

THE IMPACT OF GLOBAL CRISES ON PROSOCIAL BEHAVIOURS

by

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ABSTRACT

The proliferation of global crises in recent times has been unprecedented. For instance, the world has been faced with unparalleled challenges like a global health crisis, a worldwide financial meltdown and climate-related natural disasters. These examples highlight that people are being exposed to a lot of drastic changes more frequently than ever before, severely affecting how they see the world and the way they think and behave. Due to the widespread nature of these events, it is important to understand the role of affective and cognitive aspects on people's behaviours during crises. While prior research has examined how cognitive appraisals and emotions influence behaviours, little is known about how these affective and cognitive experiences can help explain prosocial behaviours during global crises. To close this gap, this research examines the cognitive appraisals (i.e., challenge and threat) that people experience during global crises and how this can alter their emotional states (i.e., hope) and, subsequently, impact their intentions to engage in prosocial behaviours like volunteering and donating money. Likewise, this research explores the mediating role of value in behaviour in this relationship.

Drawing on the appraisal theory of emotions, this study develops a conceptual framework linking global crises to prosocial behaviours and addresses the following research questions: RQ1: How do the appraisals of a crisis-generated stressor influence prosocial behaviours? RQ2: Do hope and value-in-behaviour act as mediators between global crises and prosocial behaviours? This study conducted an online survey with 200 participants via Amazon Mechanical Turk (MTurk). The questionnaire was administered over four weeks. Structural mediation modelling (PLS-SEM) was employed to analyse the data using SmartPLS 4.0 software.

The results reveal significant differences between the two proposed conditions (volunteering and donating money). As predicted, during a global crisis like the COVID-19 pandemic, challenge appraisals have a positive influence on volunteering and donating behaviours, having hope and value-in-behaviour (altruistic and emotional) as key mediating variables in this relationship. In turn, threat appraisals decrease the desire to donate money, having hope and value-in-behaviour (altruistic and emotional); however, this variable was not significant on intentions to volunteer. The present research contributes to the current knowledge base by offering important theoretical and managerial contributions. From a theoretical standpoint, the study contributes to the literature on prosocial behaviours during times of crisis. The impact of global crises on prosocial behaviours is yet to be fully understood, and the purpose of the study represents an effort in that direction, explaining how cognitive appraisals and emotions play a key role in that relationship. From a managerial standpoint, by understanding how individuals appraise and emotionally react to global crises, charitable

organisations can develop appropriate response strategies to continue motivating, recruiting and retaining supporters during these extreme situations and, more importantly, establish long-term relationships with them.

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ATTESTATION OF AUTHORSHIP

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgments), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

A handwritten signature in blue ink that reads "Claudia A". The signature is written in a cursive style with a large, looping initial 'C'.

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ETHICS APPROVAL

Ethics approval from Auckland University of Technology University Ethics Committee (AUTEK) was granted on 21st September 2022, for a period of three years until 21 September 2025. The ethics application number is 22/229 (see Appendix A for Ethics Approval Letter).

CHAPTER ONE: INTRODUCTION

1.1 Background

Global crises are massive disturbances that impact multiple territories simultaneously (Kabadayi et al., 2020). Consistently, Ratten (2020) describes them as emergencies with terrible consequences for humanity. As the impact of these events does not follow a uniform path, the repercussions vary on different service ecosystems and stakeholders (Davvetas et al., 2022; Kabadayi et al., 2020). For example, the COVID-19 pandemic has affected the whole world, but its impact has been different across countries in terms of the amount of infections, number of hospitalisation cases and death rates (Davvetas et al., 2022). Nowadays, global crises are more frequent and severe in impact, so countries, cities and regions are struggling more to recover from them (Davvetas et al., 2022; Kabadayi et al., 2020). Inevitably, as these disruptions bring severe consequences to the global economy, they place a large strain on our society, especially affecting the most vulnerable populations (He & Harris, 2020; Kabadayi et al., 2020).

The world has faced such few severe crises in recent years, such as the financial collapse of 2008, the ISIS terrorist attacks in 2015, the Syrian war that led to a massive refugee crisis and the COVID-19 pandemic (Davvetas et al., 2022). Difficult experiences like this can severely impact how people feel, think and react. The behavioural responses to stressors like global crises are explained by the way people interpret them (Espedido & Searle, 2021). For example, if a person encounters more demands in the environment due to a global shock, this will lead to an appraisal process in which the individual feels like the demands are exceeding their capacity and resources to face this adverse situation and, thus, this will have an impact on their behavioural patterns (Pearsall et al., 2009).

In particular, the uncertainty and constant changes engendered by global crises are major concerns for charitable organisations (Hyndman, 2020). Indeed, these extreme circumstances can severely affect charitable organisations as they have to face rising costs for essential items, while they struggle with the reduction of donations and support of volunteers to manage their day-to-day operations (Hyndman, 2020). At the same time, many charitable organisations have increasing demands for their services as people suffer the consequences of a global crisis (Mahmoud Saleh & Karia, 2020). As extreme circumstances like this play a crucial role in affecting an individual's judgments and decisions (Lavuri et al., 2022), this can potentially hamper the long term survival of charitable organisations as many of them heavily rely on the support of the public to conduct their activities (Xu et al., 2022). Thus, an in-depth understanding of how global crises can change people's intentions to support the work of charitable organisations is becoming increasingly important in order address the short-term and potentially long-term changes resulting from these massive disturbances.

1.2 Problem statement

Understanding prosocial behaviours is critically important for charitable organisations, as they rely on donations of goods and money, and the assistance of volunteers to provide services for their communities (Bradford & Boyd, 2020). Nowadays, this need is further emphasized as new global crises keep adding more pressure on charities in conducting their activities. New global crises essentially unleash a state of profound uncertainty that pushes people to experience mixed emotions, which in turn, leads to the development of new behaviours to cope with the crisis (Septianto et al., 2022; Sheth, 2020). These changes in people's responses can severely impact the support charities receive to manage their operations. Based on the potential ramifications of these shortcomings, it is important to have a good understanding of how crises affect individuals involved in supporting charitable organisations as the changes in their contributions can threaten the continuity of the charities' social missions.

The past decade has seen increased interest in prosocial behaviours in academic literature (Cavanaugh et al., 2015). However, to date, the majority of the research on prosocial behaviours has focused on understanding the individual factors and social and cultural drivers that motivate individuals to support charitable causes (Beldad et al., 2014; van Dijk et al., 2019), exploring the role of emotions on intentions to engage in prosocial behaviours (Homer, 2021; Septianto & Tjiptono, 2019) and reviewing crisis / disaster events and prosocial behaviours (de Leeuw et al., 2022; Ye et al., 2020). Yet, from the perspective of charitable organisations, the implications of global crises on prosocial behaviours are less clear, especially regarding the impact on the continuity of their missions.

Despite the importance of understanding the impact of environmental stressors like global crises on prosocial tendencies, little research has focused on understanding how appraisals and emotions engendered by these unexpected events can influence people to engage in prosocial activities like volunteering or donating money. With the development of the COVID-19 pandemic, more interest has surged on the impact of crises on people's behaviours, as the magnitude of the impact has never been seen before (Ramanathan & Ramanathan, 2022). Studies related to the impact of COVID-19 on behavioural changes in retail settings have explored how individuals have engaged in panic buying of food and other essential items (Sheth, 2020), which have led to shortages of products on supermarket shelves (Omar et al., 2021) and disruptions in the supply chains (Ramanathan & Ramanathan, 2022); and the effects of protective measures such as social distancing, mandatory quarantines, travel restrictions and cancellation of mass gathering events on individual's shopping experiences and behavioural intentions (Untaru & Han, 2021). Additionally, Zhenget al. (2021) analysed the impact of the outbreak on relational versus material goals, as well as the ramifications of the pandemic on subjective well-being. During their review of literature, they highlighted the severe impact of the outbreak on people's lives, especially focusing on the increased number of people struggling with mental health issues. Furthermore, previous research on other crises like the 9/11 terrorist attack also focused on how the uncertainty has led to changes in consumption, such as hoarding and purchase of luxury goods as a mechanism

to manage the anxiety produced because of the crisis (Mishra et al., 2022). Thus, given the importance of prosocial behaviours for charitable organisations, more research attention should be given to explore how global crises have changed people's behaviours in regard to supporting charitable activities.

In summary, beyond the investigation of global crises, emotions, and intrinsic factors like value-in-behaviour and prosocial behaviours, a gap is identified in research on how appraisals and emotions impact individuals' intentions to engage in prosocial behaviours during global crises. Considering that the underlying psychological processes to evaluate a global crisis are critical to managing the short and potential long term effects of these events, the present research provides a step in that direction.

This research addresses the current gap and concern by focusing on understanding how the appraisal of global crises can alter individuals' emotional states and how these emotions, in turn, can affect individuals' prosocial tendencies regarding volunteering and donating money. Specifically, the conceptual model proposed in this research distinguishes challenge and threat appraisals, reflecting the two different types of judgements an individual can make by assessing a global crisis, and also presents two prosocial behaviours, that is, volunteering and donating money. Furthermore, hope is used as the underlying emotional mechanism that mediates the relationship between appraisals and prosocial behaviours, while value-in-behaviour is proposed as a key mediating factor influencing the decision to engage in prosocial behaviours. Thus far, there is no empirical research that focuses on the joint roles of hope and value-in-behaviour in influencing prosocial behaviours in uncertain situations like global crises. This research adds value by producing theoretical insights into individuals' responses to global crises.

1.3 Research objectives and research questions

This research addresses the following objectives.

The first objective is to understand how the cognitive appraisals and emotional states that individuals go through when facing a global crisis can impact their approach to prosocial behaviours. To do so, the appraisal theory of emotions will serve as the framework for understanding the relationship between global crises and prosocial behaviours. According to this theory, the brain first appraises an environmental demand, commonly referred to as "stressor" (Britton et al., 2019), based on its impact on personal wellbeing. For example, if the situation is interpreted as a challenge, the individual sees an opportunity for gain or growth, whereas if the situation is perceived as a threat, the individual anticipates potential harm or losses (Kundi et al., 2021). This appraisal process then leads to the appearance of emotional responses (Tong et al., 2022), followed by distinct outcomes or behavioural responses (Copec et al., 2022). For the purpose of the present research, the recent outbreak of the COVID-19 pandemic will be used as the environmental stressor that will lead to the cognitive appraisal process in individuals, and two types of prosocial behaviours have been chosen, that is, volunteering and donating money. Firstly, the COVID-19 pandemic was chosen as the environmental stressor as its complexity, scale, and

number of lives affected have been major compared to previous global crises (Kabadayi et al., 2020). Secondly, in terms of prosocial behaviours, volunteering and donating money have been selected as they are the most common types of donations sought out by charitable organisations (Chen et al., 2022). According to Li et al. (2020), donating time through volunteering and donating money to support charitable organisations can have different effects on behaviours, satisfy various needs and have diverse associations. For example, time is commonly associated with social connections, while money is related to the idea of working hard (Chen et al., 2022; Li et al., 2020). Therefore, given the importance of these prosocial behaviours for the sustainability of charitable organisations and their missions, the present research examines how the appraisal of global crises can impact these prosocial tendencies.

The second objective is to examine the role of hope and value-in-behaviour as mediating variables in the relationship of cognitive appraisals of global crises and prosocial behaviours. This research focuses on an understudied emotion, that is hope (Cavanaugh et al., 2015). Based on Snyder's (1991) theory of hope, hope can be defined as the potential capacity that derives pathways to achieve desired goals and the internal motivation to reach those goals (Ozyilmaz, 2020). Similarly, Cavanaugh et al. (2015) described hope as the desire for good things to happen and the belief that improvement is possible. Chowdhury and Septianto (2023) expanded this definition by saying that hope is an essential emotion for adaptation and survival. Under the proposed context of a global crisis like the COVID-19 outbreak, hope is an important emotion that would advance the understanding of how prosocial behaviours can be affected by the appraisal of these extreme events. Additionally, value-in-behaviour is introduced as a novelty to the literature on donations of time and money. Value-in-behaviour can be defined as the perceived value towards the performance of a specific behaviour (Gordon et al., 2018). Within the proposed context, value-in-behaviour can help explain the value associated with volunteering and donating money. Thus, this study considers how the perceived value-in-behaviour can add to the proposed research study.

To this end, this study seeks to address the following research questions:

RQ1: How do the appraisals of a crisis-generated stressor influence prosocial behaviours?

RQ2: How do hope and value-in-behaviour mediate the relationships between global crises and prosocial behaviours?

1.4 Research design

This research employs an online survey to understand the relationship between global crises, cognitive appraisals, hope, value-in-behaviour and prosocial behaviours. Data collection took place on a crowdsourcing platform called Amazon Mechanical Turk (MTurk), and the analysis of the data was done using SmartPLS. The final sample comprises 200 participants aged 20 or

older from USA who have supported a social cause through volunteering or donating money in the past twenty-four months.

1.5 Significance of the study

This research offers several contributions to the growing literature on cognitive and emotional responses under severe circumstances, and prosocial research during global crises (see Table 1). First, the research contributes to the current literature by developing a conceptual framework that offers a more comprehensive perspective on the psychological processes that individuals go through when assessing global crises and their impact on intentions to engage in prosocial behaviours. Specifically, guided by theoretical considerations from the appraisal theory of emotions and literature on global crises and non-profit organisations, this framework develops a novel perspective for understanding the cognitive responses to a global crisis, how these responses can impact individuals' emotional states such as being hopeful for the future during an uncertain situation, and the subsequent resulting behaviours, which in this case are the intentions to support charitable organisations through volunteering or donating money. Thus, understanding the proposed relationships under the context of global crises offers important knowledge, especially as global disasters are becoming more frequent nowadays.

Second, the research adds to the literature on cognitive and affective assessments in an extremely stressful context. It is important to note that most prior research has focused on understanding how appraisals and emotions influence donation patterns (Erlandsson et al., 2018; Homer, 2021). Current literature lacks research assessing the cognitive and emotional components that could impact the support of individuals to charitable causes during global crises. A better understanding of the cognitive and emotional mechanisms underlying people's decisions could be helpful for charitable organisations to get more people involved in supporting their causes, and also ensure the retention of their current supporters long-term. Furthermore, by having this key knowledge, charitable organisations would be able to implement strategies to motivate, recruit and retain supporters during times of crisis.

