The Effects of Non-profit Agency Website Donation Button Design on Aid Agency Trust and Donation Compliance

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1. Abstract

This research aimed to develop a deeper understanding of trust and non-profit agency website design, and specifically focussed on the 'Donate Now' button. Two experiments investigated the effects of varying levels of consumer certainty, manipulated by providing varying levels of donation relevant information on the web homepage donation button, on aid agency trust and donation compliance. Both experiments were based on Study 1, a preliminary survey of website donation button design. Experiment 1 investigated the effects of iconic manipulation of the 'Donate Now' button. Results suggested that varying levels of consumer certainty through iconic manipulation of the website donation button design did not effect aid agency trust and donation compliance. Experiment 2 extended the research of Burt and Dunham (2009) to investigate the effects of varying consumer certainty levels through the provision of crisis/need and response photographs on the donation button. Results suggested that whilst there was no effect of level of certainty on donation compliance, there was an effect on aid agency trust. Participants' rated aid agency trust was increased to the greatest extent in the condition showing greatest certainty, when the donation button contained photographs of both the crisis/need and agency response. Collectively, these results suggest that aid agency trust can be enhanced through the considered manipulation of donation button design. Subsequently photographic images may be a more effective means with which to portray donation-relevant information and reduce uncertainty. Furthermore, in both experiments results showed that those individuals who reported higher aid agency trust also reported significantly higher donation intention. Thus, the current research has implications for the non-profit sector, suggesting that whilst the internet is a viable fundraising tool, the commercially driven process of online donation generation should not be isolated from the psychological concept of trust.

2. Introduction

Within recent years, a surge of research has occurred in relation to *E-commerce*, or commerce that is transacted electronically. In particular, the growth of the Internet as an E-commerce domain has been identified as one of the primary drivers of electronic trading (Grabner-Krauter & Kaluscha, 2003; Johnson, 1999). Amongst its many applications, the Internet has been touted as having the potential to revolutionize philanthropy (Powell, 2005) and it provides aid agencies with a cost-effective medium to both attract and retain new donors (Burt & Dunham, 2009). Nonetheless, researchers such as Grabner-Krauter and Kaluscha (2003) have emphasised that individuals' *trust* in electronic transactions such as online donations cannot be assumed. In fact, lack of trust is one of the most frequently cited reasons for consumers not purchasing from Internet vendors. In order to realise the potential of the Internet as a philanthropic tool Burt and Dunham (2009) stressed that non-profit agencies need to consider the effects of their *web homepage design* on perceptions of aid agency trust. They found that the provision of donation relevant information on non-profit agency web homepages targeting *uncertainty*, buoyed trust in the online donation transaction process. The current research aimed to deepen our understanding of trust and non-profit agency website design, and specifically focussed on the design of the 'Donate Now' button and its effects on aid-agency trust and donation compliance.

At the turn of the century, Johnson (1999) concluded that the internet was the fastest growing communication medium in the world. Evidence of this is the internet's pace of adoption, which has exceeded all other communication technologies before it. Its accessibility meant that it took only four years from when it was opened to the public to generate 50 million users, a benchmark which took television 13 years to reach (Johnson, 1999). With the huge progress of the Internet, retail outlets such as shopping

malls are no longer the only locations through which goods can be bought or sold. Consumers now have the option of transacting items through virtual stores or internet websites such as TradeMe (New Zealand) or Ebay (Global), from which the term E-commerce was coined. Consumers create an account and log on to buy goods from, or sell goods to, other registered users. Graphics of available products are displayed and communication between the buyer and seller is facilitated to enable a smooth transaction. Consumers can also order online via a secure server (through which confidential information can be sent over the Internet) and goods are physically shipped to the customer (Johnson, 1999). The dissolution of the need for the physical transactions of goods has also led to the rise in prominence of electronic goods and processes, such as online news media, academic journals and, most essential to this research, the ability to make charitable donations online.

However important the Internet has been to mainstream commercial organisations (Geiger & Martin, 1999; Hoffman & Novak, 1996), electronic transactions made via the internet are not restricted to the retail sector. In particular, the notion of E-commerce as increasingly relevant within the non-profit sector, has seen focus placed on how aid agencies can generate online donations through this electronic medium (Olsen et al., 2001). Whilst charitable organisations perform a vital role in society by providing support to those in need, they continue to rely heavily on public donations to fund their activities. Due to the high numbers of non-profit organisations which campaign today, marketing and advertising practitioners are faced with the challenge of persuading consumers to donate to their cause as the most deserving of many (Coulter & Pinto, 1995). With the decline in the level of donations from aging, traditional donors, and a shift by their children away from their parent's philanthropy, the Internet has been recognised as a potential channel through which non-profits can reach new donors (Johnson, 1999).

