RESEARCH ARTICLE



A sustainable crowdfunding model for natural disaster victims

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ABSTRACT - Natural disasters are calamitous incidents that affect people, buildings, and properties. Thus, financial aid from the government is crucial to overcome the losses resulting from the aftermath. However, the government is facing difficulties in providing assistance to the victims in terms of financial resources due to a constraint in the availability of recovery funds. Consequentially, the current study aims to investigate the effect of information disclosure on charitable giving behaviour in order to promote organizations' transparency, which will encourage potential donors to donate and serve as a means for sustainable funding sources to aid the victims. The study addresses the gap by using the Mediated Philanthropical Model (MPM) in Social Exchange Theory. Furthermore, this research also aims to offer a mode of sustainable financing for the victims of natural disasters using the cash Waqf principle. The development of the present study is based on examining relevant literature on natural disasters and the issues that the government and non-government institutions face in raising funds for post-disaster recovery planning in order to present a model that provides sustainable funding to support affected victims. The findings will offer valuable insights that could prove beneficial for charitable organizations to attract new donors. Moreover, this study also supports the government in establishing a viable crowdfunding charity model, which in turn will alleviate the financial strain caused by limited government funding. The current research does not contain any empirical analysis; however, future studies can conduct surveys of funders and interview beneficiaries on the practicality of the proposed model.

1. INTRODUCTION

Natural disasters such as floods, earthquakes, and landslides have grown in number, resulting in tremendous annual financial and personal losses across the globe. According to Behl (2023) the United Nations International Strategy for Disaster Reduction [UNISDR] stated that natural disasters caused 68.5% of all community and household destructions from 2005 to 2017. Additionally, a recent example of the excessive economic damage caused by natural disasters is earthquakes of 7.8 and 7.5 magnitude that hit Türkiye at the beginning of 2023. The World Bank rapid damage assessment report highlighted that the resulting severe obliteration of buildings caused an estimated 1.25 million temporarily homeless people and \$34.2 billion of financial losses (The World Bank, 2023). Similarly, Malaysia suffers annually from natural disasters, especially floods that are responsible for substantial and frequent physical damage and the loss of precious human lives (Noor et al., 2021). They also noted that in the last two decades (1998-2018), Malaysia endured 51 significant natural disasters, where 3 million people were affected and an economic loss of approximately US\$2 billion in damages. This indicates that the affected country suffers from a dire situation requiring billions of dollars to reconstruct post-natural disaster damages. However, due to a lack of recovery funds, the government finds it difficult to financially support the victims, as evidenced by previous events from 2014 and 2021. Consequently, external and internal donations play a prominent role in natural disaster relief.

Essentially, giving to charity is done to support the less fortunate. Shaikh and Mclarney (2005) categorised charity into four main activities as follows: creating welfare trusts to overcome poverty, promoting religion, encouraging and advancing education, and supporting campaigns that serve society. Since charity aims to assist and improve the livelihood of the people in need in the community, donations are an act of charity. Donating has several ways, including cash, services, and time. Disaster relief victims depend on governments, non-governmental organisations (NGO's), corporations, and individuals to help them overcome physical and financial damages (Behl et al., 2023; Joshi & Nishimura, 2016). In Malaysia, there are several NGO's that gather monetary contributions to support affected victims of natural disasters. For instance, the Malaysian Red Crescent Society, Mercy Malaysia, IMARET, Malaysian Relief Agency and Global Peace Mission (GPM) Malaysia to name a few [6]. Religion is an essential factor that drives donors to charitable causes (Chevalier-Watts, 2019). He also asserted that major religions like Islam, Christianity, Judaism, Buddhism, and Hinduism encourage their believers to assist underprivileged people in their community.

However, as the impact and frequency of natural disasters escalate, it is imperative to generate sustainable funding and encourage potential donors to participate in giving behaviour. In order to secure continuous donations from society, fundraising organisations must establish a sense of trust, a task that is primarily achieved through transparency, according to Fisher and Hopp (2020). The act of sharing information and the perceived quality of the shared information are closely

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Information disclosure Giving behaviour Trust Sustainable funding Mediated philanthropy model (MPM) connected with transparency (Fisher & Hopp, 2020; Pei et al., 2022). The availability of information about fundraising organisations is a powerful motivator that affects funders' decisions to participate in donation campaigns (Ghoorah, 2021; Yu & Shuang, 2023). Therefore, organisations' transparency regarding relevant information, such as background, financial, non-financial, governance and future information, will ensure constant support from existing donors and encourage prospective donors to contribute.