Third, after reviewing existing literature, it was noted that socio-demographic factors have been used to predict donation intentions (Casale & Baumann, 2015; Robson & Hart, 2021). However, the role of socio-demographic factors in profiling the typical donors have produced inconsistent results as determinants of prosocial behaviours (Kolhede & Gomez-Arias, 2022). Thus, the present research seeks to address the need to examine intrinsic factors that have the potential to alter the decision-making process to engage in prosocial behaviours. Given that intrinsic factors focus on the internal processes that can affect the intentions to engage in certain behaviours (Vandercammen et al, 2014), understanding this aspect can generate valuable research insights into determining what influences prosocial behaviours. This study contributes to the current literature by adding a novel factor known as perceived value-in-behaviour as an intrinsic factor that could influence individuals intentions to volunteer or donate money to support charitable organisations. It is important to note that different dimensions exist from an individual's

perspective of perceived value (i.e., altruistic, ecological, emotional, functional, social, etc); however, for the purpose of research studies, it is best to concentrate on value dimensions that are more relevant in a specific context (Gordon et al., 2018). Thus, this study focuses on the altruistic and emotional values as they refer to the intrinsic motivations that connect individuals with prosocial activities. The first, “altruistic value”, is related to the drive that individuals have to support others because it is the right thing to do as humans (Beldad et al., 2014; Previte et al., 2019). The second, “emotional value”, is related to the individuals’ emotional states that drive them to conduct benevolent acts to aid people (Butler et al., 2016).

Fourth, this research contributes to the literature on prosocial behaviours during global crises. This research focuses on two of the most sought after resources by charitable organisations: time and money. Charitable organisations try to convince individuals to support their work by donating their time or money, which are two essential resources people make decisions about during their lives (Liu & Aaker, 2008; MacDonnell & White, 2015; Mogilner & Aaker, 2009). To date, there have been studies investigating the time and money in a variety of areas like the psychology behind the use of these resources (Liu & Aaker, 2008; Mogilner & Aaker, 2009), their effect on ethical behaviours (Gino & Mogilner, 2014), and framing of charitable appeals (MacDonnell & White, 2015). The present research builds on previous research studies to provide insights with regard to time and money being affected differently when the world is impacted by a global crisis. The comparison between these prosocial behaviours is particularly worthwhile given that these two resources activate different mind-sets in people. Even though both resources are related and, to a certain degree, exchangeable, they have a different effect on perceptions and behaviour (Liu & Aaker, 2008). Accordingly, the concept of time is related to experiences and feelings of personal connection and emotional meaning; while the value of money is related to feelings of strength and quantifiable utility or the possessions it can afford (Liu & Aaker, 2008; Mogilner & Aaker, 2009).

Table 1. Prior research on prosocial behaviours

Key studies	Relevant Conclusions/Findings	Research gaps	Contributions of this study
A: Exploring the role of emotions on intentions to engage in prosocial behaviours			

Homer (2021)	Appeals that show human-suffering, combining sadness and hope translate in higher donations than when using only one emotion.		
Septianto and Tjiptono (2019)	Pride and compassion can increase donation behavior if the organisation is showing a consistent performance.	Past studies have focused on the role of emotional marketing campaigns to increase donations.	A better understanding of the cognitive and emotional mechanisms underlying individual's decisions to engage in prosocial activities is needed. Thus, the present study recognizes how important it is to understand the change in cognitive and emotional responses to a global crisis and how this can impact individuals' behaviours to support charitable organisations.

B: Understanding people's motivations to support charitable organisations

Beldad et al. (2014)	Individuals might be motivated to donate again to support charitable organisations based on their positive previous experiences, sympathy, trust and the positive reputation of the organisation.	Previous research on prosocial behaviours has centred on profiling the typical donor, understanding charitable consciousness and examining the perceptions of exchange benefits from supporting charitable activities.	Personal and contextual factors have the potential to alter the decision-making process to support charitable organisations. Hence, understanding how individual beliefs about prosocial behaviours and contextual variables can impact people's intentions to support charitable organisations is important.
van Dijk et al. (2019)	Universalism motivates people to donate. Also, individuals need to feel congruency between the values of the charitable organisation and their own values.		

C: Crises & prosocial behaviours

de Leeuw et al. (2022)	Exposure to COVID-19 news and information can inspire moral beauty (expression of humanity, kindness, virtue) in adolescents to help others.	Past research related to global crises has focused on studying the positive significance of major disasters on people's intentions to help others.	In an era marked by global crises, the support charities might count on for their activities can be quite variable. Therefore, understanding prosocial behaviours is extremely important as charitable organisations heavily rely on the support from individuals to fund their activities.
Ye et al. (2020)	The severity of a crisis motivates prosocial behaviours.		

1.6 Organisation of the dissertation

This dissertation is organized into five chapters. Chapter One details the research background, problem statement, research aim and objectives, research questions and the importance of the

proposed topic. Chapter Two presents an extensive review of the literature involving the appraisal of environmental stressors, challenge and threat appraisals, emotional responses, global crises, charitable organisations and prosocial behaviours. After that, the following lines will use the appraisal theory of emotions to develop the conceptual framework that will explain the relationship between appraisals of global crises and emotional responses, and the resulting prosocial behaviours. Chapter Three presents the research methodology, while Chapter Four details the findings of the study. Finally, Chapter Five will discuss the findings, theoretical and managerial implications of the research, research limitations and future research directions, and conclusions of the research.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

As noted in the last chapter, more insights are needed to understand how the cognitive and affective responses to global crises can impact individuals' prosocial behaviours. Therefore, this chapter will focus on reviewing the most relevant literature on charitable organisations, cognitive and affective assessments and global crises as this will provide the basis for the present research. After the review, the conceptual framework and research hypotheses will be presented.

2.2 Working to change people's lives for the better

Charitable organisations -also known as non-government organisations (NGOs) or the third sector- are an important part of society as they fight against social issues like poverty and hunger, education, climate change, inequality, access to basic health services, violence, corruption and others (Beldad et al., 2014; Kashif et al., 2015). These organisations are completely different from the public and private sectors in terms of their essence, motive of existence, work processes, management of relationships with multiple stakeholders, sources of funding and focus on the public well-being (Hyndman, 2020).

In recent years, these organisations have been faced with additional complications in providing services for people in need as there is more demand for social services, increased competition among charities to secure funding for their activities, and lower availability of government support (Kashif et al., 2015; Ko & Liu, 2020; Nageswarakurukkal et al., 2020). Most organisations largely rely on support from their communities through volunteering, fundraising activities or donations of money or goods to provide much-needed services for the most vulnerable members of society (Faulkner & Romaniuk, 2019; Pope et al., 2009). For example, some charitable organisations are able to fund their ongoing social programs by securing single or recurring donations from individuals eager to support their giving programs because they feel drawn to their causes or because they want to give back to their communities (Beldad et al., 2014).

Despite the importance of delivering essential services for the most vulnerable people in society (Mitchell & Clark, 2020), funding is still a major challenge for charitable organisations as sometimes they might struggle to secure the required level of resources to provide services for people in need (Carroll & Kachersky, 2019). In light of this, it is appropriate to say these organisations face very uncertain times because they do not have fixed funding streams and human resources to plan ahead like other sectors, all while still trying to provide services in support of their beneficiaries. Wallace and Buil (2021) add to this idea by saying that charitable organisations face an ongoing challenge trying to encourage people to donate time or money.

2.3 Doing more with far fewer resources during a global crisis

Global disasters can significantly change service ecosystems and the lives of multiple stakeholders (Kabadayi et al., 2020). Davvetas et al. (2022) mention that the impact of global disturbances is more severe nowadays as globalisation has magnified these effects, particularly for small organisations and vulnerable communities that struggle to adapt to change and recover during uncertain times (He & Harris, 2020; Kabadayi et al., 2020).

The issues created by these global shocks are of significant concern for charitable organisations. Many of them face unprecedented difficulties as crises like the COVID-19 pandemic have a severe negative impact on the funding and resources they rely on to provide their services (Hyndman, 2020), especially because of the reduction of donations from the public, cancelled fundraising events and activities, loss of volunteer support and additional funds required to cover unexpected costs (Kinsbergen et al., 2021; Ko & Liu, 2020). Specifically, the biggest struggle charitable organisations experience in times of uncertainty and constant changes brought up by global crises is having to deal with varying levels of support to accomplish their missions (Ko & Liu, 2020). To add to these issues, the needs and expectations of society are increasing considerably. For example, charities involved in social welfare and mental health industries have had a substantial increase in demand for their services (Hyndman, 2020). Against this background, it is clear that charitable organisations are expected to do more with far less funding and other essential resources to conduct their daily operations.

2.4 Cognitive appraisals and emotional responses during uncertain times

As noted earlier, charitable organisations count on donations and volunteer assistance from individuals to provide essential services for people in need (Bradford & Boyd, 2020). There is no doubt their role in society is key to filling gaps in the provision of services where the government and the private sector do not have the capacity to act on or are unable to intervene for one or another reason (Pope et al., 2009). However, when confronted with extreme uncertainty on a global scale, charitable organisations face massive pressure to continue with their activities without knowing if the resources they have will be sufficient to do this. Thus, understanding giving behaviours is critical for charitable organisations as most of the support they normally rely on comes from donations from the public (Kinsbergen et al., 2021; Wang et al., 2023). A more in-depth comprehension of human behaviour during global shocks could provide key information for charitable organisations to help them survive, adapt and continue thriving with their missions, or in simple words, be sustainable.

As changes in people's behavioural responses due to global shocks like the COVID-19 outbreak can severely impact the support charitable organisations receive to manage their operations, it is necessary to understand the components that lead to these responses. Indeed, the psychological process that individuals undergo to assess an experience is complex and dynamic; thus, it should be explored in further detail. In this regard, when an individual faces a situation, a cognitive appraisal of this event will take place together with an emotional experience (Hovnanyan et al., 2022), which will then be responsible for influencing subsequent behaviours (Ng et al., 2021).

These responses can vary based on the nature, duration and intensity of the situation, as well as the perceptions, motivations and aspirations guiding the individual's experience (Hovnanyan et al., 2022). Taking everything into account, acknowledging cognitive and affective responses to a stressor like a global crisis is important as these responses guide individuals' actions.

2.5 Prosocial behaviours amid crisis and disaster

The provision of essential services such as water, food and shelter to those in need is only possible through the support of volunteers and monetary contributions that help fund their social projects (Xu et al., 2022). These acts of generosity are known as prosocial behaviours as their main goal is to benefit other people (Twenge et al., 2007; Wang & Huang, 2022). Caulfield et al. (2022) add to this idea by highlighting the human inclination to engage in prosocial behaviours. For example, individuals driven by altruistic motivations donate blood to save lives, volunteer to support charitable causes and give donations to help the least fortunate. Notably, prosocial behaviours play an important role in creating a positive and cooperative society (Hovnanyan et al., 2022).

In a world impacted by more frequent global crises (Davvetas et al., 2022), people's intentions to engage in prosocial behaviours can be severely affected by the unpredictability of these extreme events. Notably, a crisis can generate multiple changes in people's lives. For example, a crisis can lead to significant declines in economic activity, a rise in unemployment and an increase number of people facing poverty (Ramanathan & Ramanathan, 2022). Inevitably, the intensity of these events and the uncertainty of the duration can impact people's behaviours (Ramanathan & Ramanathan, 2022). To expand on this, when individuals experience severe restrictions and constant restructure of their everyday lives from an unexpected event like a global crisis, they develop new habits to cope with the constraints (Sheth, 2020).

Given the change that a global crisis can cause, individuals will develop different behaviours that range from self-interested actions to prosocial acts of giving. Some research studies have highlighted that the sense of uncertainty and fear of the unknown have increased greedy behaviours like panic buying for essential items and hoarding (Sheth, 2020). Although global crises can enhance individual's hoarding behaviours in pursuit of personal wellbeing, research also shows that some individuals seek to gain something meaningful out of a difficult life experience. Prior research studies show that individuals exhibit more interest in performing acts of kindness or engaging in prosocial acts when they are exposed to disasters or human tragedies (Homer, 2021; Valtorta et al., 2022; Ye et al., 2020), a principle known as 'altruism born of suffering' (Ye et al., 2020). This is because individuals adjust their beliefs, attitudes and behaviours through experience (Davvetas et al., 2022), and thus, unprecedented events can challenge individuals' thoughts and attitudes towards life. In this regard, when individuals are constantly exposed to several forms of stress that threaten the tranquillity of their minds and healthy senses during a global crisis, this can play an important role in their motivation to engage in prosocial behaviours (Hovnanyan et al., 2022; Mishra et al., 2022). Despite the contrasting behavioural changes brought up by global crises, relatively little is known about the psychological

processes that lead to such behaviours. Hence, developing knowledge about these processes is critical to managing the impact of global crises on charitable organisations and their pursuit of prosocial goals.

2.6 Conceptual model

The present research uses the appraisal theory of emotions as the foundation to elaborate a conceptual model that seeks to investigate how the cognitive appraisal of global crises can influence prosocial behaviours like volunteering or donating money, mediated by hope and value-in-behaviour. The basic premise of the appraisal theory postulated by Richard Lazarus is that emotions arise in response to a cognitive appraisal of an environmental stressor, and subsequently act as the drivers of behavioural changes (Lazarus, 1991). According to the theory, *appraisals*, the first stage in the process, can be defined as the evaluation of the meaning of a stressor or particular situation on the personal wellbeing (Chen & Qu, 2021). There are two types of appraisals: primary and secondary. Primary appraisals involve the assessment of a situation and the determination of the positive or negative meaning it can have on one's wellbeing (Copec et al., 2022). Then, this evaluation will determine the internal affective state of the individual so, in simple words, emotions are the result of the mental processing of a situation (Hovnanyan et al., 2022; Ng et al., 2021). Secondary appraisals relate to the evaluation of the available resources to manage the situation (Copec et al., 2022). That is, the way an individual assesses a situation will shape their emotional and behavioural responses (Raper & Brough, 2021). The second stage in the process is *emotional states*, which represents the emotional responses with respect to the appraisal of an event (Espedido et al., 2020). The third stage in the process is *behavioural responses*, which can be defined as the actions resulting from the appraisal of an environmental stressor (Britton et al., 2019). Hence, the appraisal theory of emotions provides a comprehensive approach to understand the cognitive appraisal of environmental stressors, emotional assessments and behavioural responses (Ali, 2016). Research across different areas of study, such as sociology, psychology and psychiatry, has applied this theory to help explain why emotions are so important to humans (Ali, 2016). In particular, in marketing literature, the appraisal theory of emotions has been used to examine responses to brand-related stimuli (Ding & Tseng, 2015), relationship marketing (Banik et al., 2022), consumer brand hate (Sharma et al., 2022) and consumer engagement (Do et al., 2019).