Non-profit agencies which utilise the Internet are provided with numerous opportunities, including ease of access to a global donor community, the ability to bypass expensive intermediaries and to update their message and image with relative ease and little cost (Goatman & Lewis, 2007). Conversely, consumers have only to connect to a non-profit agency's Internet site to be provided with instant information and donation opportunities (Johnson, 1999). In addition to this, worldwide Internet users have above average incomes and are aged between 21 and 45, a demographic characterised as 'donors of the future' and one that charities report difficulty in reaching through more traditional means such as direct mail (Johnson, 1999). This group of consumers are already sophisticated users of online technology and services, and thus, non-profits have the opportunity to promote online philanthropy as a viable donation option. Whilst aid agencies are still determining the most effective strategies for cultivating and accepting online donations (Olsen et al., 2001), Goatman and Lewis (2007) emphasised that they cannot ignore the Internet as an essential aspect of their marketing communications package.

In particular, a recent paper by Kemp, Richardson and Burt (In Press) emphasised the advantages of Internet based charitable marketing initiatives through their investigation of third party gifts. A third party gift is one in which a gift donor pays for an item or service which is then delivered to a beneficiary. The donation is also received as a gift by a recipient who does not see or use the item but is made aware that the gift has been delivered to a beneficiary in their name. The majority of gifts are chosen and paid for via the organisations' websites. Kemp, Richardson and Burt (In Press) concluded that third party gifts, marketed by a number of charitable organisations such as Oxfam and Save the Children, were viewed positively by participants who also showed preference towards the specific gift items over monetary donations. Third party gifts thus provide an example of the power of the Internet in connecting donors to beneficiaries, and facilitating new methods for donations gerneration.

However, survey data, such as that collected by Johnson (1999), shows that many potential Internet donors share concerns relating to on-line donations. These most commonly centre on whether they can *trust* the security of the donation, and whether they *trust* that the donated money will reach the needy. Provided that these concerns were addressed, 65% of participants reported that they would be willing to make a donation (Johnson, 1999).

These concerns, voiced by consumers themselves, suggest that issues of trust are inevitably raised during any discussion of donating online. A growing body of research has formed which addresses the concept of trust within an E-commerce framework more generally (e.g., Grabner-Krauter & Kaluscha, 2003; Hoffman et al., 1998; Wang & Emurian, 2005). These researchers highlight the concept of trust as essential to economic transactions made via the Internet, where consumers are often on a less equal footing with their transaction partner than in more traditional settings. Whilst Grabner-Krauter and Kaluscha (2003) highlighted the often conflicting conceptualisations of the trust concept, two different components of trust are commonly cited as most relevant within the framework of online donating; *dispositional* and *transactional* trust (Burt & Dunham, 2008).

Dispositional trust, a facet of the Big Five dimension of agreeableness (Costa et al., 1991), can be defined as the tendency to attribute benevolent intent to others; distrust as the suspicion that others are dishonest or dangerous. With its roots in personality psychology (eg. Rotter, 1967), the concept of dispositional trust recognises that people develop, over the course of their lives, generalized expectations about the trustworthiness of other people (Grabner-Krauter & Kaluscha, 2003). As rationalised by Burt and Dunham (2009), it can be proposed that those who have a higher dispositional propensity towards trusting others are perhaps more likely to trust a web-based charity when donating online. Furthermore, dispositional altruism, another facet of agreeableness which refers to individuals' propensity towards selflessness and concern

for others (Costa et al., 1991) is also likely to predispose people towards viewing a web-based charity favourably. As a result of this theoretical and research basis, dispositional trust and altruism were measured in the current research so that they could be controlled for if necessary when investigating the effect of web page design on aid agency trust with a between group design.

Researchers in different disciplines have identified that trust is not only dispositional, but also has a transactional component (Wang & Emurian, 2005; Grabner-Krauter & Kaluscha, 2003). The concept of transactional trust encompasses an individual's level of certainty in the transaction and how they expect others involved in the transaction to behave (Burt & Dunham, 2009). In fact, the initiating, building and maintaining of transactional trust between online buyers and sellers is increasingly being recognised as a key facilitator of successful E-commerce (Grabner-Krauter & Kaluscha, 2003). Essentially, as Mayer et al. (1995) note, transactional trust is dependent on the willingness of a party to be vulnerable to the actions of their transaction partner, irrespective of the ability to monitor or control that partner. In an online donating framework, individuals' control over, and ability to monitor the behaviour of the aid agency they are donating to is limited. A higher level of transactional trust that the intended internet merchant will behave in a desirable manner is thus necessary during online donation transactions (Grabner-Krauter & Kaluscha, 2003).

This concept of transactional trust is not only theoretically, but also practically, relevant within the non-profit sector. A case which illustrated the importance of building and maintaining transactional trust involved a prominent New Zealand charitable trust, KidsCan. In 2009, the New Zealand media published revelations that KidsCan had spent 80% of the money it raised through its programmes on operating costs and administration. It was reported that $1.5 million of the $1.95 million raised in the year to December 2008 went to wages, advertising, PR and events and promotions

(Van Beynen, 2009). At the time, KidsCan was running a highly publicised Telethon, appealing to the public for donations to help financially disadvantaged children within New Zealand (Johnston, 2009). Intense public scrutiny surrounded this issue, and donors voiced concerns that KidsCan could no longer be trusted to act in the best interests of their beneficiaries. In essence, because transactional trust was not maintained, consumer *certainty* that their donations would actually serve to help those in need was shaken.