Furthermore, there is another significant consideration in fundraising, which is the issue of fraudulent activities. Scams can be described as illicit schemes created by dishonest parties to manipulate people into giving money, masquerading as representatives of legitimately recognised organisations. A prime example is a charity initiative called the Hurricane Sandy Relief Effort, which raised \$600,000 in aid for the affected victims. Unfortunately, this endeavour ultimately proved to be a scheme orchestrated by a couple of fraudsters to settle their outstanding credit card debts (Scott, 2015). Another example in Malaysia, The Sun Daily reported the arrest of 34 males and 21 females, ranging in age from 18 to 42 years old, on the charge of illegally using the names of three charity organisations to deceive people into collecting donations (Alena, 2023). The increasing rate of scams in collecting donations has instilled doubt and apprehension in potential funders in the community due to the lack of or limited disclosure of relevant information regarding the organisations involved in collecting aid. As a result, people cannot be assured that their contributions are truly given to people in need rather than being misused for personal gain. Consequently, people are becoming more cautious in making donation decisions, causing them to refrain from participating in giving behaviour.

In light of the aforementioned gap in research, there is a pressing need to further investigate the perspective of funders, which is the aim of the present study. It focuses on identifying the motivators that affect potential doners to contribute. Thus, the adoption of the mediated philanthropical model (MPM) within the framework of social exchange theory to explore the mediating role of trust in the relationship between information disclosure from charitable organisations and giving behaviour. Besides, to ensure sustainable funding for victims of natural disasters, the current study is presenting the concept of Society Crowdfunding Charity Model.

The remainder of this paper is organised as follows: Section 2 provides a concise overview of the existing literature on natural disasters, charitable giving behaviour, and the Social Exchange Theory and MPM framework. Then, Section 3 elaborates on the hyposis development of the study's variables. Afterwards, Section 4 explains the proposed Financial Sustainability Charity Model. Finally, Section 5 concludes the paper.

2. LITERATURE REVIEW

2.1 Natural Disasters

Natural disasters Natural disasters represent catastrophic occurrences stemming from natural phenomena, such as floods, mudslides, tsunamis, landslides, droughts, storms, and other instances of extreme weather that have already surpassed human imagination and accurate prediction (Alimonti & Mariani, 2023). Directive 20 of the Malaysian National Security Council (MNSC) defines a disaster as a complex emergency that leads to loss of life, damage to property and the environment, as well as hindrance to local social and economic activities (Shaluf & Ahmadun, 2006). The rapid development of economies, urbanisation, population growth, climate change, and environmental degradation have exposed people to natural risks. Across the globe, numerous hydrological calamities such as floods and cyclones, alongside geological phenomena including earthquakes, volcanic eruptions, and landslides, have been observed, underscoring the omnipresent risks posed by these events (Chaudhary & Piracha, 2021).

In the year 2021, the Asian region showcased the greatest number of natural disaster occurrences, amounting to 40% of the overall global natural disasters (*Natural Disaster Databook 2021 An Analytical Overview Asian Disaster Reduction Center*, 2021). This statistical representation reveals that Asia continues to take the lead as the most affected region by natural disasters worldwide, taking into account the data from the previous three decades (1991-2020), where the region contributed to 39% of the total number of natural disaster occurrences (as presented in Figure 1). There are various types of hazards, including wildfires, earthquakes, landslides, droughts, floods, and storms.

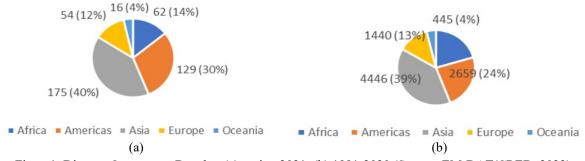
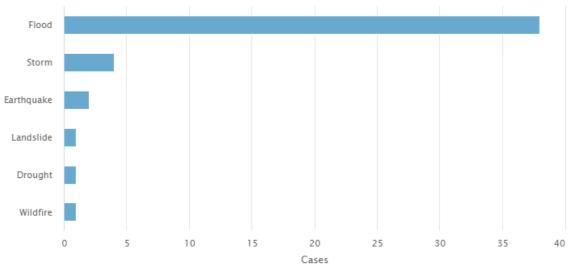
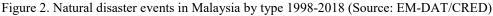


Figure 1. Disaster Occurrence Data by: (a) region 2021; (b) 1991-2020 (Source: EM-DAT/CRED, 2022)