The proposed framework (see Figure 1) aims to better understand the psychological mechanisms driving individuals to support charitable organisations during global crises. To understand this in further detail, the framework proposes that when an individual is faced with an environmental stressor, they will have to evaluate the situation through a primary appraisal process that will include the interpretation of the situation as a challenge or threat, followed by the assessment of the emotional responses to this event. As a result of this mental analysis, the individual will determine their intention to support a charitable organisation through volunteering or donating money. In this research, the COVID-19 pandemic has been selected as the environmental stressor as its consequences have been far more severe for the global economy, service and production

industries, and individuals' well-being than any other crisis before (Davvetas et al., 2022; Kabadayi et al., 2020). Moreover, in this proposed framework, the relationship between appraisals and prosocial behaviours is mediated by hope and value-in-behaviour as these variables can influence the final choice to engage in prosocial behaviours. First, hope refers to an individual's motivational state that derives from a goal-oriented mindset and designing paths to achieve those goals (Kimhi et al., 2021; Snyder et al., 1991). In this regard, high-hope people have better problem-solving abilities (Cavanaugh et al., 2015) and, as such, this emotion plays a key role in coping with extreme situations as (Kimhi et al., 2021). Thus, hope may enhance individuals' willingness to engage in prosocial behaviours during global crises. Second, value-in-behaviour relates to the perceived value in the performance of behaviours (Butler et al., 2016). According to Gordon et al. (2018), modern consumers give more emphasis to value in the performance of behaviours, rather than just perceiving value towards trading off things and using services or goods. There are different perceived value dimensions that can impact individual's behaviours (Gordon et al., 2018). Focusing on the charitable context, the present study examines altruistic and emotional values as they could help explain why people feel motivated to engage in prosocial behaviours like volunteering or donating money. To expand on this, prosocial behaviours benefit people in need, but the perceived benefits can be greater for the individual engaging in these behaviours as they can provide a sense of purpose (altruistic value) and make people healthier and happier (emotional value) (Butler et al., 2016; Gordon et al., 2018). Hence, value-in-behaviour can also play an important role in facilitating prosocial behaviours.

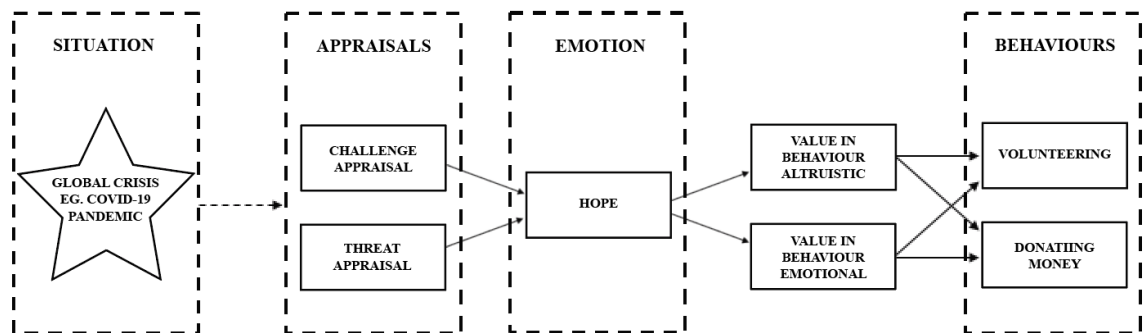


Figure 1. The conceptual framework

Note: Global crisis is used as the environmental stressor for the present research; however, it is not measured in this the study. This study tests and reports on only the non-dotted arrows

2.7 Development of hypothesis

This section will explain in further detail the constructs presented as part of the proposed conceptual framework. Furthermore, various hypotheses are proposed regarding the relationship between these constructs.

2.7.1 Appraisals, emotions, intrinsic factors and prosocial behaviours

As noted before, this study adopts the appraisal theory of emotions as a theoretical foundation to improve the understanding of the link between cognitive appraisals, emotional states and behavioural responses during global crises. According to the theory, the process of appraising a situation involves the interpretation of the event, which then will lead to an emotional response and subsequently to behavioural outcomes (Liu & Li, 2018). For instance, the appraisal of a situation plays a key role in guiding individuals' behaviours. In this regard, as appraisals shape behavioural responses under ordinary life conditions, it is appropriate to say they will also shape prosocial behaviours during times of crisis. Moreover, the role of emotions is highly important in environments that are surrounded by uncertainty, which is a characteristic of a global disaster (Morris et al., 2022). To expand on this, it is important to define the cognitive and affective assessments as they lead individuals to different behavioural responses.

In terms of cognitive assessment, individuals make two types of appraisals to attribute meaning to a situation: challenge or threat. The first type of appraisal, "challenge", can be defined as demands that create opportunities to accomplish personal goals, so they relate to positive outcomes (Mazzola & Disselhorst, 2019; Webster & Adams, 2020), whereas the second type of appraisal "threat" refers to the threatening constraints that can interfere with performance and personal goals, so they relate to negative and strain-inducing outcomes (Mazzola & Disselhorst, 2019; Webster & Adams, 2020). Additionally, it is important to note that challenge and threat appraisals are determined by the individual's perceived capacity to deal with the stressor based on the required effort to deal with the situation, uncertainty and potential danger from it, and the available resources to face the situation like having a supportive network, essential life skills and material possessions (Espedido et al., 2020; Porter & Goolkasian, 2019).

When facing a stressor in the environment, individuals go through an appraisal process to evaluate whether the stressor is a challenge or threat to themselves. On the one hand, if the situation is perceived as a challenge, the stressor is seen as an opportunity to learn, grow and better oneself (Kundi et al., 2021). In line with this notion, individuals may interpret an event in a positive sense as a way to overcome whatever situation is causing them problems or concerns. Accordingly, if individuals experience a positive affective reaction from these life experiences, they will learn and grow up into wiser and stronger people (Espedido et al., 2020). Thus, this emotional reaction will guide their behavioural responses to the situation they are facing in a more positive way. On the other hand, if the situation is perceived as a threat, the stressor is identified as a barrier to reaching personal goals (Kundi et al., 2021). Notably, people with an orientation to avoid difficult situations may interpret an event as an obstacle against their goal achievement, with no visible opportunities to grow as individuals, or gain experience or valuable resources (Pearsall et al., 2009). In this case, the appraisal of an event as a threat will lead individuals to refrain from acting and showing effort towards an end as they will see barriers in their way to their desired outcome. Subsequently, individuals might reduce their desire to achieve goals, resulting in decreased motivation and engagement with regular life activities (Pearsall et al., 2009).

In terms of affective evaluations, emotional responses arise from the cognitive appraisals of events (Gelbrich, 2010), which will then lead to different behavioural outcomes based on the appraisal that was initially done in the process (Bagozzi et al., 1999). Thus, emotions act as a mediating mechanism between cognitive appraisals and behavioural responses based on the principles of the appraisal theory of emotions. During the appraisal of a situation, challenge and threat appraisals lead to different affective responses (Espedido & Searle, 2021). Specifically, in terms of emotional outcomes, challenge appraisals activate positive emotions such as vitality, hope or excitement (Vallerand et al., 2022) and threat appraisals activate negative emotions such as frustration or anger (González-Gómez et al., 2021). For example, a feeling of achieving a goal towards which one has worked for is experienced as a positive emotion, while a feeling of being unable to reach the desired goal is experienced as a negative emotion (Ozyilmaz, 2020).

Emotions, and in particular, hope, are a key element in affecting behaviours (Tong et al., 2022). Hope refers to the positive psychological state of mind that is based on the desire and expectation to meet goals (Kimhi et al., 2021). In other words, hope is a motivational state of mind that drives individuals to seek something with desire and reasonable confidence that it will become real (Homer, 2021). Hopeful individuals have positive mindsets and they are confident they can reach their desired goals (Kimhi et al., 2021). Such individuals tend to be more resilient when facing obstacles in life (Lazarus, 1991) and thus, they possess enough confidence to better adapt to adverse events (Hu et al., 2021). In contrast to this, individuals with low hope or hopelessness have negative thinking, which leads them to believe they would not be able to reach their desired goals in life (Ozyilmaz, 2020).

It is important to note that along with cognitive appraisals and emotional states, intrinsic factors can also play an important role in influencing behaviours. According to Sweeney and Soutar (2001), besides the focus on the cognitive and emotional aspects that lead to behaviours, it is also necessary to explore the intrinsic elements that make a behaviour valuable in itself, by utilising a concept known as value-in-behaviour. Individuals perceive value in exchanging things (value-in-exchange) and also by using goods and experiencing services (value-in-use); however, they also perceive value by performing certain behaviours (Gordon et al., 2018). Sweeney and Soutar (2001) add to this idea by saying that consumer choice is determined by different value dimensions and these dimensions add to the perception of value in different choice situations. In this regard, value-in-behaviour perceptions can incorporate several dimensions of value such as altruistic, economic, ecological, emotional, functional and social (Gordon et al., 2018; Previte et al., 2019). It is important to note that the impact of value-in-behaviour on consumer behaviour can change based on a particular context and thus, research studies should focus on values that are relevant to their contexts (Gordon et al., 2018). For the purpose of the present research, altruistic and emotional values are important as they could help understand the inner motivations driving individuals towards the performance of prosocial behaviours.

2.7.2 Influence of challenge and threat appraisals on hope during global crises

Global crises can trigger different cognitive appraisal processes and change people's emotions, which can then affect their decision-making process. To illustrate this, a vivid example of these psychological processes can be seen through the use of the COVID-19 pandemic as the environmental stressor as this global shock has impacted life in a way like never seen before. Specifically, in the context of charitable organisations, the COVID-19 pandemic has triggered significant behavioural shifts, including changes in supporters' prosocial behaviours. The reason behind this is that the cognitive responses to this stressor have led people to experience mixed feelings about their current situation, and thus, this has changed individuals' desires to engage in prosocial behaviours. To expand on this, it is important to explain the cognitive and affective responses to an stressor such as the COVID-19 pandemic in further detail.

When individuals appraise a situation such as the COVID-19 pandemic, they will assess the significance of this event either a challenge or threat to themselves. On one hand, even though the outbreak has led to multiple societal changes and many people have experienced high levels of stress (Ratten, 2020), the struggle resulting from a difficult situation like this can lead to positive outcomes. If individuals try to see the good things in life and remain hopeful that things will improve in the future, the use of this positivity to appraise the pandemic as a challenge will drive them to grow in life and seek motivation to improve their current situation. In line with this notion, the acknowledgement of the pandemic as a challenge can lead to positive adaptive psychological responses like the elicitation of positive emotions such as hope and an improved attitude toward personal relationships and life values (Vallerand et al., 2022). Channelling this hopeful spirit can help individuals reach positive outcomes like increased motivation to help others and a more active involvement in welfare activities (Wang & Huang, 2022). For example, a positive spirit when facing the impact of the pandemic has contributed to more people feeling drawn towards donating money to purchase protective gear to control the spread of the virus and lots of volunteers have assisted with treatment in areas with severe outbreaks (Ye et al., 2020).

On the contrary, the assessment of a global crisis like the COVID-19 outbreak as a threat can result in a mindset of fear, uncertainty and anxiety that will prevent individuals from engaging in their regular activities. Notably, the impact of the pandemic can severely affect the emotional state of an individual. As the impact of the pandemic continues to disrupt people's lives, individuals become so vulnerable as a result of their experience that they lose all hope with regard to their current situation improving. Yet, some who have suffered from an extreme event still seek for meaning in the world even though they are struggling with the state of their present circumstances (Mittal & Woodside, 2022), thus becoming the promoters of change to make things better for other people that need support (Wang & Huang, 2022). This behaviour can be explained through the idea of 'altruism born of suffering', which states that following a traumatic event such as the COVID-19 outbreak, individuals might be more motivated to help others and engage in prosocial acts (Black et al., 2021).

Based on the previous reflection, it is noted that hope is an important emotion in an appraisal process as it can change people's behavioural responses (Cavanaugh et al., 2015). Hope is

especially important during the appraisal process of a global crisis as it can allow individuals to cope with the many changes that life presents (Kimhi et al., 2021). Hence, if individuals appraise a global crisis as a challenge, this can substantially increase individuals' hope to cope with the situation. By contrast, if individuals appraise a global crisis as a threat, their hope about things improving will reduce because of the profound uncertainty and disruptions caused by the situation.

Therefore, this background leads to the following hypotheses:

H1: Challenge Appraisal increases hope among volunteering and donating money conditions

H2: Threat Appraisal reduces hope among both volunteering and donating money conditions

2.7.3 Mediating role of hope and value-in-behaviour

Hope appeared in recent literature as an emotion that could improve the understanding of individuals' intentions to engage in prosocial behaviours (Cavanaugh et al., 2015). In this regard, hope has been named as a crucial antecedent of prosocial behaviours according to the hope theory postulated by Snyder et al. (1991). A key principle behind this idea is that feeling an emotion like hope evokes a motivational state of mind and a sense of optimism about goals and expectations with regard to a future situation (Homer, 2021). Hence, understanding an emotion like hope could improve the knowledge of what drives individuals to engage in prosocial behaviours during global crises.

When facing a global shock like the COVID-19 pandemic, individuals experience a sense of hope or hopelessness based on their appraisal process. More specifically, a situation appraised as a challenge can lead to the experience of hope and, as such, this can increase individuals' intentions to engage in prosocial behaviours such as making monetary donations to support a charitable cause or performing altruistic acts (Homer, 2021). In contrast to this, when individuals appraise a global crisis as a threat, this assessment can decrease their hope about the situation improving and leave people in a state of concern about what the future holds for them. This relationship can lead to decreased motivation or avoidance behaviours as the situation presents a real life-threat to themselves. However, suffering because of an adverse life event like a global crisis can lead to increased helping behaviour, which is the foundation of the altruism born of suffering theory (Vollhardt, 2009). To support this idea, the current COVID-19 pandemic is a clear example of how more prosocial behavioural trends have emerged to uplift society and help individuals cope with the constraints created by the crisis (Homer, 2021). Moreover, previous research suggests that experiences with catastrophes or tragedies lead to increased prosocial behaviours such as volunteering or donating money to support prosocial goals (Ye et al., 2020).

From the aforementioned conceptualisation of hope, there is no doubt that this emotion is linked to motivation. Consistent with this notion, previous research studies have demonstrated that positive emotions play a key role in the stimulation of motivation and, in particular, intrinsic motivation (Vandercammen et al, 2014). For example, individuals that possess a hopeful spirit

are more eager to engage in daily life activities, and experience more enjoyment while conducting these activities (Reeve & Isen, 2006). It is appropriate to say that individuals feel good about engaging in life activities when they are intrinsically motivated. Hence, experiencing hope from the appraisal of a situation can facilitate intrinsic motivation such as perceiving value in the performance of these activities.

In the context of charitable organisations, value-in-behaviour perceptions could serve as the inner motivation or drive that can guide individuals to get involved in prosocial activities. For example, perceived value-in-behaviour could show the value that individuals perceive towards volunteering or donating money to support charitable organisations. From the several dimensions of value that exist, the present study focused on altruistic and social value as they could serve as drivers to engage in fulfilling goal-relevant activities such as volunteering and donating money to support social causes. Furthermore, the concept of value-in-behaviour could also help understand the relationship between the appraisal of a global crisis and prosocial behaviours as it has the potential to stimulate behavioural reactions.

Therefore, the following hypotheses were generated from the reasoning presented above:

H3: Hope increases the perceived value-in-behaviour (altruistic) and value-in-behaviour (emotional) among both volunteering and donating money conditions

H4: Without hope as a mediator, neither challenge appraisal (H4A) nor threat appraisal (H4B) will have a significant effect on perceived value-in-behaviour (altruistic) nor value-in-behaviour (emotional) among both volunteering and donating money conditions

H5: Perceived value-in-behaviour (altruistic) (H5A) and value-in-behaviour (emotional) (H5B) will lead to an increase in prosocial behaviour intentions among both volunteering and donating money conditions

2.8 Summary

The aim of this chapter was to improve the understanding of the appraisal process of global crises that lead to the development of feelings of hope, and subsequently to prosocial behaviours. Specifically, this section analysed how a global crisis such as the recent COVID-19 outbreak can be appraised as a challenge or threat, and then this assessment can impact individuals' intentions to engage in prosocial behaviours like volunteering or donating money. In addition, this study seek to explore and understand the role of hope and value-in-behaviour as mediating variables that can influence prosocial behaviours.

CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter describes the proposed methodology for this research. The present research seeks to answer the research questions, “how do the appraisals and emotions of a crisis-generated stressor influence prosocial behaviours?” and “do hope and value-in-behaviour act as mediators between global crises and prosocial behaviours?” by using a quantitative study to determine if challenge and threat appraisals generated by global crises can influence individuals’ intentions to engage in prosocial activities like volunteering or donating money.

This chapter will start with a discussion of the research paradigm approach selected to conduct the present study. This is followed by a description of the methods used to answer the proposed research hypotheses, an overview of the creation and distribution of the research tool and sampling of the population to study, the steps to conduct the analysis and interpretation of the data to evaluate the measurement model and information on ethical considerations taken to conduct the research. These aspects are discussed in the following sections.

3.2 Research paradigm

The research paradigm is the framework that guides researchers in their journeys to design and construct a research project (Gray, 2018). It is important to define an appropriate research paradigm as this will guide the actions of the study -conceptualising and planning the research, developing a data collection plan, and analysing and interpreting the data to accept or reject the proposed theories-to achieve the desired research outcomes (Levers, 2013; Mertler, 2018).

The appropriate terms underpinning the development of a research project are ontology, epistemology and paradigm. Ontology seeks to understand the nature of reality or, in simple words, the “what is reality”; epistemology tries to understand “what is acceptable knowledge” and paradigm centres on the “what approach to use to get knowledge” (Gray, 2018; Wilson, 2010). The rationale of the research questions for the present research are centred on exploring and understanding how individuals respond to challenge-threat appraisals during global crises. Thus, the choices of ontology, epistemology, paradigm and methodology for the study are focused on answering this question. Each one of these choices will be explained in further detail in the following lines.

First, with regard to the ontological stance, this study adopts a realism position as the aim of the study is to find the underlying cause that generates an observed phenomenon (Creswell & Creswell, 2023). The premise this stance adopts is based on a real-world existing independently of individuals’ values,

beliefs and perceptions (Levers, 2013). Therefore, this approach would allow research studies to gain facts about the world and build theories based on that.

Second, with regard to the epistemology approach, the present research is focused on uncovering the objective truth (Gray, 2018), so the study adopts an objectivism approach to discover the meaningful sense of the world (Levers, 2013). This epistemological position promotes that reality exists independent of human consciousness, so any research conducted to understand certain events should focus on avoiding the biases of individuals to prevent false results (Levers, 2013). Accordingly, the essence of the phenomenon being studied should not change regardless of the person studying it.

Third, as the focus of the present research centres on uncovering, explaining and predicting outcomes, this study adopts a post-positivist paradigm (Gephart, 2004). The post-positivist paradigm was created as an alternative choice to the traditional positivist approach to conduct research studies (Creswell & Creswell, 2023). According to Kankam (2019), this paradigm seeks to expand the narrow view of the positivist paradigm into a more open approach to examining reality. This paradigm supports the idea that reaching the absolute truth is nearly impossible; thus, any discovery is only a partial segment or approximation of the truth (Creswell & Creswell, 2023; Levers, 2013). Therefore, the post-positivist approach focuses primarily on promoting the value of data, evidence and probabilities to explain an event or human actions (Creswell & Creswell, 2023; Gray, 2018). Likewise, the post-positivist approach promotes the idea that all knowledge is constructed in society (Kankam, 2019). In addition, the post-positivist worldview emphasises the value of meanings and seeks to understand issues affecting society (Kankam, 2019). Therefore, as this paradigm shows a lot of interest in individuals and their world, it would be a good approach to use to understand individuals' behaviour. Creswell & Creswell (2023) remark that the post-positivism paradigm is a suitable approach to study people's behaviours and understanding patterns.

3.3 Research methodology

The research methodology helps in guiding a research study, outlining the research approach, as well as the research methods, specifically the process of data collection and data analysis (Creswell & Creswell, 2023). In the present research, a quantitative approach will be used to understand how appraisals and emotions brought up by global crises can influence individuals to engage in prosocial activities.

The goal of quantitative research is centred on understanding and explaining a phenomenon under analysis. This approach follows established processes; therefore, researchers need to remain as objective as possible and not allow for any personal judgments to be involved in research studies (Mertler, 2018). Objectivity in quantitative research studies is key in reducing the change of biases affecting the quality of the research and to generalise the findings of a research further away than the phenomenon being studied (Mertler, 2018). Also, a quantitative approach is an effective option to

generate insights about people's attitudes and behaviours through the objective analysis of data (Czaja et al., 2014).

The process to conduct this type of research involves designing and implementing appropriate sampling procedures, and designing a research instrument like a survey or experiment. First, by drawing a representative sample of the population of interest and measuring their characteristics and behavioural patterns, research studies like the present one seek to generalise the results to a larger population and build meaningful knowledge (Edmonds & Kennedy, 2013; Wilson, 2010). Second, in terms of the research instrument used for the present study, a survey was conducted to expand the current knowledge on this topic. This quantitative research technique allows the population of interest to express their opinions or describe their characteristics, attitudes and behaviours (Edmonds & Kennedy, 2013; Mertler, 2018). Additionally, this type of research tool enables the testing of hypotheses through the use of structured questions and validated instruments to assess relationships between constructs of interest (Wilson, 2010). Mertler (2018) adds to this idea by saying that survey research could be used in comparative research design, which allows examination of the differences in attitudes and behaviours between two or more sub-groups of a population.

Thus, quantitative research was an appropriate approach to test the proposed research hypotheses as it provides guidance to collect data to investigate the research problem, analyse and use the data from the investigation, and draw conclusions to validate or reject the hypotheses. Moreover, as this approach follows a structured and objective plan to collect quantifiable data and uses statistical analysis to test the research hypotheses, it would allow the present research to generate factual and objective outcome data in order to understand how global crises can influence people to engage in prosocial behaviours and, potentially, generalise statistical results to larger populations.

3.4 Sample and data collection

The study seek to test the validity of the conceptual model. The questionnaire for the present research was developed using Qualtrics, a web-based survey platform, to manage the research process in one location. Before gathering research participant responses through a survey panel, thirty people with previous involvement in charitable causes were invited to participate in a pre-test of the research instrument so that appropriate adjustments could be made to the content of the questionnaire and the order of the questions could be re-arranged as required.

After making the necessary updates to the questionnaire, the final version was launched on Amazon's Mechanical Turk (MTurk) crowdsourcing marketplace. MTurk is an efficient tool to gather consumer insights for research purposes (Keith et al., 2017) as it facilitates the rapid collection of data from thousands of participants worldwide (Daly & Natarajan, 2015). Using a platform like this guarantees an anonymous randomised research sample as participants do not disclose their identities.

In order to use MTurk to gather research participant responses, a new job (referred to as Human Intelligence Task or HIT) was published on the crowdsourcing platform. The HIT included a link to the survey questionnaire on Qualtrics so individuals that fit the study criteria could engage in the research. Each person was offered \$3 as an incentive for their participation. Participants were also advised that approximately 10 – 15 minutes were required to complete the survey. The data collection was done in a single wave from October 19 to November 11, 2022.

The sampling frame included respondents from the USA over the age of 20 that have supported a social cause through volunteering or donations of money. The study focused only on active donors. According to Martín-Santana et al. (2020), active blood donors are individuals that have donated at least once over the last twenty-four months (see Table 1). Thereby, this study included only people who have supported a social cause through volunteering or donating money in the last twenty-four months. A screening question, “have you ever volunteered your time / donated money to support charitable organisations?”, was set up at the beginning of the survey on Qualtrics to find suitable participants for the research. If the participant selected the first alternative, “yes, I have volunteered my time at least once over the last 24 months”, they were directed to Section 1 to answer queries related to their volunteering experience. If the participant selected the second alternative, “yes, I have donated money at least once over the last 24 months”, they were directed to Section 2 to answer queries related to their donating money experience. If they had engaged in prosocial behaviours in the past but had not done so in the last twenty-four months, or if they had never engaged in prosocial behaviours, the survey ended for them. Likewise, to gather an even number of participants for both conditions (volunteering and donating money), a quota was set up on Qualtrics to gather one hundred responses from individuals that had volunteered in the last twenty-four months and one hundred responses from individuals that had donated money to support charitable causes within the same time period. Finally, it is important to mention that all questions were set up as compulsory for participants to respond to, so there was no missing data in the entire data set.

Table 2. Donor’s profile

Profile	Statement
Active donor	Individuals that have donated at least once over the last twenty-four months

Inactive/ Lost donor	Individuals that have donated in the past, but have not donated in the last twenty-four months
Non-donor/ Potential donor	Individuals that have never donated

Note. Adapted from "Modelling the role of anticipated emotions in blood donor behaviour: A cross-sectional study" by J. Martín-Santana, E. Reinares-Lara and L. Romero-Domínguez, 2020, *Journal of Economic Psychology*. Copyright 2020 by Elsevier B.V.

Participants were requested to complete the questionnaire, which contained measures of challenge and threat appraisals, hope, value-in behaviour and intention to support a charitable organisation, along with socio-demographic questions regarding age, gender, education, ethnicity, relationship status, employment status and annual income.

The measures selected for the present research were selected because of their thorough development, testing and validation process in previous research studies. All measures used were adapted to fit the research study context (see Table 2). Responses to all questions were measured using a 7-point Likert scale ranging from 1 - "Strongly disagree" to 7 - "Strongly agree". To measure perceived challenge and threat appraisals, participants were asked how they generally think about the COVID-19 pandemic. A 6-item scale measure adapted from Gomes and Teixeira (2016) served to measure challenge and threat appraisals. Whereas an example of challenge appraisals (three items) was 'the COVID-19 pandemic is an opportunity for learning', an example of threat appraisals (three items) was 'the COVID-19 pandemic has a negative impact on me'.

Then, to assess hope, participants were asked to think about themselves and what is going on in their lives at present as a result of the pandemic. Hope ratings were assessed using the 6-item scale measure adapted from Snyder's (2002) State Hope Scale. An example item is "at this time, I am meeting the goals that I have set for myself" (Snyder, 2002).

Subsequently, to assess the individual's intention to engage in prosocial behaviours, participants rated the extent they "would consider", "try to" or "plan" to volunteer or donate money to support charity organisations within the next six months. A 3-item scale measure from Onofrei et al. (2022) was adapted to measure intention to volunteer and intention to donate.

Finally, to assess value-in-behaviour, participants were asked to rate how much they agreed with each statement related to the meaning of volunteering or donating money based on the condition they selected at the start of the survey. An 8-item scale measure was adapted from Previte et al. (2019) to measure this construct.

To minimise the potential influence of social desirability bias (SDB), ambiguous questions were rephrased during the pre-test of the survey, participants were asked to answer the questions as honestly as possible and they were also assured since the beginning of the survey that their responses

would remain confidential to reduce any tendencies to show socially desirable responses as recommended by Podsakoff et al. (2003).

Table 3. Measures

Constructs and items
Challenge appraisal (Adapted from Gomes & Teixeira, 2016)
A.1 The COVID-19 pandemic stimulates me to overcome obstacles
A.2 The COVID-19 pandemic is an opportunity for learning
A.3 The COVID-19 pandemic is helping me become a stronger person
Threat appraisal (Adapted from Gomes & Teixeira, 2016)
B.1 The COVID-19 pandemic is disturbing to me
B.2 The COVID-19 pandemic is threatening to me
B.3 The COVID-19 pandemic has a negative impact on me
Hope (Adapted from Snyder, 2002)
C.1 I could think of many ways to get out of any potential trouble
C.2 At the present time, I am energetically pursuing my goals
C.3 There are lots of ways around any problem that I am facing now
C.4 Right now, I see myself as being pretty successful
C.5 I can think of many ways to reach my current goals
C.6 At this time, I am meeting the goals that I have set for myself
Value-in-Behaviour_Altruistic Volunteering (Adapted from Previte et al., 2019)
D.1 Volunteering my time benefits humanity
D.2 Volunteering my time saves lives
Value-in-Behaviour_Emoional Volunteering (Adapted from Previte et al., 2019)
E.1 Volunteering my time makes me feel comfortable
E.2 Volunteering my time makes me feel great satisfaction
E.3 Volunteering my time makes me feel happy
E.4 Volunteering my time makes me feel calm
E.5 Volunteering my time makes me feel proud
E.6 Volunteering my time gives me a sense of self-fulfillment

Constructs and items (continue)

Intention to volunteer (Adapted from Onofrei et al., 2022)

F.1 In the next 6 months, I would consider volunteering my time to support charity organisations

F.2 In the next 6 months, I will try to volunteer my time to support charity organisations

F.3 In the next 6 months, I plan to volunteer my time to support charity organisations

Value-in-Behaviour_Altruistic Donating Money (Adapted from Previte et al., 2019)

G.1 Donating money benefits humanity

G.2 Donating money saves lives

Value-in-Behaviour_Emotional Donating Money (Adapted from Previte et al., 2019)

H.1 Donating money makes me feel comfortable

H.2 Donating money makes me feel great satisfaction

H.3 Donating money makes me feel happy

H.4 Donating money makes me feel calm

H.5 Donating money makes me feel proud

H.6 Donating money gives me a sense of self-fulfillment

Intention to donate money (Adapted from Onofrei et al., 2022)

I.1 In the next 6 months, I would consider donating money to support charitable organisations

I.2 In the next 6 months, I will try to donate money to support charity organisations

I.3 In the next 6 months, I plan to donate money to support charity organisations

3.5 Data analysis

The valid data obtained from research participants was analysed using IBM SPSS Statistics Software (Version 28) and SmartPLS 4.0. Initial descriptive analysis to gather demographic characteristics of the sample, along with confirmatory factor analysis and reliability analysis to gather preliminary results were conducted using SPSS. After this, SmartPLS was used for structural mediation modelling to test the relationships among variables in the research.

3.5.1 Data preparation by SPSS

After collecting data from research participants, the data was downloaded from Qualtrics in a table-structured format with numeric values for each one of the responses. Then, the data was cleaned before uploading the file into IBM SPSS Statistics Software.