Extending this concept, two important dimensions of transactional trust that are commonly cited within an online donating framework are those of *system-dependent* and *transaction-specific* uncertainty (Burt & Dunham, 2009). System-dependent uncertainty is caused by the implicit uncertainty that comes from using a technological system for the exchange of information and money (Grabner-Krauter & Kaluscha, 2003). Within an online donating framework, this uncertainty relates to technology-dependent risks, such as technological errors or security gaps, which are beyond the direct influence of the actors within the transaction. Aid agencies attempting to undertake online donation transactions need to reduce this uncertainty through methods such as facilitating encrypted transactions, installing firewalls and utilizing authentication mechanisms (Burt & Dunham, 2009; Pavlou, 2003).

As in the work published by Burt and Dunham (2009), transaction-specific uncertainty specifically is of primary interest to this research. Moreover, the relationship between transaction specific uncertainty and aid agency trust is the core focus. From the perspective of the potential donor, transaction specific uncertainty relates to the Internet merchant (the aid agency) and their potential behaviours after the transaction process (online donation). Within an online donating framework, the consumer is most often not able to personally inspect what their donation goes towards or whether the charity is in fact using it effectively (Burt & Dunham, 2009). Thus, there is an asymmetric distribution of information between the transaction partners (Grabner-Krauter &

Kaluscha, 2003). There remains, however, a consumer expectation (a trust) that donations made towards a specific crisis/need will be used to respond to that crisis/need **(**Burt & Dunham, 2009). Transaction-specific uncertainty can thus form in relation to two key areas within the donation framework, the *crisis/need* for which the funds are being raised by the non-profit agency and what *services/responses* the agency intends to provide to respond to this need (Burt & Dunham, 2009).

Although it is often difficult for donors to assess physically the services provided by a charity to a beneficiary group (as discussed above), Burt and Dunham (2009) investigated the value of instead providing donation relevant information on charity web homepages to give potential donors insight into charity effectiveness and decrease transaction-specific uncertainty. A body of research has formed in relation to issues associated with online fundraising more generally (e.g., Goatman & Lewis, 2007; Jillbert, 2003; Powell, 2005; Sargeant, 2001), however Burt and Dunham (2009) were the first to investigate this issue of transaction specific certainty, trust and aid agency *website design* more specifically.

Within marketing communications discourse more generally, Burt and Strongman (2005) investigated the importance of the imagery used in advertising design to charity advertising success. They concluded that images which informed potential donors about the charity's reason for existence and its activities helped generate donations; in particular images of children which evoked negative emotions within charity donation advertising generated significantly larger monetary donations (Burt & Strongman, 2005). Additionally, Fox and Carr (2000) suggested that the inclusion of visual information on the situational causes of poverty on non-profit agency websites optimised participants' donation intention. Use of situational rather than human imagery directed attention back towards the situational causes of poverty, such as climate change, and prevented the attribution of poverty to character traits in the poor themselves (Fox & Carr, 2000). Finally, McWah and Carr (2009) concluded that

individuals with differing Higher Education backgrounds (Business vs Social Science) differed also in their attributions of blame for poverty after viewing 'cropped' (child's face only) versus 'full' (face-plus-context) images of poverty. These results suggest that aid agency campaign images can be psychologically tailored to differently educated market segments (McWah &Carr, 2009). Moreover, these studies together suggest that the choice of donation relevant information (images or icons) to be used as part of an aid agency's website design should not be random, but selected with care.

Burt and Dunham (2009) extended these findings within an online donating framework specifically and concluded that the portrayal of donation relevant photographs on a charity's internet homepage reduced transaction specific uncertainty and increased rated transactional trust in the agency. As the homepage is what creates the initial impression of the non-profit organisation, images placed on the homepage which depicted both the crisis/need, and the services the agency were providing in response to this need, specifically targeted the two facets of transaction-specific uncertainty and significantly increased rated transactional trust in the charity (Burt & Dunham, 2009). Furthermore, ratings of trust were significantly correlated with ratings of interest in exploring the 'make a donation online' web page link and the amount participants stated they might donate. It seems, therefore, that efforts to eliminate transaction-specific uncertainty at the time when the potential donor is considering contributing online, could have implications for online *donation compliance* as well as trust.

Several researchers have focussed on the most effective means with which to promote online donation compliance. Gueguen and Jacob (2001) investigated the 'foot-in-the-door' technique within an online framework, which consists of proposing a small request to a subject, then submitting a second, larger request. They confirmed the efficacy of this manipulation technique for online agencies, concluding that it appeared to be a good technique for inducing people to explore a web site or donate online.

Jillbert (2003) presented a comprehensive survey of charity website design on which suggestions for generating online donation compliance were based. To maximise the potential for online donation compliance, a website should be simple, clean, easy to navigate and quick to load (Jillbert, 2003). Fox and Carr (2000) concluded that charitable donation intentions were optimised when the website contained an optimal amount of (textual and visual) information on the situational causes of poverty. This research again suggests how Internet technology, specifically the manipulation of website design, can be applied to raise dollar donations. Based on this rationale, participants' donation compliance was measured along with aid agency trust in this study.