Malaysia is geographically situated in Southeast Asia, specifically in a tropical region along the Strait of Malacca and the South China Sea. Fortunately, the country is spared from direct influences of disasters like volcanic eruptions, hurricanes, earthquakes, tornadoes, and typhoons. However, there are two significant hydrological disasters that adversely affect this nation: excessive water in the form of floods and water scarcity in the form of droughts (Shah et al., 2017). Figure 2 demonstrates the number of natural disasters that have occurred in Malaysia over a span of two decades, from 1998 to 2018 (Noor et al., 2021). The evidence reveals that 38 out of the 51 natural disasters during this period were attributed to floods. Upon examining the overall damage incurred, it becomes evident that floods account for nearly 70 percent of the total destruction in Malaysia, resulting in a loss of MYR8 billion in value (Noor et al., 2021).





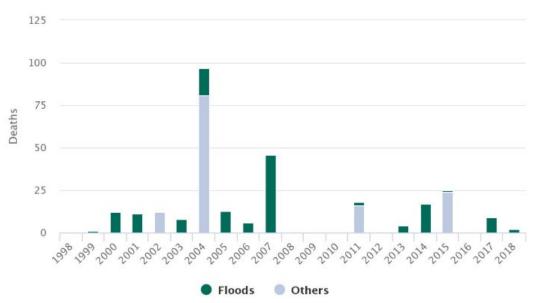


Figure 3. Deaths from natural disasters in Malaysia by year 1998-2018 (Source: EM-DAT/CRED)

Floods in Malaysia have affected numerous individuals, with approximately 770,000 people being affected (Zurairi, 2018). Noor et al (2021) noted that floods have emerged as a major disaster in Malaysia, resulting in numerous fatalities. Tragically, 148 lives were lost due to this natural disaster. Figure 3 illustrates that floods have been the primary cause of death over the past two decades (1998-2018), accounting for more than half of all fatalities resulting from natural disasters. Hence, floods represent a severe calamitous event that has inflicted significant losses upon many Malaysians. As depicted in Figure 3, the highest number of deaths caused by natural disasters occurred in 2004, attributed to earthquakes and tsunamis (Zurairi, 2018).

2.2 Giving Behaviour for Natural Disaster Events

Giving is a voluntary act that involves sacrificing one's own interests to benefit others or a public cause, without expecting anything in return (Berrebi et al., 2021). Berrebi et al (2021) also mentioned that the factors influencing giving behaviour can be categorised as extrinsic and intrinsic. Extrinsic factors, such as education, age, and income level, are easily discernible, while intrinsic factors operate on a deeper level and pertain to the psychological motives underlying an individual's decision to support a charitable cause(Nguyen et al., 2022). Such motives are driven by a sense of duty

and responsibility towards helping those in need. If individuals possess a strong urge to assist the less fortunate, it will motivate them to make donations. In the realm of corporate giving behaviour, two categories shed light on the underlying reasons and motivations behind such behaviour. The first category focuses on the business motives associated with donations, identifying potential rewards and benefits for the company. Meanwhile, the second category centres on a company's social responsibility and its ability to demonstrate corporate benevolence (Gautier & Pache, 2015). Post-disaster stage is critical for a country's recovery. Massive funding is required to aid in the reconstruction of the nation and provide essential necessities to affected individuals. Despite numerous efforts to prevent and mitigate disasters, humanitarian relief remains the primary source of support for countries struck by natural disasters (Kaniasty, 2020). Besides, Kaniasty (2020) noted that different aspects, such as the involvement of non-governmental organisations (NGOs), the diplomatic relations of an affected country with other nations, private donors (such as celebrities and athletes), and corporate entities, play a crucial role in providing financial and non-financial support for the victims.

The issues pertaining to natural disasters and post-disaster financial aid are of great interest within academic research. This field offers numerous significant findings that greatly contribute to future disaster management preparedness. From a theoretical perspective, the objectives and standards of humanitarian aid have been defined. The United Nations General Assembly (UNGA) Resolution 46/182 mandates that emergency and crisis assistance should be provided based on the principles of humanity, neutrality, impartiality, and independence (Aderhold, 2016). Humanitarian assistance serves as a crucial determinant in providing emergency relief and alleviating human suffering during crises, regardless of factors such as race, skin colour, citizenship, or political considerations. However, concerns have arisen over the years regarding the allocation of emergency funds, leading to criticism from organisations and the media. Therefore, it is essential to disclose financial information to the general public in order to prevent misunderstandings among funders.