In SPSS, each one of the scale items from the survey was labelled and coded. After that, a data set containing two groups (volunteers and donors of money) was defined based on the participant's answers to the filter question about their engagement to support charitable organisations through volunteering or donating money over the past twenty-four months. Initially, a basic demographic analysis was conducted for each group to gather information about the characteristics of the sample. Later, an initial descriptive analysis was performed to summarise the mean values and standard

deviations of each survey item. As Gavin (2008) remarks, descriptive statistics provide a good summary that enables the comparison between sub-groups of a population and constructs of interest. The present research followed the recommended principles from Hair et al. (2014) that suggest using a two-step measurement-model analysis to ensure that all constructs were measured appropriately, which includes testing the validity of all measures through confirmatory factor analysis (CFA) and then assessing the reliability of all measures by examining their Cronbach's alpha values. First of all, each one of the constructs was tested by confirmatory factor analysis (CFA) in order to confirm the internal consistency of each scale item (Mueller & Hancock, 2001). According to Harrington (2008), CFA seeks to analyse the relationship between latent variables, also known as the constructs, and the measures or observed variables to determine if the model has a good fit under the proposed study conditions. Thus, to understand how each observed variable relates to the latent variable, it is necessary to evaluate the factor loadings obtained through the CFA analysis. Higher loadings indicate that the observed variable strongly influences the latent variable; on the contrary, low factor loadings mean that the observed variable is not good to measure a latent variable (Harrington, 2008). Values need to be higher than 0.50 to have an acceptable consistency (Mueller, & Hancock, 2001).

In the next step, reliability analysis was employed to determine whether each one of the scales could be considered as a reliable measure for the study (Pallant, 2002). In simple terms, the research instrument must be reliable so, if the experiment is tested again under identical conditions, the results should be fairly similar to the results obtained during the original test (Field, 2018). The most common indicator of the scale's internal consistency is Cronbach's alpha (Pallant, 2002). Ideally, the Cronbach's alpha of a scale should be at least 0.70 to say that the scale items are consistent and the scale itself is reliable (Hair et al., 2010). According to Hinton et al. (2014), values between 0.70 to 0.90 are considered to have "high reliability", while values between 0.90 and above show "excellent reliability".

3.5.2 Model testing by using SmartPLS

The next step in the process of analysing the survey data was done using the partial least squares structural equation modelling (PLS-SEM) method. The PLS-SEM path modelling offered by the SmartPLS 4.0 software was used to assess the properties of the constructs of interest, determine links between independent and dependent latent variables, and to test the proposed research hypotheses (Chin, 1998). PLS-SEM was selected as the method to analyse the research model as it is very useful to determine both direct and indirect path influences among latent variables (Haenlein & Kaplan, 2004). Likewise, a sampling frame between 100 – 200 people is suitable to conduct PLS-SEM path modelling according to prior studies (Hoyle, 1995).

To start the data analysis, a new project was created on SmartPLS and the data sets of each condition, volunteering and donating money, were imported into this project. Based on the conceptual

framework proposed earlier in this dissertation, the volunteering condition model was drawn by adding latent variables and using the connector tool to form the relationships between constructs of interest. An inbuilt algorithm named Bootstrapping was used to analyse the data. The research model was tested using the path weighing scheme with 5,000 bootstrap samples and a significance level of 0.05 to calculate the *t*-statistics and its *p*-values as recommended by Hair et al. (2011). The same process was followed for the donating money condition.

To assess if the model supports the initial predictions, it is important to clearly define the terms *t*-statistics and *p*-values as they will help assess if the proposed hypotheses are statistically significant or not. First, a *t*-statistic, also known as *t*-value, is a value used to compare the research data to what is expected under the null hypothesis, which refers to the baseline for statistical significance testing (Field, 2018). As the present study used a 95% confidence level to test the research predictions, a *t*-statistic value above 1.96 or below -1.96 was used to find statistical significance (Borradaile, 2003). Second, a *p*-value refers to the probability that the results of an experiment occurred randomly (Field, 2018). Normally, researchers use a *p*-value of 0.05 (or 5% of probability that the results from an experiment happened by chance) as a threshold to say there is strong evidence to support a hypothesis (Field, 2018). The present research used 0.05 as a threshold for statistical significance.

The following tests were performed: First, confirmatory factor analysis (CFA) was conducted to investigate the validity of the constructs and thus, whether the measurement model showed a good fit (Hair et al., 2010). The CFA results need to be higher than 0.70 to demonstrate variables are significant. Average Variance Extracted (AVE) was applied to measure the amount of variance that is captured by a construct in regard to the amount of variance due to measurement error, and for all constructs needs to be higher than 0.50 to demonstrate the convergent validity of the measures or, in simple words, to ensure good internal consistency of the variables (Bagozzi & Yi, 1988). Discriminant validity, a test that shows that two measures that are not supposed to be related are unrelated, was tested by comparing the square root of the AVE value of each scale and the correlation values (Fornell & Larcker, 1981). It is important to note that, in order to demonstrate discriminant validity, correlations need to be significant with values lower than 0.001, and their results have to be smaller than the square root of the AVE (Chin, 1998). Finally, to confirm the model fitness, the Standardized Root Mean Square Residual (SRMR) statistical value, measurement of fit that is defined as the difference between the observed correlation and the predicted correlation, has to be below 0.80 (Hair et al., 2010). Second, the measures of reliability of scale items, that is, Cronbach's alpha and composite reliability (CR), need to be higher than 0.70 to indicate the variables' good reliability (Fornell & Larcker, 1981; Hair et al., 2010).

3.6 Ethical considerations

Ethical considerations are essential for any type of research that involves people (Creswell & Creswell, 2023). Thus, this study was conducted in accordance with the recommendations of

Auckland University of Technology Ethics Committee (AUTEK) with written informed consent to proceed with the research study. AUTEK is a key organism that ensures the privacy, health and safety, and welfare of the research participants (Auckland University of Technology, n.d.).

The present research provided participants with a participant information sheet so they had all the information needed to decide if they wanted to engage in the study or not. The information sheet included information with regard to the purpose of the study, the research procedures, the eligibility criteria to qualify for the research, and researchers' contact details so that participants could ask questions about the research (see Appendix A).

The participation of individuals was voluntary – in other words, it was their choice to be involved in the research. They had the option to withdraw from the study at any time if they did not want to answer some of the survey questions. Furthermore, the research ensured that participation was anonymous as the data collection process was managed through a crowdsourcing site, so none of the researchers had access to any identifying details from the research participants.

Participants were not disadvantaged or harmed during the research. Likewise, participants received a koha of \$3 USD for the time they invested in the survey.

3.7 Summary

This chapter presented an overview of the research design, a discussion about why a quantitative approach was chosen to investigate the proposed research questions and the procedures followed in conducting the research. A quantitative study, specifically a survey, was conducted to gather information from anonymous research participants recruited through the MTurk crowdsourcing marketplace. The survey included measures of challenge and threat appraisals, hope, value-in behaviour, and intention to support a charitable organisation through volunteering and donating money, along with demographic questions related to age, gender, education, ethnicity, relationship status, employment status and annual income. The following chapter will present the results of the quantitative study.

CHAPTER FOUR: FINDINGS

4.1 Introduction

To test the aforementioned proposed hypotheses, the results of the analysis are discussed here. SPSS Version 28 and SmartPLS 4.0 statistical programs were used to analyse the impact of challenge and threat appraisals on the intention to engage in volunteering and donating behaviours, having hope and value-in-behaviour as mediating variables.

4.2 Sample

In total, 200 people responded to the questionnaire; the participants that have volunteered to support charitable organisations (n = 100) and the participants that have donated money to support charitable causes (n = 100). The demographic profiles of both samples are presented in Table 4.

Table 4. Respondent's profile

Demographics	Condition 1 - Volunteering (Frequency) (n = 100)	%	Condition 2 - Donating money (Frequency) (n = 100)	%
	Gender			
Male	47	47	59	59
Female	53	53	41	41
Age				
20 - 29	10	10	4	4
30 - 39	40	40	41	41
40 - 49	33	33	26	26
50 - 59	6	6	19	19
60+	11	11	10	10
Education				
Secondary school qualification or lower	20	20	34	33
Undergraduate qualification	68	68	56	56
Postgraduate qualification	12	12	10	10

Demographics	Condition 1 - Volunteering (Frequency)	%	Condition 2 - Donating money (Frequency)	%
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	(n = 100)		(n = 100)	
Annual Income				
Less than \$15,000	15	15	25	25
\$15,000 - \$24,999	11	11	10	10
\$25,000 - \$34,999	23	23	22	22
\$35,000 - \$49,999	26	26	22	22
\$50,000 - \$74,999	17	17	7	7
\$75,000 - \$99,999	0	0	0	0
\$100,000 - \$149,999	4	4	14	14
\$150,000 or more	4	4	0	0
Relationship Status				
Single	36	36	42	42
Married or domestic partnership	53	53	47	47
Widowed	2	2	0	0
Divorced	7	7	11	11
Separated	2	2	0	0
Employment Status				
Full-time employment	76	76	75	75
Part-time/casual employment	11	11	7	7
Unemployed	0	0	0	0
Retired	2	2	2	2
Homemaker	1	1	1	1
Student	2	2	2	2
Self-employed	0	0	1	1
Other	8	8	12	12
Ethnicity				
White	82	82	83	83
Black or African American	6	6	5	5
American Indian and Alaska Native	1	1	0	0
Asian	4	4	7	7
Native Hawaiian or Other Pacific Islander	4	4	4	4
Hispanic or Latino	3	3	1	1
Other	0	0	0	0

According to Table 4, within the sample of participants that have volunteered to support charitable organisations, the age distribution consisted of 10% at 20–29 years, 40% at 30–39 years, 33% at 40–

49 years, 6% at 50–59 years and 11% at 60 years and older, female (53%), married (53%) and white (82%). Almost 80% of the sample had full-time employment, and 11% had part-time/casual employment. Average annual income was diverse, with the majority of respondents earning between \$25,000 - \$34,999 (23%) and \$35,000 - \$49,999 (26%). In terms of educational level, 20% of the sample had completed high school, 68% had an undergraduate qualification, and 12% had a postgraduate qualification. In the sample of participants that have donated money to support charitable causes, the age distribution consisted of 4% at 20–29 years, 41% at 30–39 years, 26% at 40–49 years, 19% at 50–59 years and 10% at 60 years and older, male (59%), married (47%), white (83%) and full-time employees (75%), Average annual income was diverse, with the majority of respondents earning between \$25,000 - \$34,999 (22%) and \$35,000 - \$49,999 (22%). Regarding education, 1% had a primary school qualification, 33% a secondary school qualification, 56% an undergraduate qualification and 10% a postgraduate qualification. It is important to note that, from these results, the sample for both conditions is reasonably representative of the US population in terms of demographic characteristics such as gender (females 50.5%, males 49.5%), ethnicity (white 75.8%) and annual income (US \$37,638) (U.S. Census Bureau, 2020).

4.3 Data examination

In order to test the proposed hypotheses, SPSS Version 28 and SmartPLS 4.0 statistical programs were used. With SPSS, descriptive analysis was conducted to do a preliminary analysis of the data and to gather demographic information about the sample for both volunteering and donating money conditions. Also, confirmatory factor analysis and reliability analysis were adopted to test the data set. With SmartPLS, confirmatory factor analysis was conducted to prove the validity of each construct, while the reliability of the constructs was checked by examining the composite reliability (CR) and Cronbach's alpha measures. Then, structural equation modelling was used to test the research hypotheses. More details on the steps used to conduct the data examination are presented in the following sections.

4.3.1 Missing data

As mentioned in the previous chapter, once the quota for both conditions was met on Qualtrics, the data set was transferred to SPSS to clean the data and run descriptive analysis. It is important to note that every question was set up as compulsory on Qualtrics for research participants to answer the query before they could continue the survey, so there was no missing data to analyse the measurement variables. Thus, the data set was acceptable to continue the analysis.

4.3.2 Initial analysis on SPSS

To understand the general constructs of 34 items, confirmatory factors analysis (CFA) was tested in SPSS. This step was implemented to check whether each item was loaded in the right constructs. Note

that in SPSS, both conditions, volunteering and donating, were analysed together. The deeper analysis based on each condition was done on SmartPLS. Originally, there were nine constructs, which included challenge appraisals, threat appraisals, hope, value-in-behaviour_altruistic volunteering, value-in-behaviour_emotional volunteering, intention to volunteer, value-in-behaviour_altruistic donating money, value-in-behaviour_emotional donating money and intention to donate money. The results showed that all items had an acceptable level of convergent validity (see Table 5) as their factor loadings were above 0.50 (Hair et al., 2010). After that, all constructs were assessed using Cronbach's alpha coefficients to test the internal consistency of the measures. According to Hair et al. (2010), the coefficient must be higher than 0.70 to indicate that a construct has an acceptable level of internal consistency. Table 5 shows the results of the analysis, including factor loadings, mean values, standard deviations and Cronbach's α for each item.

The first construct related to an individual's interpretation that particular demands have potential for personal growth, development and well-being is defined as "challenge appraisals" (Copeck et al., 2022). Factor loading of each item was 0.85, 0.89 and 0.92, with a Cronbach's α of 0.86.

The second construct related to an individual's perceived vulnerability regarding the probability of experiencing harm is named as "threat appraisals" (Raper & Brough, 2021). Factor loadings ranged from 0.90 to 0.91, with a Cronbach's α of 0.89.

The third construct represented the perceived capability to accomplish goals, and determination to meet those goals which is defined as "hope" (Ozyilmaz, 2020). Factor loadings ranged from 0.76 to 0.92 and Cronbach's α of 0.91.

The fourth construct represented the perceptions of value in the performance of behaviours, which are defined as "value-in-behaviour" (Gordon et al., 2018). With regard to the volunteering condition, factor loadings for the altruistic value-in-behaviour item scales were 0.84, with Cronbach's α of 0.55; while factor loadings for each of the emotional value-in-behaviour items ranged from 0.68 to 0.87, with Cronbach's α of 0.87. Item 'Volunteering my time gives me a sense of self-fulfillment' had a loading of 0.68; however, it was kept in the study to maintain the same items as in the donating money condition. Additionally, according to Comrey and Lee (1992), any items with loadings higher than 0.60 are considered to have an appropriate loading. With regard to the donating money condition, factor loadings for the altruistic value-in-behaviour item scales were 0.90, with Cronbach's α of 0.75; while factor loadings for the emotional value-in-behaviour scale ranged from 0.84 to 0.90, with Cronbach's α of 0.93.

The last construct included individual's "intention" to engage in prosocial behaviours. Intention is a combination of the individual's interest in and the possibility of engaging in prosocial behaviours (Kim & Ko, 2012). In other words, measuring intentions to engage in prosocial behaviours assumes an individual will follow certain behavioural patterns in the future based on their attitudes and

preferences. Factor loadings for the volunteer condition ranged from 0.93 to 0.97 and Cronbach's α of 0.94; while factor loadings for the donating money condition ranged from 0.85 to 0.93 and Cronbach's α of 0.87.