Furthermore, although aid agency trust and donation compliance were measured as two separate dependent variables within the two experiments reported here, previous research by Burt and Dunham (2009) suggests that there may be a relationship between the two within an online donating framework. They found a significant effect of aid agency trust on donation compliance; those individuals who reported higher aid agency trust also reported significantly higher donation intention, as depicted in Figure 1.

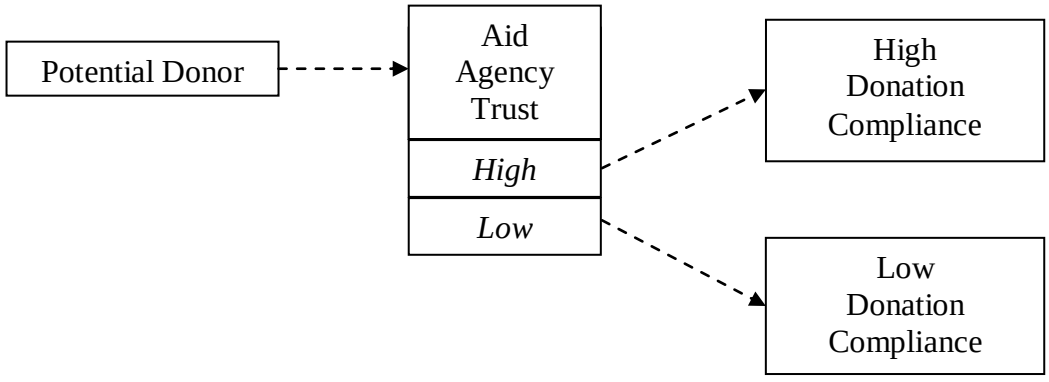


Figure 1. The effect of aid agency trust on donation compliance

Wang and Emurian (2005) rationalised this, emphasising that online trust is not simply a theoretical concept but instead motivates actual physical actions, such as

making an online donation transaction. This suggests that trust and donation compliance could be interlinked; if non-profits are able to generate increased levels of trust in their aid agency through manipulating their website design then this could impact how many individuals go on to donate online through their website. Based on this rationale, it was predicted that aid agency trust would be positively associated with donation compliance in both experiments.

Further consideration of donation compliance has centred on the issue of whether certain social groups differ in their propensity towards generosity. As much research into donating behaviour uses students as sample groups, researchers such as Bekkers (2007) have investigated differences in philanthropic behaviour between students and non students. It is a well-established finding in research on philanthropy that donation compliance increases with level of education (Bekkers 2006; Brown 2005). The higher educated earn higher incomes, have higher verbal ability, larger social networks and more pro-social value orientations. However, Bekkers (2007) concluded that the effect of education on charitable giving becomes apparent only after graduation when individuals develop more opportunity to donate due to factors such as increased disposable income. Within the current research, the research sample consisted of both students and members of the general public. They were asked to indicate whether they were a student or not, but no specific questions were asked in relation to graduate status or past education. Therefore, there was a possibility that the general public sample was made up largely of university graduates or staff at university who (according to the research mentioned previously) would have higher online donation compliance compared with current students (Bekkers, 2006; Brown, 2005). Thus, the variable ‘student’ was identified as a possible covariate to be controlled for within the experiments.

Despite the aforementioned research focus on online donation compliance, a key question is whether aid agencies are actually concerned with tailoring their websites

towards generating donation compliance. More pivotally, do charities view their websites as viable fundraising tools? In answering these questions it is pertinent to address the research of Rowley (2001) who identified four developmental stages of organisational websites: contact, interact, transact and relate. At the 'contact' level websites are largely about promoting a corporate image and providing general information; at the 'interact' level there is evidence of targeting specific audiences; 'transactional' websites facilitate online purchasing; and 'relational' sites develop two-way consumer relationships. In studies of large charities it was found that most are designed merely for what Rowley (2001) terms 'contact' purposes, that is to provide information about the charity and promote the charity's image (Sargeant, 2001; Sargeant & Jay, 2003; Wenham et al., 2003). Whilst the majority do have a fundraising objective, this is rarely the primary reason for their existence.

Furthering this research, Goatman and Lewis (2007) recently conducted a comprehensive survey of attitudes in relation to website adoption and use across a broad spectrum of UK charities. The charities surveyed reported that the fundamental purpose of their websites was to provide information and raise awareness of the charity and its mission. The website's purpose as a fundraising, transaction-based tool was, interestingly, a far lower priority. Additionally, website success was deemed as largely contingent on information provision. The successes of the websites were not thought of as contingent on interactive functions such as fundraising. Furthermore, Sargeant (2001) reported that 47% of the charities surveyed who offer an online donation facility stated that the amount raised from this was lower than expected. Olsen et al. (2001) suggests that results such as these, which often point to the relative lack of success of Internet fundraising, may in fact be due to many charity websites making it neither easy nor compelling to donation online, especially if aid agencies do not view the fundraising function of their website as a high priority (Goatman & Lewis, 2007).