The present study adopts a quantitative method, incorporating a questionnaire to collect data. The proposed model and findings have the potential to establish a sustainable fund for future natural disasters, thereby alleviating the burden on the government and relevant authorities like the National Disasters Management and Relief Committee (NDMRC) and the National Security Council (NSC) in securing funding for assistance. Furthermore, the study's findings also indicate that this institution is receptive to innovation and actively promotes partnerships aligned with the 17th initiative of the sustainable development goals (SDG).

2.3 Social Exchange Theory and MPM Framework

The theory employed in this study is the social exchange theory. The underlying principle of this theory is that relationships evolve over time based on mutual commitments, trust, and loyalty (Mora Cortez & Johnston, 2020; Thaichon et al., 2018). To foster such development, individuals must adhere to certain rules of exchange. The social exchange theory was developed by four scholars, namely George Homans (1958), John Thibaut and Harold Kelley (1959), and Peter Blau (1964). This theory encompasses various technical contributions, with Peter Blau emphasising technical economic analysis, while Thibaut and Kelley begin with psychological concepts and gradually progress to the dyad and small group dynamics (Abrutyn & McCaffree, 2021).

On the other hand, Homan's contribution to the field of social exchange theory entails the development of a distinct psychological approach that diverges from the perspective advocated by Thibaut and Kelley. He focuses on the psychology of instrumental behaviour. Homan explores the psychological principles of reinforcement to explain the knowledge gained on the exchange at a group level (Treviqo & Tilly, 2015). Blau, however, cautions against being overly focused on psychological concerns, as this may hinder the recognition of vital emerging aspects of social exchange (Abrutyn & McCaffree, 2021).

Social exchange is a significant process whereby there is an interchange of intangible (e.g. relationships and social services) and material benefits (e.g. money) between parties or individuals, thereby facilitating human interaction (Casper Ferm & Thaichon, 2021; Mora Cortez & Johnston, 2020). In their book on the directions of social exchange theory, Abrutyn and McCaffree (2021) noted that Blau's focus primarily lies on the reciprocal sharing of external benefits and the various forms of cooperation and evolving social formations that arise from such social interactions. The theoretical framework of the Mediated Philanthropy Model (MPM) within the Social Exchange Theory, established by Blau (1964), serves as the foundational theory for this study. This model is an expansion of the Basic Philanthropy Model (Blau, 1964), which elucidates the relationship between aid funders, beneficiaries, and social groups. When a funder contributes their money or time to a recipient, they get rewarded with gratitude from the recipient and social approval from their peers.

The expanded framework of the Mediated Philanthropy Model (MPM) describes an exchange that takes place between funders, charitable organisations, and recipients. The recipient expresses gratitude and provides feedback on the performance of the organisation, with the expectation that funders will continue their contributions (Purbasari & Ratnasari, 2021). Charitable organisations act as an intermediary between the donors and recipients, responsible for organising, collecting, managing, and distributing funds to the intended recipients. This study distinguishes itself from others by emphasising the establishment of a daily connection between donors and recipients within a social context through continuous donations. The focus is primarily on the personal relationship between the two parties, driven by social obligations. Recognising donors' giving behaviour is integral to social engagement as human beings. In the case of this specific research, MPM closely reflects the act of giving aid in Malaysia and overseas, managed by charitable organisations. These organisations are responsible for delivering support to the intended recipients. However, while

expressing gratitude to donors, these organisations provide limited feedback information. It is obligatory for organisations to disclose information regarding the use of aids and any other relevant details to the donors. Therefore, the aim of this study is to explore the impact of information disclosure on donors' giving behaviour. The MPM framework will establish a connection between information disclosure and the level of trust among donors. Information exchange, encompassing organisation strategies, forums, and aid conventions, will be utilised to enhance trust levels by improving organisations' transparency regarding shared information with donors. According to Purbasari and Ratnasari (2021), using the Social Exchange Theory as a theoretical basis to assess funders' behaviour is more suitable than other economic theories.

3. HYPOTHESES DEVELOPMENT

3.1 Background Information

The provision of basic background information guarantees that institutional donors possess comprehensive knowledge about an organisation's nature, status, and service operations when deciding to donate (Abd Jalil et al., 2019; Zainon et al., 2011). A study conducted by Nogami (2014) to examine the attitudes of Japanese donors and non-donors revealed that approximately 54% of a sample of 5253 respondents refrained from donating due to scepticism towards charitable organisations. Another study done by Dougherty (2019) revealed that 92 percent of Canadian donors believe that charities should disclose how funds are allocated, reflecting their scepticism towards charitable organisations. Zainon et al. (2011) asserted that background information can be classified as essential information that fosters trust in an organisation. The transparency of charities impacts the intention to donate, especially when it comes to handling the collected funds (Kasri & Ramli, 2019). Therefore, it is crucial for charitable organisations to disclose the necessary background information in order to gain the trust of donors.