Table 5. Results of the analysis on SPSS

Constructs and items	Factor loadings	Mean	Standard Deviation	Cronbach's alpha (α)
Challenge appraisal				
The COVID-19 pandemic stimulates me to overcome obstacles	0.850	4.35	1.795	0.860
The COVID-19 pandemic is an opportunity for learning	0.887	4.67	1.751	
The COVID-19 pandemic is helping me become a stronger person	0.916	4.17	1.796	
Threat appraisal				
The COVID-19 pandemic is disturbing to me	0.898	5.00	1.742	0.891
The COVID-19 pandemic is threatening to me	0.912	4.42	1.855	
The COVID-19 pandemic has a negative impact on me	0.910	4.78	1.731	
Hope				
I could think of many ways to get out of any potential trouble	0.759	5.14	1.268	0.912
At the present time, I am energetically pursuing my goals	0.836	5.13	1.478	
There are lots of ways around any problem that I am facing now	0.807	4.91	1.474	
Right now, I see myself as being pretty successful	0.827	4.43	1.700	
I can think of many ways to reach my current goals	0.918	5.04	1.416	
At this time, I am meeting the goals that I have set for myself	0.864	4.85	1.569	
Value-in-Behaviour_Altruistic Volunteering				
Volunteering my time benefits humanity	0.843	5.94	1.062	0.546
Volunteering my time saves lives	0.843	4.78	1.715	

Constructs and items	Factor loadings	Mean	Standard Deviation	Cronbach's alpha (α)
Value-in-Behaviour_Emoional Volunteering				
Volunteering my time makes me feel comfortable	0.869	5.65	1.114	0.868
Volunteering my time makes me feel great satisfaction	0.806	6.08	1.116	
Volunteering my time makes me feel happy	0.796	5.96	1.188	

Volunteering my time makes me feel calm	0.776	5.54	1.290	
Volunteering my time makes me feel proud	0.752	5.96	1.302	
Volunteering my time gives me a sense of self-fulfillment	0.677	6.18	1.077	
Intention to volunteer				
In the next 6 months, I would consider volunteering my time to support charity organisations	0.928	6.28	1.055	
In the next 6 months, I will try to volunteer my time to support charity organisations	0.947	6.15	1.184	0.943
In the next 6 months, I plan to volunteer my time to support charity organisations	0.969	6.18	1.123	
Value-in-Behaviour_Altruistic Donating Money				
Donating money benefits humanity	0.896	5.91	0.911	
Donating money saves lives	0.896	5.61	1.091	0.746
Value-in-Behaviour_Emotional Donating Money				
Donating money makes me feel comfortable	0.860	5.11	1.278	
Donating money makes me feel great satisfaction	0.896	5.31	1.261	
Donating money makes me feel happy	0.890	5.37	1.253	
Donating money makes me feel calm	0.840	4.98	1.400	0.931
Donating money makes me feel proud	0.854	5.38	1.384	
Donating money gives me a sense of self-fulfilment	0.846	5.23	1.254	
Intention to donate money				
In the next 6 months, I would consider donating money to support charitable organisations	0.854	6.24	0.698	
In the next 6 months, I will try to donate money to support charity organisations	0.930	5.97	0.881	0.873
In the next 6 months, I plan to donate money to support charity organisations	0.913	5.81	1.032	

4.3.3 Conceptual model testing on SmartPLS

Next, SmartPLS structural mediation model was used to test the theoretical model. This method was selected because it is a good approach for predicting relationships between latent variables, and also, it determines how well the model explains the constructs of interest (Hair et al., 2010). The analysis of the data was done using SmartPLS 4.0.8.6 software. The testing of the conceptual model is presented in three steps: First, reliability and validity analyses were used to ensure that all constructs were measured appropriately. Second, correlation analysis was conducted to confirm discriminant validity among all constructs. Third, structural path significance in bootstrapping was used to test the proposed hypotheses.

Firstly, the quality of the data was assessed using reliability and validity analyses. Regarding reliability, confirmatory factor analysis (CFA) was used on all constructs to validate the convergent factor validity of the proposed framework. The convergent validity of the constructs was tested by validating that the average variances extracted (AVE) values were above 0.50 (Hair et al., 2010). Regarding validity, the reliability of the constructs was confirmed by examining the composite reliability (CR) values, which must be higher than 0.70 (Hair et al., 2014). Internal consistency reliability of each one of the constructs was assessed using Cronbach's alpha (α), which must be higher than 0.70 (Hair et al., 2010). The data of each condition was analysed separately. Table 6 presents the results for the volunteering condition, while the results for the donating money condition are reported in table 7.

Among the volunteering condition (see Table 6), most of the Cronbach's α values exceeded the minimum value of 0.70 (challenge appraisal = 0.858; threat appraisal = 0.844; hope = 0.887; value-in-behaviour_altruistic volunteering = 0.591; value-in-behaviour_emotional volunteering = 0.871 and intention to volunteer = 0.943). The only value that did not meet this threshold was value-in-behaviour altruistic volunteering. Although this item is slightly below the Hair et al. (2014) recommended loading of 0.70, some consider 0.60 to be an acceptable threshold (Bagozzi and Yi, 1988).

Among the volunteering condition (see Table 6), most of the Cronbach's α values exceeded the minimum value of 0.70 (challenge appraisal = 0.858; threat appraisal = 0.844; hope = 0.887; value-in-behaviour_altruistic volunteering = 0.591; value-in-behaviour_emotional volunteering = 0.871 and intention to volunteer = 0.943). Only one construct, value-in-behaviour_altruistic volunteering, had low Cronbach's α and thus, did not meet the 0.70 threshold. However, the items inside were retained for several reasons. Although this construct is slightly below the recommended loading of 0.70 (Hair et al., 2014), some consider 0.50 to be an acceptable loading when constructs have fewer than ten items on the scale (Pallant, 2010). Hinton et al. (2004) support this statement by saying that an alpha score between 0.50 – 0.70 is generally accepted as it shows moderate reliability. Additionally, this construct was kept in the present research as it will allow the comparison of equal item scales between the volunteering and donating money conditions.

With regard to composite reliability results, all measures exceeded the threshold of 0.50 (challenge appraisal = 0.913; threat appraisal = 0.905; hope = 0.915; value-in-behaviour_altruistic volunteering = 0.819; value-in-behaviour_emotional volunteering = 0.902 and intention to volunteer = 0.964). Finally, the average variance extracted (AVE) results of all variables were higher than the recommended value of 0.50 (challenge appraisal = 0.779; threat appraisal = 0.761; hope = 0.644; value-in-behaviour_altruistic volunteering = 0.697; value-in-behaviour_emotional volunteering = 0.609 and intention to volunteer = 0.898). Overall, the results demonstrate adequate reliability and

convergent validity for the constructs used in the volunteering condition, except for the value-in-behaviour altruistic volunteering measure as it has a Cronbach's α value below 0.70.

Table 6. Internal Consistency Volunteering

Factors	Cronbach's alpha (α)	Composite reliability (CR)	Average variance extracted (AVE)
Challenge appraisal	0.858	0.913	0.779
Threat appraisal	0.844	0.905	0.761
Hope	0.887	0.915	0.644
Value-in-Behaviour_Altruistic Volunteering	0.591	0.819	0.697
Value-in-Behaviour_Emotional Volunteering	0.871	0.902	0.609
Intention to Volunteer	0.943	0.964	0.898

Among the donating money condition (see Table 7), all Cronbach's α values of all measures exceeded the minimum value of 0.70 (challenge appraisal = 0.860; threat appraisal = 0.931; hope = 0.929; value-in-behaviour_altruistic donating money = 0.754; value-in-behaviour_emotional donating money = 0.932 and intention to donate money = 0.882). The composite reliability results showed that all measures exceeded the threshold of 0.50 (challenge appraisal = 0.914; threat appraisal = 0.956; hope = 0.944; value-in-behaviour_altruistic donating money = 0.890; value-in-behaviour_emotional donating money = 0.947 and intention to donate money = 0.927). For the average variance extracted (AVE), all variables were higher than the recommended value of 0.50 (challenge appraisal = 0.779; threat appraisal = 0.878; hope = 0.739; value-in-behaviour_altruistic donating money = 0.801; value-in-behaviour_emotional donating money = 0.747 and intention to donate money = 0.808). The results show an acceptable fit of all constructs used in the donating money condition.

Table 7. Internal Consistency Donating Money

Factors	Cronbach's alpha (α)	Composite reliability (CR)	Average variance extracted (AVE)
Challenge appraisal	0.860	0.914	0.779
Threat appraisal	0.931	0.956	0.878
Hope	0.929	0.944	0.739
Value-in-Behaviour_Altruistic Donating Money	0.754	0.890	0.801

Value-in-Behaviour_Emo	0.932	0.947	0.747
Intention to Donate Money	0.882	0.927	0.808

Secondly, after examining the results of the validity and reliability analyses in the previous section, the model was tested using correlation analysis to confirm all the constructs in the conceptual framework have discriminant validity. To confirm there is discriminant validity, the square root of AVE of the constructs needs to be higher than the correlation values. Table 8 shows the correlation matrix relating to the volunteering condition, while Table 9 shows the results for the donating money condition.

Table 8. Measurement Model Correlation Matrix Volunteering

	Challenge Appraisal	Hope	Intention to Volunteer	Threat Appraisal	Value-in-Behaviour_Altruistic Volunteering	Value-in-Behaviour_Emo
Challenge Appraisal	1					
Hope	0.336	1				
Intention to Volunteer	0.209	0.253	1			
Threat Appraisal	0.226	-0.091	0.359	1		
Value-in-Behaviour_Altruistic Volunteering	0.296	0.381	0.346	0.171	1	
Value-in-Behaviour_Emotion Volunteering	0.325	0.322	0.769	0.266	0.517	1

Table 9. Measurement Model Correlation Matrix Donating Money

	Challenge Appraisal	Hope	Intention to Donate money	Threat Appraisal	Value-in-Behaviour_Altruistic Donating Money	Value-in-Behaviour_Emo
Challenge Appraisal	1					
Hope	0.352	1				

Intention to Donate Money	0.396	0.310	1			
Threat Appraisal	0.332	-0.205	0.158	1		
Value-in-Behaviour_Altruistic Donating Money	0.223	0.216	0.500	0.264	1	
Value in Behaviour_Emoional Donating Money	0.328	0.470	0.466	0.137	0.424	1

With regard to the volunteering condition (Table 8), the square root values of AVE ranged from 0.609 to 0.898 and the correlation values ranged from -0.091 to 0.769. Therefore, discriminant validity could not be confirmed for this model as one of the values from the correlation analysis was higher than the AVE values. Meanwhile, with regard to the donating money condition (Table 9), the square root value of AVE ranged from 0.739 to 0.878 and the correlation values ranged from -0.205 to 0.500. Thus, these results demonstrate good discriminant validity for this condition as each construct had a square root of AVE that exceeded correlations between that construct and other constructs.

Thirdly, after the overall model fit was validated, the research hypotheses were tested via structural mediation modelling. Table 10 presents the structural effects obtained from the SmartPLS model for the volunteering and donating money condition.

According to the results in Table 10, in the volunteering condition, challenge appraisals significantly increased hope ($\beta = 0.376, t = 4.119, p = 0.000$), providing support for H1. However, threat appraisals showed contrasting results as they had no significant effects on hope ($\beta = -0.176, t = 1.649, p = 0.099$), rejecting H2. Hope had positive effects on both value_in_behaviour_altruistic_volunteering ($\beta = 0.349, t = 3.078, p = 0.002$) and value_in_behaviour_emotional_volunteering ($\beta = 0.287, t = 2.676, p = 0.007$). To rephrase, hope works positively in enhancing value_in_behaviour_altruistic_volunteering and value_in_behaviour_emotional_volunteering, so hypothesis H3 was supported.

With regard to the relationship between challenge and threat appraisals and value-in-behaviour (H4), without hope as a mediator, neither challenge appraisals nor threat appraisals had significant effects on the value-in-behaviour variables. Challenge appraisals had no significant effects on both value-in-behaviour variables – altruistic ($\beta = 0.140, t = 1.062, p = 0.288$) and emotional ($\beta = 0.171, t = 1.467, p = 0.142$). Thus, hypothesis H4A was supported. Meanwhile, without hope as a mediator, threat appraisals failed to show a significant effect on both value-in-behaviour variables – altruistic ($\beta = 0.171, t = 1.521, p = 0.128$) and emotional ($\beta = 0.254, t = 1.936, p = 0.053$). Therefore, hypothesis H4B was also supported.

Finally, with regard to the relationship between value-in-behaviour and intentions to volunteer (H5), only one path was significant at the $p = 0.000$ level. The results showed that

value_in_behaviour_altruistic_volunteering had no significant effects on intention to volunteer ($\beta = -0.176$, $t = 1.649$, $p = 0.099$), so H5A was not supported. On the contrary, value_in_behaviour_emotional_volunteering had a positive influence on intention to volunteer ($\beta = 0.806$, $t = 9.097$, $p = 0.000$) and thus, H5B was supported.

Note that all R^2 values are higher than 0.10 as recommended by Falk and Miller (1992) (hope = 0.142, intention to volunteer = 0.596, value_in_behaviour_altruistic_volunteering = 0.204 and value_in_behaviour_emotional_volunteering = 0.216).

Table 10. Structural Model Results Volunteering

Completely Standardized Path Estimates		
Path	Condition 1 - Volunteering (n = 100)	Condition 2 - Donating money (n = 100)
H1: Challenge Appraisal -> Hope	$\beta = 0.376$ ($t = 4.119$, $p = 0.000$)	$\beta = 0.472$ ($t = 4.862$, $p = 0.000$)
H2: Threat Appraisal -> Hope	$\beta = -0.176$ ($t = 1.649$, $p = 0.099$)	$\beta = -0.362$ ($t = 3.369$, $p = 0.001$)
H3: Hope -> Value-in-Behaviour_Altruistic	$\beta = 0.349$ ($t = 3.078$, $p = 0.002$)	$\beta = 0.272$ ($t = 2.425$, $p = 0.015$)
H3: Hope -> Value-in-Behaviour_Emotional	$\beta = 0.287$ ($t = 2.676$, $p = 0.007$)	$\beta = 0.481$ ($t = 4.339$, $p = 0.000$)
H4A: Challenge Appraisal -> Value-in-Behaviour_Altruistic	$\beta = 0.140$ ($t = 1.062$, $p = 0.288$)	$\beta = 0.023$ ($t = 0.183$, $p = 0.855$)
H4A: Challenge Appraisal -> Value-in-Behaviour_Emotional	$\beta = 0.171$ ($t = 1.467$, $p = 0.142$)	$\beta = 0.091$ ($t = 0.711$, $p = 0.477$)
H4B: Threat Appraisal -> Value-in-Behaviour_Altruistic	$\beta = 0.171$ ($t = 1.521$, $p = 0.128$)	$\beta = 0.313$ ($t = 2.792$, $p = 0.005$)
Completely Standardized Path Estimates (continue)		
Path	Condition 1 - Volunteering (n = 100)	Condition 2 - Donating money (n = 100)
H4B: Threat Appraisal -> Value-in-Behaviour_Emotional	$\beta = 0.254$ ($t = 1.936$, $p = 0.053$)	$\beta = 0.206$ ($t = 1.730$, $p = 0.084$)
H5A: Value-in-Behaviour_Altruistic -> Intention to support a charitable organisation	$\beta = -0.070$ ($t = 0.814$, $p = 0.416$)	$\beta = 0.368$ ($t = 3.954$, $p = 0.000$)

H5B: Value-in-Behaviour_Emo-tional -> Intention to support a charitable organisation	$\beta = 0.806 (t = 9.097, p = 0.000)$	$\beta = 0.310 (t = 3.018, p = 0.003)$
R^2 — Hope	0.142	0.241
R^2 — Intention to support charitable organisations	0.596	0.329
R^2 — Value-in-Behaviour_Altruistic	0.204	0.147
R^2 — Value-in-Behaviour_Emo-tional	0.216	0.284

With regard to the donating money condition, the bootstrapping results showed that multiple paths were significant. With regard to the path between stress appraisals and hope (H1–H3), the results showed that all paths were significant. Challenge appraisals had positive effects on hope ($\beta = 0.472, t = 4.862, p = 0.000$). Likewise, threat appraisals were significantly negatively related to hope ($\beta = -0.362, t = 3.369, p = 0.001$). Hope had a positive effect on value_in_behaviour_altruistic_donating money ($\beta = 0.272, t = 2.425, p = 0.015$) and value_in_behaviour_emotional_donating money ($\beta = 0.481, t = 4.339, p = 0.000$).