To further assess aid agencies' approach to online donation generation outside of academia, a scan of aid agency homepages through Charity Navigator, an American aid agency website database, was completed. This is reported as Study 1 below. This showed that most use a 'Donate Now' button to generate online donations. Consumers click this button to navigate to a donation form where they allocate the donation amount and provide credit card and payment details. Corson-Finnerty (2000) confirmed that for most aid agencies the use of a 'donate now' button defines the concept of cybergiving. However, he stresses that despite this, having a good website with a 'Donate Now' button should be conceived of as just the 'beginning' of online fundraising, rather than its culmination (Corson-Finnerty, 2000; Kemp, Richardson & Burt, In Press). Additionally, Sargeant (2001) reported that there appeared to be no significant difference in development and maintenance costs of those sites designed to raise funds and those designed for other purposes. Thus, if an aid agency has a captive audience of people who visit their web homepage, there seems to be value in maximising the opportunity to concurrently generate online donations.

2.1 Current Research

The results of the Charity Navigator scan and the aforementioned strong research basis formed the rationale for this research which aimed to deepen our understanding of aid agency website design and trust. The research aimed to extend the results of Burt and Dunham (2009) by investigating whether using a link with the words 'Donate Now' written on it is the best way of motivating donation intention at the time when a potential donor is scanning a homepage.

Firstly, Study 1, a preliminary survey of website donation button design, was conducted. Two experiments were then designed, partly based on information obtained in Study 1, to investigate the effects of charity donation button design on aid agency trust and donation compliance. More specifically, the research investigated whether

incorporating varying levels of donation relevant information on the 'Donate Now' button would lead to actual effects on transaction (rated aid agency) trust and donation compliance.

Experiment 1 investigated the effects of decreasing transaction-specific uncertainty, through iconic manipulation of the 'Donate Now' button, on rated transactional trust in the aid agency and donation compliance. To achieve this, a mock aid agency web homepage template was created which participants viewed on a computer as part on an online survey. Three 'Donate Now' buttons were created containing varying levels of donation relevant information (represented by icons) in an attempt to generate progressively higher levels of transaction-specific certainty across the three experimental conditions. In line with past findings on website design and transaction specific certainty (Burt & Dunham, 2009), the following hypothesis was tested:

(1) Increasing transaction-specific certainty via iconic manipulation of the 'Donate Now' button will increase donation compliance and rated transactional trust in the non-profit agency.

Experiment 2 was based on the results of Burt and Dunham (2009), who found that crisis/need and agency response homepage images increased aid agency trust. Thus, Experiment 2 investigated whether crisis/need and response images are also suited to be used on a 'Donate Now' button in order to increase transactional trust and donation compliance. To achieve this, the same mock aid agency web homepage template used in Experiment 1 was presented to participants on a computer as part on an online survey. Four new 'Donate Now' buttons were created which aimed to progressively increase transaction-specific certainty across the four experimental conditions. Based on the results of Burt and Dunham (2009), a second hypothesis was tested:

(2) That rated transactional trust and donation compliance will increase to the greatest extent when the donation button contains photographic representations of both the crisis/need and agency response (least uncertain condition).

Finally, based on Burt and Dunham's (2009) results which suggested that agency trust may influence individuals' willingness to donate, and the resulting rationale that efforts to increase agency trust through website design may have practical implications for generating online donations, an overarching hypothesis is that:
(3) That in both experiments trust will have a significant effect on willingness to donate, with those who report higher aid agency trust demonstrating higher donation compliance.

3. Study 1

3.1 Method

3.11 Procedure

The development of the non-profit agency online donation buttons used in Experiment 1 and Experiment 2 was guided by Study 1, an internet survey of 10% (559) of the available charity websites sourced through Charity Navigator, an online, American charity database. The sample of websites surveyed was chosen at random from the Charity Navigator database using a random digit table.

Because the results of this research were intended to guide aid agencies towards the most effective possible donation button design, we were firstly interested in identifying the status quo of non-profit agency donation button design and evaluating whether charities were currently applying any of the design specifications to be investigated in this research.

Thus, Study 1 was conducted to assess whether non-profit agencies already included any form of donation relevant information on donation buttons on their web homepages or rather, whether it was common practise to create a donation button with only the words 'Donate Now' on it. By being aware of the status quo of aid agency donation button design, it was intended that any practical recommendations generated from the results would be more specifically tailored to the real-world non-profit sector.

3.2 Results

Twenty three of the 559 charity websites surveyed did not have online donation buttons. Of the remaining 536 websites, 86 % of the donation buttons surveyed were rectangle in shape with an average length of 3.72 cm and width of 1.26 cm (measured consistently on a 27 cm x 43 cm computer screen). Seventy nine percent of the donation

buttons were located on the top half of the homepage screenshot either in the left (36%) or right corner (43%). The colour of the buttons varied widely and seemed to be most related to the colour scheme chosen for each website as a whole. The phrases 'Donate' (20%) and 'Donate Now' (14%) were the two general phrases (not specifically tailored to one non-profit organisation) most commonly placed on the website's donation buttons.

As expected, only 2.7 % (15) of the web homepages surveyed included any form of icon or picture on the donation button. Of these, 9 (1.6%) included icons relevant to the charity (such as a dog's paw for an animal rescue charity). The other 6 (1.1 %) included dollar sign icons and credit card symbols (Visa, MasterCard and Amex), related to the process of giving money. No photographs were included on the donation button of any website surveyed.