A significant relationship has been observed by Yeo et al. (2017) between the disclosure of background information and individual donation decisions. Consequently, employing the Mediated Philanthropy Model, it can be inferred that well-informed donors or potential donors will develop trust in an organisation upon acquiring background information. Based on the aforementioned discussion, the following hypothesis is proposed:

H1: Background information of organisation has a positive effect on trust towards organisation

3.2 Financial Information

When deciding whether to contribute to a donation, prospective donors consider the disclosure of financial information provided by the charitable organisation (Ghoorah et al., 2021). Besides that, Abd Jalil et al. (2019) highlighted financial information as records of financial operations, such as incomes, expenses, costs, and revenues, to ensure accuracy and clarity of the data. Financial statements, including the statement of cash flow, balance sheet, and statement of income and expenditure, serve as formal records of the organisation's financial activities. By examining these financial reports, donors can access relevant information to analyse the efficiency of an organisation's performance (Chen, 2021). Additionally, Yang et al. (2017) and Ghoorah et al. (2021) deduced that each component of the financial information caters to different needs, collectively ensuring that funders can assess how effectively a charitable organisation observes total expenditure, allocates its funds, and ascertains its financial sustainability.

The annual report serves as a comprehensive document that showcases the financial performance and operational activities of an organisation. In a study conducted by Yasmin et al. (2021), the focus was on understanding the intended beneficiaries of charities. Through interviews, participants were queried about the target audience of the annual report. The findings revealed that the annual report holds significant importance as a communication channel. Furthermore, it can be regarded as a comprehensive reporting package that promotes accountability (Yasmin et al., 2021). The annual report is perceived as a vital document that provides the charity organisation with a competitive advantage in terms of governance. By examining the organisation's financial performance as depicted in the annual report, donors can acquire information regarding the utilisation of funds and whether they are allocated appropriately towards intended activities or individuals. When non-profit organisations exhibit sound financial management, it enhances their reputation and thence trustworthiness (Ghoorah et al., 2021). Hence, organisations must disclose information regarding the sources and utilisation of funds in financial statements that effectively gauge their financial performance, thereby satisfying public trust and encouraging people to frequently donate through them.

providing more detailed information on the actual cost-income ratios, would improve public trust in charitable organisations (Peng et al., 2019). Moreover, Yeo et al. (2017) found a significant correlation between the disclosure of financial information and individual decisions to donate. The application of the Mediated Philanthropy Model should involve a mutual sharing of benefits between all parties involved. Consequently, this study aims to investigate the relationship between the sharing of financial information and people's trust in the organisation, and subsequently propose the following hypothesis:

H2: Financial information of organisation has positive effect on trust towards organisation

3.3 Non-Financial Information

Non-financial data is a qualitative reporting that provides individuals with knowledge regarding the organisation's mission accomplishment (Ihsan et al., 2011; Jalil et al., 2021). Furthermore, a study done by Hyndman (1990) found that

funders of the majority of charitable organisations use non-financial information about an organisation to judge its performance. This suggestion was supported by Atan et al. (2012), who noted that the availability of non-financial information to donors and potential donors will increase their determinant to make donations to charity organisations since it gives an insight on the performance, development, and impact of the organisation's activities. The scope of activities and programmes run by the charity organisation and its efficiency are the non-financial information that is critical for doners to participate (Zainon et al., 2011). This type of data informs donors and potential donors of the charitable organisation's achievements and goals, which in turn encourages them to make donation decisions. Thus, an organisation will make an effort to disclose non-financial data in order to maintain its reputation among donors (Anggita et al., 2019).

Moreover, the Global Reporting Initiative (GRI) guidelines ensure that a framework of principles and guidance is provided to companies for reporting on their sustainability performance, including a list of disclosures and key performance indicators (Perego & Kolk, 2012). Consequently, within the Mediated Philanthropy Model, it is imperative that donors possess the belief that charitable organisations are dependable, credible, capable of effectively transmitting their mission, and judicious in their use of donations before making contributions. Therefore, the objective of this study is to examine the association between non-financial information and trust towards an organisation. Hence, the subsequent hypothesis is proposed:

H3: Non-financial information of organisation has positive effect on trust towards organisation