With regard to the relationship between challenge and threat appraisals and value-in-behaviour without hope as a mediator (H4), the results showed that only one path was significant. Challenge appraisals had no significant effects on both value-in-behaviour variables – altruistic ($\beta = 0.023, t = 0.183, p = 0.855$) and emotional ($\beta = 0.091, t = 0.711, p = 0.477$). However, threat appraisals had a positive effect on value_in_behaviour_altruistic_donating money ($\beta = 0.313, t = 2.792, p = 0.005$), but there is no such as a significant effect on value_in_behaviour_emotional_donating money ($\beta = 0.206, t = 1.730, p = 0.084$). Thereby, H4 was partly supported in this case.

Finally, a path between value-in-behaviour and intention to donate money (H5) was significant at a $p = 0.000$ level. Value_in_behaviour_altruistic_donating money had a positive influence on intention to donate money ($\beta = 0.368, t = 3.954, p = 0.000$), while value_in_behaviour_emotional_donating money also had a positive effect on intention to donate money ($\beta = 0.310, t = 3.018, p = 0.003$).

Note that all R^2 values are higher than 0.10 as recommended by Falk and Miller (1992) (hope = 0.241, intention to donate money = 0.329, value_in_behaviour_altruistic_donating money = 0.147 and value_in_behaviour_emotional_donating money = 0.284).

4.4 Summary

The current research proposes that the appraisal of a global crisis and the subsequent emotional responses to such an event can influence individuals' intentions to support a charitable organisation through volunteering and/or donating money. Through the use of an online survey on MTurk, 200 individuals from the USA were recruited to participate in the research, with the criteria that they are

aged 20 years of age or older, and that they have supported a charitable organisation in the last 24 months.

The results show that among the volunteering condition (condition 1), challenge appraisals positively influence intentions to volunteer, having hope and value-in-behaviour_emotional as mediating variables. Meanwhile, among the donating money condition (condition 2), challenge appraisals positively influence intentions to donate money, having hope and value-in-behaviour (altruistic and emotional) as mediators in this relationship. Likewise, threat appraisals decrease hope on the donating money condition; however, this effect does not stop individuals to perceive value-in-behaviour (altruistic and emotional), and then support a charitable organisation through donations of money. This result is validated by the altruism born of suffering concept, which states that people are more inclined to support prosocial causes after suffering extreme situations.

CHAPTER FIVE: CONCLUSIONS AND IMPLICATIONS

5.1 Introduction

The increase in the development of new global crises and associated changes in behavioural responses, impulse the need to understand the psychological dynamics that individuals go through when experiencing such events. These changes in behavioural responses are a big concern for charitable organisations as they largely rely on donations to fund their work. Hence, the present study focused on examining prosocial behaviours from a mental process perspective during global crises.

Adopting the appraisal theory of emotions, the primary aim of the study was centred on uncovering whether challenge and threat appraisals from an environmental stressor like a global crisis can cause an increase or decrease in an individual's intention to engage in prosocial behaviours such as volunteering or donating money, having hope and value-in-behaviour as key variables mediating this relationship. It is important to note that the research offered a great opportunity to gather insights from research participants within the context of the ongoing COVID-19 pandemic, which was used as the environmental stressor for the study.

5.2 Discussion

This section summarises and discusses the effects of challenge and threat appraisals on hope, the impact of hope on value-in behaviour (altruistic and emotional), and the influence of value-in behaviour (altruistic and emotional) on individuals' intentions to support charity organisations by volunteering or donating money. The following table (Table 11) summarises the results of the five main proposed hypotheses for the research.

Table 11. Results Summary

Hypotheses	Result
H1: Challenge Appraisal increases hope among volunteering and donating money conditions	Supported
H2: Threat Appraisal reduces hope among both volunteering and donating money conditions	Partial Support (Donating Money Condition)
H3: Hope increases the perceived value-in-behaviour (altruistic) and value-in-behaviour (emotional) among both volunteering and donating money conditions	Supported
H4: Without hope as a mediator, neither challenge appraisal (H4A) nor threat appraisal (H4B) will have a significant effect on perceived value-in-behaviour (altruistic) nor value-in-behaviour (emotional) among both volunteering and donating money conditions	H4A –Supported, H4B – Partial Support (Emotional)
H5: Perceived value-in-behaviour (altruistic) (H5A) and value-in-behaviour (emotional) (H5B) will lead to an increase in prosocial behaviour intentions among both volunteering and donating money conditions	H5A – Partial Support (Donating Money Condition), H5B – Supported

5.2.1 The role of challenge appraisal and threat appraisal on hope

During global crises, one of the most vital tasks is to understand the mechanisms that influence human behaviours. The process to appraise a stressor such as a global crisis might look like a simple exercise in theory; however, it is actually a complex task as, rather than focusing on a situation itself, it involves the interpretation of this event as a challenge or a threat, which then will lead to an emotional response and subsequently to behavioural outcomes (Liu & Li, 2018). In this regard, the appraisal of a situation plays a key role in influencing individuals' emotional responses. The primary findings in regard to the impact of challenge and threat appraisals on hope are as follows:

First, as expected, a positive relationship has been demonstrated between challenge appraisals and hope for both conditions (volunteering and donating money) (H1). This finding is expected as challenge appraisals are recognised for inducing positive emotions such as hope, happiness or pride (Porter & Goolkasian, 2019).

Second, another prediction of the study was that threat appraisals would reduce hope for both study conditions (H2). The findings of the study partially support this hypothesis as the relationship between threat appraisals and hope is validated for the donating money condition. As indicated by existing literature, the assessment of an event as a threat means that people anticipate loss and harm from it and, thus, negative emotions such as feeling hopeless emanate from the way the stressor has been unfavourably appraised (Espedido & Searle, 2021). In contrast, the lack of an association between these variables for the volunteering condition could be explained by the level of control people feel over their time. Volunteering represents a high involvement activity as individuals need to allocate time to engage in community services (Robson & Hart, 2021). With the generally busy lifestyles people have nowadays, it can be hard to find time to volunteer. Time plays a significant role in our life as we need to utilise most of it to conduct regular activities like working, eating, sleeping and to accomplish other daily chores in life. Moreover, in the midst of a global pandemic such as we are

experiencing at present, time has been found to be the most precious asset for people as they now give more importance to time with their loved ones and enjoying life outdoors. Hence, the lack of association between threat appraisals and hope in the volunteering condition might be related to the fact that people perceive they have more control over the use of their time than over monetary donations (Costello & Malkoc, 2022) and thus, this sense of control could make volunteers more likely to appraise a difficult circumstance as a challenge to themselves rather than considering it a threat as they feel they have the tools to overcome the situation.

5.2.2 The importance of hope and value-in-behaviour as mediators

The idea of prosocial behaviours has been prevalent during the current COVID-19 pandemic as more people are inclined to engage in prosocial activities after experiencing the ongoing effects of the outbreak (Wang & Huang, 2022). The ongoing pandemic has changed people's views of the world and made them appreciate life and thus, it feels like individuals are more motivated to support one another to overcome difficult times, seek the well-being of people in need and care for their communities, which reaffirms their commitment to support social causes during a crisis. In line with this notion, the present research focused on hope and two intrinsic factors (value-in-behaviour altruistic and value-in-behaviour emotional) as they have the potential to influence the decision-making process to engage in prosocial behaviours (Cavanaugh et al., 2015; Vandercammen et al., 2014).

In regard to hope, this emotional state has been identified as a key mediator in the relationship between appraisals of global crises and prosocial behaviours. Moreover, positive emotions like hope are directly related to motivation and, in particular, intrinsic motivation (Vandercammen et al, 2014). Thus, the elicitation of hope can promote the perception of value in the performance of prosocial behaviours, a concept known as value-in-behaviour. The primary findings in regard to the mediating role of hope are as follows:

First, hope in both volunteering and donating conditions is positively associated with perceived value-in-behaviour (altruistic) and perceived value-in-behaviour (emotional) in support of hypothesis H3. This finding is supported as the effect of emotions on behavioural responses depends on the appraisal process and the interaction with contextual and intrinsic factors (Septianto et al., 2022).

Second, guided by the principles of the appraisal theory of emotions, it was expected that individuals do not react directly to a global disaster, but rather through their cognitive appraisals and emotional states (Lazarus, 1991). Basically, this theory reaffirms the critical role of the appraisal process of a global crisis and the resulting emotional responses in influencing behavioural outcomes. In line with this notion, the findings supported H4A as challenge appraisals need an emotion such as hope as a link to lead to behavioural outcomes in both volunteering and donating money conditions. The emotion of hope was selected for the present research because of its unique properties to enhance the

desire to achieve something meaningful and plan ways to meet set goals, leading to increased capabilities to cope with adverse life events such as global crises (Kimhi et al., 2021). Hence, hope can be effective in promoting prosocial behaviours during extreme circumstances. On the contrary, the results for H4B were mixed. There was no association between threat appraisals and the value-in-behaviour emotional variable, which means this relationship needs an emotion such as hope to work in both conditions; however, there was a positive association between threat appraisals and the value-in-behaviour altruistic variable for the donating money condition.

In regard to perceived value-in-behaviour, this variable has been validated as a significant intrinsic factor that can influence desired prosocial behaviours like volunteering and donating money. The idea behind this is that if people perceive value in these prosocial behaviours, they will feel more drawn to engage in them. The main findings in regard to the mediating role of value-in-behaviour are as follows:

First, perceived value-in-behaviour (altruistic) positively associated with intentions to donate money; however, the association of these two variables was not supported in the volunteering condition. As a result, there is only partial support for hypothesis H5A. The lack of association between the perceived value-in-behaviour (altruistic) variable and intentions to volunteer could be related to the fact that, from an individual's perspective of perceived value, other value dimensions like social value can be more relevant to them than the altruistic value in their decision to volunteer to support a charitable cause. To add to this idea, people that volunteer do it because they appreciate their social connections with others (Geng et al., 2022) and this feeling is reinforced more than ever nowadays after suffering the social distancing impact of the COVID-19 pandemic.

Second, perceived value-in-behaviour (emotional) leads to an increase in both volunteering and donating money conditions, which fully supports H5B. This finding is in line with previous research studies that say that positive emotions play a key role in the elicitation of motivation and, in particular, intrinsic motivation (Vandercammen et al, 2014). This motivation is key to engage individuals to support charitable organisations and their missions.

5.3 Theoretical implications

The present research makes some important theoretical contributions to existing literature.

First, while global crises and prosocial behaviours have been studied before (de Leeuw et al., 2022; Ye et al., 2020), this research is different in its focus because it analyses the cognitive and emotional mechanisms underlying individuals' intentions to volunteer and donate money to support charitable organisations during a global crisis. In line with this notion, this study validates the theoretical foundations of the appraisal theory of emotions, as appraisals and emotions play a key role in influencing people's intentions to engage in prosocial behaviours during extreme events. The present research represents a step towards understanding changes in cognitive and emotional responses to a

global crisis and how this can impact individuals' behaviours toward supporting charitable organisations.

Second, the present research provides further insights into the role of hope as a driver of prosocial behaviours. Previous research studies have focused on the characteristics of hope, such as its motivational properties to reach goals and solve issues (Snyder, 2002). A second area of research has identified hope as an important positive emotion that can facilitate prosocial tendencies toward close others (Cavanaugh et al., 2015). A third area of research investigated the role of hope as a resilience emotion to cope with stressful events (Kimhi et al., 2021; Satici & Uysal, 2017). Thus, this research adds to the prosocial behaviour literature by demonstrating that hope possesses motivational and resilience properties that influence individuals to engage in prosocial behaviours during extreme events such as the COVID-19 pandemic.

Third, the current research adds to the prosocial literature as perceived value-in-behaviour is confirmed as an important intrinsic factor to promote prosocial behaviours, having hope as a mediator in this relationship. As demonstrated by Vandercammen et al (2014), positive emotions like hope play a key role in the elicitation of motivation and, especially, intrinsic motivation. Not surprisingly, the findings supported the positive relationships between both value-in-behaviour variables (altruistic and emotional) with intentions to donate money, having hope as a mediating mechanism for this relationship to work. However, there was only partial support for the volunteering condition as the relationship of value-in-behaviour emotional was positively associated with intentions to volunteer, mediated by hope.

Fourth, to better understand prosocial behaviours, the present study focused on two acts of kindness: volunteering and donating money. To explain this in further detail, the decision on whether to engage in prosocial behaviours like volunteering or donating money depends on the interpretation of the event as an opportunity to learn something new (challenge) or as an obstacle to achieve set goals (threat) (Espedido & Searle, 2021), on the emotional hopeful or hopeless state that results from the appraisal process of the event, as well as on the perceived value-in-behaviour that individuals hold towards prosocial activities such as volunteering or donating money. Based on the study findings, the effects of appraising a global crisis as a challenge or threat differ for the volunteering condition versus the donating money condition. To expand on this, the findings support the challenge path for both conditions as the appraisal of a situation as a challenge leads to the experience of hope and, as such, this increases individuals' intentions to engage in prosocial behaviours such as volunteering and donating money. On the contrary, threat appraisals do not have an impact on individuals' intentions to volunteer. This finding differs from previous research studies that found a positive association between trauma or disaster experience with prosocial behaviours such as volunteering and/or donating money (Ye et al., 2020).

5.4 Managerial implications

As charitable organisations increasingly seek ways to respond to new global crises, managers face complicated decisions when designing their strategies to adapt their welfare and support services. The insights obtained from the findings of this study offer some managerial implications to help guide these decisions.