Overall, the status quo of website button design was a rectangle button located in either the top-left or top-right corner of the web homepage with the phrase "Donate Now" (or words to that effect) printed on it. No consistent evidence of presentation of donation relevant information on the donation button (in either iconic or photographic form) was found.

To adhere to these real-world findings, the *Control* condition button, used in Experiment 1 and Experiment 2, was designed to approximate this status quo donation button. This was then used as the basis with which to explore the hypotheses that increasing the level of donation-relevant information on the donation button above and beyond the minimum amount provided in this *Control* condition, would increase rated aid agency trust and donation compliance.

4. Experiment 1

4.1 Method

4.11 Participants

Forty three students from the University of Canterbury and 18 individuals from the general public participated in Experiment 1. Students were approached either through the first year participant pool at the University of Canterbury, or by email, and asked to volunteer. Individuals from the general public were approached by email and asked to volunteer. Those who volunteered completed an online research questionnaire. The participants were randomly assigned to one of the three experimental conditions.

Nine males (mean age 25.3 years) and 11 females (mean age 25.5 years) participated in the *complete uncertainty* condition. Of these 13 were students and 7 were members of the general public. Seven males (mean age 23.4 years) and 9 females (mean age 21.7 years) participated in the *less uncertain* condition of which 12 were students and 4 were members of the general public. Nine males (mean age 27.4 years) and 16 females (mean age 24.6 years) participated in the *least uncertainty* condition. Of these 18 were students and 7 were members of the general public.

4.12 Materials

An online questionnaire was designed on a computer in html format using Lyme Survey software and was used in each of the three experimental conditions. The first pages of the questionnaire were identical and contained the informed consent statement:

‘ Please read the following note before completing the questionnaire. You are invited to participate in the present research project, The Effects of Non-profit Agency Website Design, by completing the following questionnaire. The aim of the project is to investigate the effects of non-profit agency web-page design.

The project is being carried out as part of an MSc thesis in Applied Psychology by Sophie Gibbons under the supervision of Associate Professor Chris Burt, who can be contacted at seg56@student.canterbury.ac.nz. They will be pleased to discuss any concerns you may have about participation in the project.

The questionnaire is anonymous, and you will not be identified as a participant. You may withdraw your participation, including withdrawal of any information you have provided, until your questionnaire has been added to the others collected. Because it is anonymous, it cannot be retrieved after that.

BY COMPLETING THE QUESTIONNAIRE IT WILL BE UNDERSTOOD THAT YOU HAVE CONSENTED TO PARTICIPATE IN THE PROJECT, AND THAT YOU CONSENT TO THE PUBLICATION OF THE RESULTS OF THE PROJECT, WITH THE UNDERSTANDING THAT ANONYMITY WILL BE PRESERVED.'

The second pages were also identical across conditions and contained general instructions for participants. The same set of instructions was used for both Experiment 1 and Experiment 2. Thus, all seven website links were visible below these instructions in both experiments. Those participants who were allocated Website Link 1, 2 or 3 participated in Experiment 1:

'Below are seven website links. You have been given a card with a website number on it. When instructed to, please select the website link which corresponds to the website number on your card eg. If your card says 'Website 5', select the 'Website 5' link.

This will take you to an internet homepage screenshot of a non-profit organisation. This is an inactive homepage screenshot, thus clicking the links will not work. Please look at/read this homepage, taking as much time as you require, then click the 'next' button at the bottom of the page.

You will then proceed to the survey questions. Ensure you answer ALL questions, on every page of the survey. Now, please select the appropriate website link, and click the 'next' button at the bottom of the page.'

The third page of the questionnaire contained one of three non-profit agency web homepage screenshots (Appendix A; Appendix B; Appendix C). One web homepage template was designed and used across all three conditions. One of three donation buttons was then added to each web homepage to create the three conditions (discussed further below).Research conducted by Burt and Dunham (2009) guided the construction of the web homepage template and ensured that it was consistent with those currently used by aid agencies. They conducted a survey of 105 non-profit web homepages and observed that they consistently included (actual percentages are given in brackets) the agency name (100%), a brief statement about the agency (40%) and several links (described below). Thus, the web homepage template was headed with the charity name, *New Zealand Aid International*, and a brief description of the charity, '*New Zealand Aid International provides food, medical, fresh water and housing relief to those affected by humanitarian crises and natural disasters'*. On the left hand side of the homepage a list of links was positioned including the following: *Home, About Us, Aid Response Photo Gallery, Charity Navigator Star Rating, Annual Reports, Publications, News Archive, Get Involved and Contact Us.*

In the centre of the page a vertical list of links was positioned including: *See our work in China, See our work in Africa, See our work in India*. Maps of each of these three countries were positioned beside each link to add further interest to the page. A vertical list of links was also positioned on the right hand side of the page including: *Read our most recent success stories, Learn more about our volunteer programme* and *Why should you contribute to New Zealand Aid International?*

Figure 2 shows the three images, deemed as neutral, that were positioned on the homepage under the charity description to provide interest on the webpage aside from the text, the donation buttons and the maps.