3.4 Governance Information

Jalil et al. (2021) defined governance as the process of providing strategic leadership to an organisation through the establishment of direction-setting, policies and strategy decisions, performance supervision, and observation, and general accountability. Based on a study done by Gandía (2008), the codes of good corporate governance have experienced rapid growth since the early 1990s, resulting in compliance with business practices becoming the benchmark for company transparency. The evidence regarding donors relying on governance information for their donation decisions is still weak. Therefore, it would be profitable to assess the usefulness of governance information to donors since such information can be considered crucial. Besides, people are concerned about the efficiency and effectiveness of how charitable organisations manage donation funds to ensure that the intended beneficiaries receive the support. Consequently, it is vital for all charitable organisations to disclose how they utilise the donations they receive from funders (Nogami, 2014; Yeo et al., 2017). In addition, a study was conducted by (Atan et al., 2014) to examine the relationship between governance attributes and the disclosure practices of charity organisations. These attributes encompass both internal mechanisms (such as the presence of institutional donors on board and board size) and external governance mechanisms (such as the presence of an independent audit). The findings indicate that the extent of information disclosure by charity organisations is influenced by their size and capacity to enhance transparency, thus attracting more donations. This suggests that donors seek data on the utilisation of donated funds for charitable purposes in order to establish trust in the organisation. In the context of charity, one aspect of governance may involve whether donors compel workers (whether employed or volunteers) to allocate funds exclusively for the intended individuals (Hyndman & McDonnell, 2009).

Furthermor, Anggita et al. (2019) conducted a study to determine whether governance information, such as the structure, position, and employment, should be transparently disclosed at Bangka Belitung University. Although not all governance information was revealed transparently by the university, the study indicated that respondents consider governance information to be quite important, as evidenced by 65.85% of respondents agreeing with most of the items related to governance information disclosure in the questionnaire. Moreover, a significant correlation was found between governance information disclosure and individual's donation intention (Ghafran & Yasmin, 2020; Yeo et al., 2017). In line with the Mediated Philanthropy Model, it is crucial to disclose governance information before funders can develop trust in an organisation. Consequently, this study aims to investigate the relationship between governance information and proposes the following hypothesis:

H4: Governance information of organisation has positive effect on trust towards organisation

3.5 Future Information

Zainon et al. (2011) defined future information as data related to strategic planning, statement of future activities, budget, core practicality of the organisation, and its vision and mission statements. These elements are expected by institutional donors to be included in the charitable organisation's report. According to the Jenkins committee, business reporting should provide users with essential and relevant information that enables them to predict the future performance of the firm (Flöstrand & Ström, 2006). Doners are familiar with leading performance indicators and therefore have a preference for future information over past information, as it aids in planning and forecasting in order for them to decide on participating in giving behaviour. Future information plays a crucial role in ensuring sustainability and assessing the achievement of the organisation's goals in the previous year (Jalil et al., 2021). Moreover, Anggita et al. (2019) studied the effect of the level of voluntary information disclosure by Banka Belitung University on the willingness of stakeholders to contribute. It revealed that informations. Another study on Faith-Based charity organisations examined the communicated accountability, which categorised the disclosure of plans or information for the future period as policy accountability. This type of accountability holds trustees responsible for the pursued policies and the appropriateness of their actions

(Yasmin et al., 2014). Applying the Mediated Philanthropy Model, when donors or potential donors have access to information about the organisation's budget, strategic planning, future activities, and future budget, they develop trust and confidence in the organisation. Based on the aforementioned discussion, the following hypothesis is proposed:

H5: Future information of organisation has positive effect on trust towards organisation

3.6 Trust to Giving Behaviour

The concept of trust refers to a state in which a party holds positive expectations regarding the intentions or behaviour of another party without any intention of damage, abuse, or causing harm (Hou et al., 2020). Previous research has revealed a significant indirect correlation between trust and giving behaviour (Fanea-Ivanovici & Baber, 2021; Islam et al., 2021; Zhang et al., 2020). However, Shang et al. (2019) found no significant direct relationship between trust and giving behaviour. In a separate study, Snip (2011) aimed to identify the factors that influence individuals' intention to donate to a charitable organisation, as well as the factors that impact their trust in such organisations. The findings indicated that individuals are more likely to continue giving when they trust the organisation. Therefore, it can be inferred that trusting an organisation ultimately leads to engaging in giving behaviour. Enhancing an organisation's trustworthiness can effectively increase the public's trust in said organisation (Bekkers, 2003; Ghoorah et al., 2021). Thus, the subsequent hypothesis is proposed:

H6: There is a positive relationship between trust and giving behaviour for natural disaster