First, in this day and age, as charitable organisations play a key role in society, more vulnerable people are relying on the provision of their services on a day-to-day basis (Beldad et al., 2014; Hovnanyan et al., 2022). Charitable organisations can be severely affected by the impact of global crises and, hence, the provision of their services can be reduced or stopped at sudden notice, leaving vulnerable people in frail positions. To prevent this from happening, charitable organisations need to find the most effective response strategies to face the crisis. In this regard, a key element to prioritise to overcome potential crises involves understanding the impact of global crises on individuals' cognitive and emotional responses as this can change their behavioural responses to support charitable organisations. By understanding this psychological process, charitable organisations can develop appropriate response strategies to continue motivating, recruiting and retaining supporters during times of crisis and, more importantly, to explore new avenues to cultivate long-term relationships with them.

Second, charitable organisations are an essential service to our current society now and they will be needed more than ever once other global shocks strike. Their social services are critical in these uncertain periods of time. Whenever global crises impact life as we know it, there is more demand for the services offered by charitable organisations, plus there is a significant reduction in donations and the cost of everything increases, so basically, charitable organisations are expected to achieve more with considerably fewer resources. Hence, the analysis of the impact of global crises on charitable organisations is critical as it can provide valuable lessons to help them face other crises that may appear in the future and adapt to any changing conditions brought up by the disruptions.

Third, charitable organisations are expected to innovate to adapt to shifting consumption patterns during global crises. Under these stressful circumstances, managers of charitable organisations are asked to provide immediate answers to deal with the issues, often with no guidance. Crucially, when tensions are high, managers should remain calm in order to provide helpful support to their teams. Communication is key during crises, so managers should share their crisis management planning with their teams as this can help explain difficult decisions and manage tensions between a team so that operations can continue as normal as possible.

5.5 Limitations and future research

Despite its contributions, this research presents some limitations which can guide other possibilities for future studies.

First, even though the sample was a good representation of the US population in terms of demographic characteristics and the use of SmartPLS was ideal to work with small sample sizes, the present research sample was limited in its size ($n = 200$). Future research could consider a larger sample size to replicate the findings of the study.

Second, while the current research focused on comparing the psychological mechanisms that impact donations of time versus donations during global crises, it is important to recognise that charitable organisations also receive other types of donations that support them to reach their prosocial goals. It would be interesting to explore the impact of cognitive appraisals and emotional responses to other types of prosocial behaviours like donations of goods, leaving a will that includes support for charitable causes, etc.

Third, the study only included a one-time point survey. Future studies could be conducted over different time points as this would provide valuable data to contribute to understanding changes in volunteering and donating money behaviours. Conducting longitudinal studies is beneficial as it helps detect changes over time in regard to the target population being studied, as well as supporting the assessment and evaluation of those changes (Jennings, 2005).

Fourth, the present study involved participants from the United States only, which means that the results may only apply to other developed countries that have a similar giving culture, such as Australia and New Zealand (World Giving Index, 2022). It is important to note that the United States has been named the third most generous country in the world according to the World Giving Index (World Giving Index, 2022). Costello and Malkoc (2022) mention that Americans donate more than \$310 billion dollars and volunteer approximately 8.8 billion hours a year, largely because they are passionate about helping those in need and because their level of income allows them to do so. Further research could replicate the study conditions to enhance the validity of the results with samples taken from other contexts, such as Japan, where donation patterns are different than in the United States because of their culture that sees giving as a responsibility (World Giving Index, 2022).

5.6 Conclusion

Given that global crises are becoming a more recurrent phenomenon and that charitable organisations are one of the most affected groups in society because of this, focusing on the psychological mechanisms that lead to behavioural intentions during global crises is a good way to plan and prepare for future global disasters. Specifically, the present research focused on the need to enhance the current understanding of how appraisals and emotions brought up by a global crisis, mediated by hope and value-in-behaviour, can influence behavioural intentions to engage in prosocial activities. To generate new insights on this topic, this study gathered survey data concerning volunteering and

donating money intentions and applied a theoretical model, namely the appraisal theory of emotions, to understand the relationship between the appraisal of global crises, hope, value-in-behaviour and prosocial behaviours.

Using a survey approach, evidence was presented that challenge and threat appraisals generated by global crises evoke changes in the levels of hope, that subsequently affect both value-in-behaviour variables (altruistic and emotional), and finally impact individual's intentions to engage in prosocial behaviours. While the findings did support the prediction that challenge and threat appraisals impact donations of money, having hope and value-in-behaviour as mediators, the evidence was not as well supported for the volunteering condition suggesting that the level of engagement in terms of prosocial behaviours can play a big role in people's intentions to support charitable organisations.

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APPENDICES

Appendix A: Ethics Approval

Auckland University of Technology Ethics Committee (AUTECH)

Auckland University of Technology
D-88, Private Bag 92006, Auckland 1142, NZ
T: +64 9 921 9999 ext. 8316
E: ethics@aut.ac.nz
www.aut.ac.nz/researchethics

21 September 2022

Crystal Yap

Faculty of Health and Environmental Sciences

Dear Crystal

Re Ethics Application: 22/229 The impact of global crises on prosocial behaviours

Thank you for providing evidence as requested, which satisfies the points raised by the Auckland University of Technology Ethics Committee (AUTECH).

Your ethics application has been approved for three years until 21 September 2025.

Non-Standard Conditions of Approval

Alteration of the term 'Pacific Islander' in the survey with the term 'Pacific Peoples' in accordance with current New Zealand Statistics and AUT style guidelines

Non-standard conditions must be completed before commencing your study. Non-standard conditions do not need to be submitted to or reviewed by AUTECH before commencing your study.
Standard Conditions of Approval

The research is to be undertaken in accordance with the Auckland University of Technology Code of Conduct for Research and as approved by AUTECH in this application.

A progress report is due annually on the anniversary of the approval date, using the EA2 form.

A final report is due at the expiration of the approval period, or, upon completion of project, using the EA3 form.

Any amendments to the project must be approved by AUTECH prior to being implemented. Amendments can be requested using the EA2 form.

Any serious or unexpected adverse events must be reported to AUTECH Secretariat as a matter of priority.

Any unforeseen events that might affect continued ethical acceptability of the project should also be reported to the AUTECH Secretariat as a matter of priority.

It is your responsibility to ensure that the spelling and grammar of documents being provided to participants or external organisations is of a high standard and that all the dates on the documents are updated.

AUTECH grants ethical approval only. You are responsible for obtaining management approval for access for your research from any institution or organisation at which your research is being conducted and you need to meet all ethical, legal, public health, and locality obligations or requirements for the jurisdictions in which the research is being undertaken.

Please quote the application number and title on all future correspondence related to this project.

For any enquiries please contact ethics@aut.ac.nz. The forms mentioned above are available online through <http://www.aut.ac.nz/research/researchethics>

(This is a computer-generated letter for which no signature is required)

The AUTEK Secretariat

Auckland University of Technology Ethics Committee

Cc: vwn2876@aut.ac.nz; noke.tipgomut@aut.ac.nz

Appendix B: Participant Information Sheet

Date Information Sheet Produced

09.08.2022

Project Title

The impact of global crises on prosocial behaviours

An Invitation

My name is Claudia Arana. I am a business student undertaking this research as my Master's Dissertation project under the Department of Marketing from the AUT Faculty of Business, Economics & Law. I would like to invite you to participate in my research on the impact of global crises on prosocial behaviours. The purpose of this Participant Information Sheet is to help you decide if you would like to take part of the study or not. This sheet will explain the rationale behind the research study, what the participation of individuals will involve, outline potential benefits and risks, and explain how anonymity and confidentiality will be ensured.

What is the purpose of this research?

This study aims to understand how stress brought up by a global crisis can influence behavioural intentions to engage in prosocial activities. In this study, we defined prosocial behaviours as people' willingness to get involved in activities that benefit other individuals.

How was I identified and why am I being invited to participate in this research?

You have been invited to participate in this research as you are aged 20 and above that have supported a social cause in the past twenty four months. Any participant that does not fit this conditions will not be able to participate of this research.

How do I agree to participate in this research?

If you decide you would like to take part in this research, click on the link to the project advertised on the MTurk platform for workers to complete a task. This will redirect you to the online survey on Qualtrics to start the survey. Completion of the research questionnaire will count as an agreement to participate in the research.

Participation in this study is enteriley voluntary. You can change your mind at any time without any negative consequences.

What will happen in this research?

Once you click on the link to the project on MTurk, you will be taken to the Qualtrics survey so you can read the description of the study. Following your consent to take part in this study, you will be

able to take part in the online questionnaire. The online survey will take around 15 minutes to complete.

What are the discomforts and risks?

There are no expected discomforts or risks associated with participating in this study.

How will these discomforts and risks be alleviated?

Participation is entirely voluntary and if, for any reason, you feel uncomfortable, you can withdraw from the study at any time without any consequences.

What are the benefits?

Through your participation, you will help provide information to understand the potential impact of global crises on prosocial behaviours. As any changes in the level of resources required for charitable organisations to provide their services could severely impact the vulnerable populations that rely on them to access basic goods or services, it is crucially important to learn from the impact of these events in the support of individuals to charitable causes.

You will receive NZ\$3 as a token of appreciation for participating in this study. This research will allow me, as the primary researcher, to fulfil the requirement to complete my Master's degree.

How will my privacy be protected?

Participation in this study is anonymous. The research team will not have access to any identifiable data, which means none of the researchers will know who is taking part in the study. The answers you provide in the survey will remain completely anonymous and unidentifiable.

Data collected during the present research study will be electronically stored on AUT premises. This data will be stored for a minimum of six years and then destroyed after completion of this period of time.

What are the costs of participating in this research?

There are no costs to you other than your time to participate in the present research. Participation duration will be approximately 15 minutes.

What opportunity do I have to consider this invitation?

You can take your time to consider if you wish to participate in the present research. However, it would be appreciated if you can respond within three weeks' time from the date the invitation is sent.

Will I receive feedback on the results of this research?

If you want to access the summary of the research's findings, please use the following URL:
<https://www.dwbresearchfindings.com>

What do I do if I have concerns about this research?

If you have any concerns about this research, please contact the Research Ethics Lead of AUTECH:
Phone: +64 9 921 9999 ext 6038
Email: ethics@aut.ac.nz

Whom do I contact for further information about this research?

Please keep this information sheet for your future reference. You can also contact the research team as follows:

Please note completion of the research questionnaire will count as an agreement to participate in this research.

Thank you for taking the time to read this information sheet. If you have any questions or concerns, please contact:

Primary researcher:

Claudia Arana
MBus Candidate
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*Approved by the Auckland University of Technology Ethics Committee on 25.08.2022, AUTEK
Reference number 22/229*

Appendix C: Questionnaire

Filter question

1. Have you ever volunteered your time / donated money to support charitable organisations? Note: If you have done both activities, please select the option that you feel is more important to you.
- Yes, I have volunteered my time at least once over the last 24 months
 - Yes, I have donated money at least once over the last 24 months
 - Yes, I have volunteered / donated money in the past, but have not done in the last 24 months
 - No, I have never volunteered / donated money

Section 1: Volunteering time

2. In the past 24 months, how many times have you volunteered your time to support charitable organisations?
- More than 4 times per month
 - 1-4 times per month
 - 5-11 times per year
 - 1-4 times per year
 - Less than 1 time per year

3. Thinking back to your overall experience volunteering your time to support charitable organisations, to what extent do you agree with the following statements:

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
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a. Volunteering my time makes me feel comfortable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Volunteering my time makes me feel great satisfaction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Volunteering my time makes me feel happy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Volunteering my time makes me feel calm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Volunteering my time makes me feel proud	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Volunteering my time gives me a sense of self-fulfillment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Volunteering my time benefits humanity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. Volunteering my time saves lives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. Please indicate how you feel about each of the following statements by selecting a rating from 1 (strongly disagree) to 7 (strongly agree).

In the next 6 months:

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
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a. I would consider volunteering my time to support charity organisations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. I will try to volunteer my time to support charity organisations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. I plan to volunteer my time to support charity organisations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Section 2: Donating money

5. In the past 24 months, how many times have you donated money to support charitable organisations?
- More than 4 times per month
 - 1-4 times per month
 - 5-11 times per year
 - 1-4 times per year
 - Less than 1 time per year

6. Thinking back to your overall experience donating money to support charitable organisations, to what extent do you agree with the following statements:

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
a. Donating money makes me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

feel comfortable							
b. Donating money makes me feel great satisfaction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Donating money makes me feel happy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Donating money makes me feel calm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Donating money makes me feel proud	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Donating money gives me a sense of self-fulfillment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Donating money benefits humanity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. Donating money saves lives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. Please indicate how you feel about each of the following statements by selecting a rating from 1 (strongly disagree) to 7 (strongly agree).

In the next 6 months:

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
a. I would consider	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

donating money to support charity organisations							
b. I will try to donate money to support charity organisations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. I plan to volunteer my time to support charity organisations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Section 3: COVID-19

The following questions are used to understand how you think and feel about COVID-19.

- Please read the following items carefully and select a rating from 1 (strongly disagree) to 7 (strongly agree) to describe the way you generally think and feel about the COVID-19 pandemic.

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
a. The COVID-19 pandemic is disturbing to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. The COVID-19 pandemic is threatening to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. The COVID-19 pandemic has a negative impact on me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. The COVID-19 pandemic stimulates me to overcome obstacles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. The COVID-19 pandemic is an opportunity for learning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. The COVID-19 pandemic is helping me become a stronger person	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9. Please take a few moments to focus on yourself and what is going on in your life at this moment as a result of the COVID-19 pandemic. Then, read the following items carefully and select a rating from 1 (strongly disagree) to 7 (strongly agree) to describe how you think about yourself right now.

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree

a. I could think of many ways to get out of any potential trouble	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. At the present time, I am energetically pursuing my goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. There are lots of ways around any problem that I am facing now	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Right now, I see myself as being pretty successful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. I can think of many ways to reach my current goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. At this time, I am meeting the goals that I have set for myself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Section 4: Demographic information

Please answer the following questions based on your actual demographic data.

10. Gender
 - Male
 - Female
 - Other

11. What is your age range?
 - 20 - 29
 - 30 - 39
 - 40 - 49
 - 50 - 59
 - 60+

12. What is the highest level of education you have completed?
 - Primary school qualification
 - Secondary school qualification
 - Undergraduate qualification
 - Postgraduate qualification
 - Other, please specify

13. What is your approximate average annual income?

- Less than \$15,000
 - \$15,000 - \$24,999
 - \$25,000 - \$34,999
 - \$35,000 - \$49,999
 - \$50,000 - \$74,999
 - \$75,000 - \$99,999
 - \$100,000 - \$149,999
 - \$150,000 - or more
14. Which of the following best describes your current relationship status?
- Single, never married
 - Married or domestic partnership
 - Widowed
 - Divorced
 - Separated
15. Which of the following best describes your employment situation?
- Full-time employment
 - Part-time/casual employment
 - Unemployed
 - Retired
 - Homemaker
 - Student
 - Self-employed
 - Other, please specify
16. Which ethnicity best describes you?
- White
 - Black or African American
 - American Indian and Alaska Native
 - Asian
 - Native Hawaiian or Other Pacific Islander
 - Hispanic or Latino
 - Other ethnicity, please specify