-794.

Datareportal (2024). The state of digital in Nigeria in 2024. Retrieved from https://datareportal.com/reports/digital-2024-nigeria

De Vreese, C. H., & Neijens, P. (2016). Measuring media exposure in a changing communications environment. *Communication Methods and Measures, 10*(2–3), 69–80. https://doi.org/10.1080/19312458. 2016.1150441

Development Monitoring and Evaluation Office (DMEO). (2022). *Sampling guidelines.* Government of India. Retrieved from https://dmeo.gov.in/sites/default/files/2022-06/Sampling_Guidelines_21062022.pdf

Erubami, J. A., Okpeki, P. I., Ohaja, E.U., Anorue, U. C., & Ezugwu, M. N. (2022). Beyond health belief: Modeling the predictors of COVID-19 vaccine uptake among social media users in Nigeria. *Studies in Media and Communication*, 10(2), 39-42. http://doi.org/10.11114/smc.v10i25600

E-ISSN: 2735-9891 DOI: https://doi.org/10.5281/zenodo.20251503

Gerber, E. M., & Hui, J. S. (2013). Crowdfunding: Motivations and deterrents for participation. *ACM Transactions on Computer-Human Interaction, 20*(6), 1-32. https://doi.org/10.1145/2530540

Gleasure, R., & Feller, J. (2016). A rift in the ground: Theorizing the evolution of anchor values in crowdfunding communities through the Oculus Rift case study. *Journal of the Association for Information Systems, 17*(10), 708-736.

Hair, J. F., Ringle, C. M., Gudergan, S. P., Fischer, A., Nitzl, C., & Menictas, C. (2019). Partial least squares structural equation modeling-based discrete choice modeling: An illustration in modeling retailer choice. *Business Research, 12*(1), 115-142.

Hase, V., Schäfer, M. S., Metag, J., Bischofberger, M., & Henry, L. (2022). Engaging the public or asking your friends? Analysing sciencerelated crowdfunding using behavioural and survey data. *Public Understanding of Science, 31*(8), 993–1011. https://doi.org/10.1177/09636625221113134

Huang, Z., Ouyang, J., Huang, X., Yang, Y., Lin, L. (2021) Explaining donation behavior in medical crowdfunding in social media. *SAGE Open, 11*(2), 1-12. https://doi.org/10.1177/21582440211014520

International Trade Administration (2023). Nigeria- Country commercial guide. Retrieved from https://www.trade.gov/country-commercial-guides/nigeria-healthcare Retrieved September 16, 2014.

Kim, Y. (2017). Understanding crowdfunding awareness and participation. *Social Behaviour and Personality: An International Journal, 45*(7), 1183-1193.

Livingstone, A., Servais, L., & Wilkinson, D. J. C. (2022). The ethics of crowdfunding in paediatric neurology. *Development Medicine and Child Neurology, 65*(4), 450–455. https://doi.org/10.1111/dmcn.15442

Memon, A., Ting, H., Cheah, J.-H., Thurasamy, R., Chuah, F., & Cham, T. H. (2020). *Sample size for survey research: Review and recommendations. Journal of Applied Structural Equation Modeling, 4*(2), i–xx. Retrieved from https://jasemjournal.com/wp-content/uploads/2020/08/Memon-et-al_JASEM_-Editorial_V4_Iss2_June2020.pdf

Mollick, E. (2014). The dynamics of crowdfunding: An exploratory study. *Journal of Business Venturing, 29*(1), 1-16. https://doi.org/10.1016/j.jbusvent.2013.06.005

Shobiye, H. O., Dada, I., Ndili, N., Zamba, E., Feeley, F., & de Wit, T. R. (2021). Determinants and perception of health insurance participation among healthcare providers in Nigeria: A mixed-methods study. *PLoS ONE 16*(8), e0255206. https://doi.org/10.1371/journal.pone.0255206

Statista. (2024). Number of social media users worldwide from 2017 to 2028 (in billions). Retrieved from https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/

World Bank Group (2025). World Bank development Indicators. Out-of-pocket expenditure (% of current health expenditure) – Nigeria. Retrieved from https://data.worldbank.org/indicator/SH.XPD.OOPC.CH.ZS?locations=NG

Young, M.J. (2017). The rise of crowdfunding for medical care. *Journal of the American Medical Association, 31*(16). https://doi.org/10.1001/jama.2017.3078

Zhang, T., Zhang, Q., Jiang, R., Gao, T., & Yang, M. (2022). Online users' donation behaviour to medical crowdfunding projects: Mediating analysis of social presence and perceived differences in trust. *Frontiers in Psychology 13*, 1008494. https://doi.org/10.3389/fpsyg.2022.1008494