3.7 Trust as Mediator

According to Sargeant and Lee (2004) there is a correlation between trust and the act of giving. In the absence of trust, donors will refrain from engaging in giving behaviour towards an organisation, as they lack confidence in the organisation (Abdul Shukor et al., 2019; Ghoorah et al., 2021). Previous research has also demonstrated the importance of trust in charitable donations in the Netherlands (Bekkers, 2003). In a different context, previous studies have explored the link between the level of knowledge and the decision-making process regarding organ donation. For instance, Volz Wenger and Szucs (2011) revealed that sufficient information is necessary to make an informed decision, and individuals who possess this knowledge are more likely to discuss their donation intentions with their family members. Another study done by Nifadkar et al. (2019) in a different context examined the association between supervisors' sharing of work-related and non-work-related information and the trust subordinates have in their supervisors and found a significant relationship. Additionally, trust has been found to be connected to both information disclosure and giving behaviour. Accordingly, trust can be seen as a mediator between the organisation's information and giving behaviour. This study will employ MPM to investigate the impact of feedback information on information disclosure, which in turn fosters trust in donors towards the organisation, ultimately leading to giving behaviour. Therefore, the paper proposes the following hypothesis:

- *H7a:* Trust mediates the relationship between background information of an organisation and donors giving behaviour for natural disaster
- *H7b:* Trust mediates the relationship between financial information of an organisation and donors giving behaviour for natural disaster
- *H7c:* Trust mediates the relationship between non-financial information of an organisation and donors giving behaviour for natural disaster
- H7d: Trust mediates the relationship between future information of organisation and donors giving behaviour for natural disaster
- *H7e: Trust mediates the relationship between governance information of an organisation and donors giving behaviour for natural disaster*

Based on the literature review, Figure 4 presents the proposed theoretical model of hypothesis in this research. In the context of information disclosure pertaining to donor's giving behaviour, this framework has been adopted and altered. Serving as the independent variable, information disclosure is anticipated to indirectly impact the giving behaviour of the dependent variable, with trust acting as a mediator. Trust, being the mediating variable, plays a pivotal role in shaping the donor's giving behaviour.

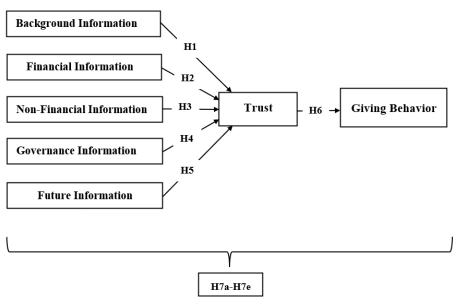


Figure 4. Theoretical model

4. RESEARCH METHODOLOGY

The quantitative approach will be utilised to achieve the research objective. Primary data will be collected via a questionnaire using the convenience sampling method. The unit of analysis for the study is at the individual level, and the data is categorised as cross-sectional time horizon research. G*Power was utilised to determine the minimum sample size for the study, which is 138 samples. Further, in this study, the questionnaire contains three sections. Section A is dedicated to gathering socio-demographic information and consists of ten questions. Section B focuses on all independent variables, while Section C is dedicated to the dependent variable and the mediating variable. In total, there are 64 items designed to measure the variables under investigation in this study. The independent variables are assessed using a Likert scale consisting of five levels, ranging from Strongly Not Important (1) to Strongly Important (5). The dependent variable and the mediating variable, on the other hand, are evaluated using a five-point Likert scale, which spans from Strongly Disagree (1) to Strongly Agree (5). The data collected will be analysed using SmartPLS software.

5. CONCLUSION

Even though several studies in literature have addressed the topic of both natural and man-made disasters, there is still a scarcity of studies examining the determinants that influence charitable giving behaviour. Hence, this study represents the first comprehensive investigation focusing on the behaviour of donors in the context of natural disaster occurrences in Malaysia. The objective of this paper is to analyse the impact of information disclosure on charitable organisations in order to establish trust and encourage potential donor's engagement for sustainable funding. moreover, this research will provide a valuable contribution to the Mediated Philanthropy Model, which is widely utilised in academic research and is grounded in social exchange theory. Additionally, there is no empirical or scholarly evidence that utilises cash Waqf principle in generating profits from collected donations. Hence the model presented in this study is regarded as a novel and comprehensive model that the government can potentially introduce to the general public.