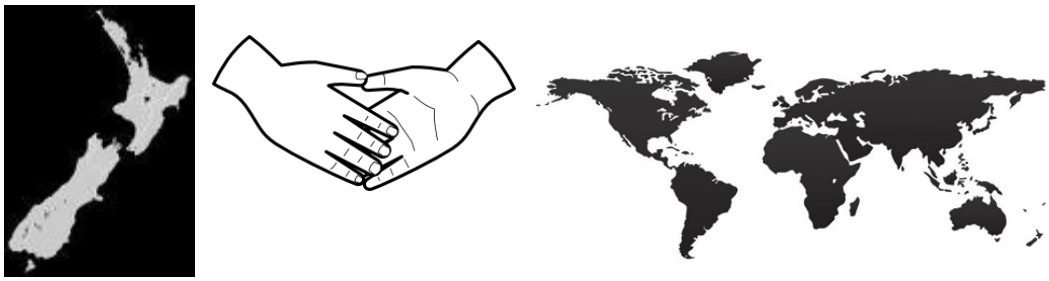


Figure 2. The three neutral images positioned on the web homepage template

In order to create the three different experimental conditions, one of the three donation buttons was positioned in the top left hand corner of each web homepage screenshot. Figure 3 shows the donation buttons used in the *Control, Less Uncertain* and *Least Uncertainty* conditions respectively (actual size and colour depicted).

Control Condition

Less Uncertain Condition

Least Uncertainty Condition

Figure 3. Donation buttons used in Experiment 1

The findings from Study 1 guided the physical construction of the donation buttons, shown in Figure 3. The 7.5 cm wide and 5.5 cm high donation button was controlled across the three conditions and was blue and rectangle in shape. Due to the inclusion of images and icons in two of the experimental conditions, the donation button was larger than those most commonly used by charities in the Charity Navigator database (which most commonly only included a phrase such as 'Donate Now'). The words 'Donate Now', printed in white, were included on every button and this text measured 5 cm in width and 0.6 cm in height. To replicate the 3D style of the surveyed buttons the experimental buttons were created online using the website http://www.netdenizen.com/buttonmill/glassy.php.

As an explanation of the three experimental conditions; In the *Control* condition, a button with the words 'Donate Now' (see Figure 3) was used as the donation link. Participants were given no indication of what their donation was to be used for. In the *Less Uncertain* condition, the button with a donation amount of $10 and the words 'Donate Now' (see Figure 3) printed above it was used as the donation link. Participants' donation choice was more specific as they were allocated an amount to donate. In the final condition, *Least Uncertainty*, the button with a first aid kit icon, a consistent donation amount ($10) and the words "Donate Now" printed above it (see Figure 3) was used as the donation link. The medical kit icon (white with a red cross on it) was chosen to indicate that the donation would contribute to medical personnel and supplies as the red cross is an internationally recognised symbol (and is certainly recognised in New Zealand) of medical aid. The 5 participants who piloted the questionnaire all reported that they assumed this icon to mean that they would be donating to medical services. It was thus concluded that the medical kit icon was a sufficient representation of the intended use of the donation. Participants in this condition were thus intended to be least uncertain, as they were made aware that they would be donating ten dollars to medical personnel and supplies.

After the web page, a question on donating to the non-profit organisation was included to measure donation compliance. The question was, "*Would you be willing to make an online donation to New Zealand Aid International's relief work?"*. Participants' were asked to rate their answer to this question using a 5-point scale (anchored with 1 = I would definitely not donate to 5 = I would most definitely donate to the charity) to indicate how strongly they were inclined to donate to the non-profit agency.

The next section measured trust in the aid agency using the five items developed by Sergeant and Lee (2004). An example item is 'I would trust the non-profit to always act in the best interests of the cause'. Each item was rated on a 5-point scale, anchored

with 1 = strongly disagree to 5 = strongly agree. Respondents' five Trust in Non-Profit Agency item scores were summed and then divided by the number of scale items (5), to form a Trust in Non-Profit Agency score which could range from 1 to 5. A higher score indicated higher trust in the non-profit agency. Coefficient α for the scale was 0.94.

Personality facets of trust and altruism were measured using a total of 20 items selected from the International Personality Item Pool (2007). Each facet was assessed using 10 items. Participants responded using a 5-point Likert scale, anchored with 1 = Strongly disagree to 5 = Strongly agree. A sentence stem of 'You tend to see yourself as someone who…' preceded each item. Four items on the facet Trust scale were negatively keyed. These items were reverse scored and all ten Trust item scores were summed, and then divided by the number of scale items (10), to generate a Dispositional Trust score with a possible range of 1-5. Five items on the Dispositional Altruism scale were also negatively keyed. These items were reverse scored and all ten Altruism item scores were summed, and then divided by the number of scale items (10) to generate a Dispositional Altruism score which could range from 1-5. Higher scores indicated a greater tendency towards the respective facet. The facet scales had reported reliabilities (coefficient α) ranging from 0.73 to 0.87 (International Personality Item Pool, 2007). In this study the coefficient α's were trust 0.83 and altruism 0.82.