The findings of this study will offer valuable insights to the industry and policy makers, particularly in terms of fundraising efforts for post-disaster recovery, both domestically and internationally. The significant determinants identified in this study will serve as benchmark signals, particularly for charitable organisations, indicating the need to meet relevant criteria in order to enhance donor confidence and ease decision-making processe for potential donors. Moreover, this study can assist in formulating guidelines, procedures, and collaborative efforts, including the establishment of transparent and systematic processes for approved organisations in handling natural disasters. These efforts would involve making the organisation's information publicly available to both donors and potential donors, thus fostering greater trust and confidence in charitable organisations. Besides, the findings of this study can benefit the government to propose legislation in Parliament that mandates organisations to appoint third-party trustees to ensure that donated funds are directed towards the intended natural disaster events and victims. The proposed model will restore and improve donors' trust by appointing an impartial government party to oversee the collection of donations and its investments. Therefore, ensuring a consistent flow of funds to support natural disaster victims and reduce their dependency on government assistance.

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AUTHORS CONTRIBUTIONS

Yuvaraj Ganesan (Conceptualization and Writing) Anwar Allah Pitchay (Conceptualization and Writing) Muhammad Shabir Shaharudin (Methodology and Editing) Azlan Amran (Methodology) Noha Mamdouh Aboueliz (Writing)

AVAILABILITY OF DATA AND MATERIALS

The data supporting this study's findings are available on request from the corresponding author.

ETHICAL STATEMENT

Not applicable.

CONFLICT OF INTEREST

The authors declare no conflicts of interest.

REFERENCES

- Alena (2023). Syndicate posing as charity organisations online uncovered, 55 Malaysians arrested, World of Buzz, https://worldofbuzz.com/syndicate-posing-as-charity-organisations-online-uncovered-55-msians-arrested/ (accessed Feb. 23, 2024).
- Behl, A., Dutta, P., Sheorey, P., & Singh, R. K. (2023). Examining the role of dialogic communication and trust in donation-based crowdfunding tasks using information quality perspective. *The TQM Journal*, 35(1), 292-319.
- Chevalier-Watts, J. (2019). Faith, hope and charity-a critical review of charity law's socio-legal reconciliation of the advancement of religion as a recognised head of charity (Doctoral dissertation, The University of Waikato).
- Fisher, J., & Hopp, T. (2020). Does the framing of transparency impact trust? Differences between self-benefit and otherbenefit message frames. *International Journal of Strategic Communication*, 14(3), 203-222.
- Ghoorah, U., Talukder, A. M. H., & Khan, A. (2021, April). Donors' perceptions of financial disclosures and links to donation intentions. In *Accounting Forum* (Vol. 45, No. 2, pp. 142-170). Routledge.
- Joshi, A., & Nishimura, M. (2016). Impact of disaster relief policies on the cooperation of residents in a post-disaster housing relocation program: A case study of the 2004 Indian Ocean Tsunami. *International Journal of Disaster Risk Reduction*, 19, 258-264.
- Noor, B. Koh, P. Lee, & C. Mamat (2021). *Country Experience: Malaysia*. National Disaster Management Agency (NADMA). https://www.unescap.org/sites/default/d8files/event-documents/Malaysia_7th_TWG_30Apr2021.pdf
- Pei, X., Yang, Y., Huang, Z., & Bestoon, O. (2022). Research on user donation and information sharing in textile crowdfunding. *Industria Textila*, 73(6), 671-679.
- Scott, R. (2015). Charity Scams Put the Disaster in Disaster Relief. Forbes, October. https://www.forbes.com/sites/causeintegration/2015/10/05/charity-scams-put-the-disaster-in-disaster-relief/-?sh=4ef250adc6fa (accessed Feb. 23, 2024)
- Shaikh, S., & McLarney, C. (2005). Where does all the money go? An investigation of donation filtration. *International Journal of Sociology and Social Policy*, 25(12), 81-91.
- The World Bank (2023). Earthquake Damage in Türkiye Estimated to Exceed \$34 billion: World Bank Disaster Assessment Report, https://www.worldbank.org/en/news/press-release/2023/02/27/earthquake-damage-in-turkiye-estimated-to-exceed-34-billion-world-bank-disaster-assessment-report (accessed Feb. 21, 2024).
- Tan (2024). Malaysia floods: List of verified, fundraising charities you can donate to, *Vulcan post*, 2021. https://vulcanpost.com/772756/malaysia-flood-donate-charities-list/ (accessed Feb. 22, 2024).
- Yu, S., & Shuang, L. (2022). Study on the influence factors of non-profit organization's information disclosure quality. In 2022 2nd International Conference on Financial Management and Economic Transition (FMET 2022) (pp. 43-54). Atlantis Press.