Following this, a section was included asking participants for demographic information, (age, gender, whether they were a student, number of times they had donated to a charity in the past 12 months, number of hours of voluntary work they had done in the last 12 months and whether they own a credit card).

Finally, a timer was embedded in the survey which timed how long participants viewed the web homepage for from when the page loaded to when the participant navigated away from the page. These times were to be used as a Covariate to ensure any results were not a result of participants failing to pay sufficient attention to the homepages.

4.13 Procedure

The survey was completed online at the participants' convenience. Participants who volunteered were randomly assigned a Website Link (from 1-3) and instructed to read the informed consent blurb and instructions page. They were informed that there was no time limit on the survey and that it was anonymous, and that they should try to answer as honestly as possible.

4.2 Results and Discussion

4.21 Descriptive Data and Outliers in Data Set

Descriptive statistics were initially inspected to screen the data set for errors and outliers. Table 1 shows the descriptive data for the 61 respondents in Experiment 1.

Table 1
Descriptive Data for Experiment One

	Minimum Value	Maximum Value	Mean	Standard Deviation
Age	18	51	24.7	6.4
Website Viewing Time	9	8790	183.8	1120.6
Number of Volunteer Hours	0	1050	38.5	153.9
Number of Donations	0	16	3.2	3.6
Dispositional Altruism Score	16	47	39.3	5.5
Dispositional Trust Score	24	44	34.7	5.2
Trust in Non-Profit Agency	5	25	14.6	4.6
Donation Compliance	1	4	2.3	0.9

Of the 61 respondents in Experiment 1, one was excluded from analyses after inspection of website viewing time descriptive statistics suggested there was an outlier. Table 2 shows the mean, 5% trimmed mean, standard deviation and minimum and maximum values for website viewing time.

Table 2
Mean, 5% Trimmed Mean, Standard Deviation and Minimum and Maximum Values for Website Viewing Time in Seconds

Minimum Value	Maximum Value	Standard Deviation	Mean	5% Trimmed Mean
9	8760	1120.6	183.8	38.0

The dissimilarity between participants' mean website viewing time and the 5% trimmed mean indicates the presence of outlying cases within the data. The respondent with an outlying website viewing time of 8760 seconds was excluded and analyses were performed on the remaining sample of 60 participants.

4.22 Identification of Possible Covariates

A standard multiple regression of possible covariates onto donation compliance was conducted to identify which variables (if any) were to be statistically controlled for in later analyses. The dichotomous variable, student, was converted into a dummy variable ('Student/General Population') before the analysis was conducted. Table 3 shows the Beta coefficients, standard errors and *t*-values of possible covariates when regressed onto donation compliance.

Table 3
Beta Weights, t-values and of p-values of Possible Covariates When Regressed onto Donation Compliance

	Beta Weight (Standard Error)	t-value	p-value
Website Viewing Time	0.18	1.35	0.18
Age	-0.07	-0.54	0.58
Student/General Population	0.26	1.88	0.06
Number of Volunteer Hours	0.11	0.85	0.39
Number of Donations	0.15	1.13	0.26
Dispositional Altruism Score	-.13	-.94	0.34
Dispositional Trust Score	0.13	0.89	0.37

No significant predictors of donation compliance were found. However, the student dummy variable was approaching significance.

A second standard multiple regression of possible covariates onto trust in non-profit agency was then conducted. Table 4 shows the Beta coefficients, *t*-values and *p*-values of possible covariates when regressed onto donation compliance.

Table 4
Beta Weights, t-values and of p-values of Possible Covariates When Regressed onto Trust in Non-Profit Agency

	Beta Weight (Standard Error)	t-value	p-value
Website Viewing Time	-0.16	-1.19	0.23
Age	0.23	1.66	0.10
Student/General Population	0.27	1.95	0.057
Number of Volunteer Hours	-0.03	-0.25	0.80
Number of Donations	0.13	0.97	0.33
Dispositional Altruism Score	-0.10	-0.69	0.49
Dispositional Trust Score	0.28	1.96	0.055

No significant predictors of trust in non-profit agency were found. However, the student dummy variable was again approaching significance as was dispositional trust.

Despite random assignment to conditions, and the marginal effects of the covariates, it was decided to statistically control for the student dummy variable and individual differences in dispositional trust in the analysis of the effects of varying levels of transaction-specific certainty on donation compliance and rated trust in the non-profit agency.

Because credit cards are most often required to donate online, it was possible that those participants who did not own a credit card may have given a low donation compliance rating based on their real-world inability to donate online. The decision was made to remove all non-credit card holders (n=18) from the data set in the analysis of the effects of varying levels of transaction-specific certainty on donation compliance, which was thus performed on the remaining 42 participants. In the analysis of the

effects of varying levels of transaction-specific certainty on aid agency trust all 60 participants were used.

4.23 Analysis of Covariance

To ensure that the analysis of the main independent variable was valid, an Analysis of Covariance (ANCOVA) was conducted with total dispositional trust and the student dummy variable as covariates, exploring the effect of varying levels of transaction-specific certainty on rated donation compliance and total trust in non-profit agency. Table 5 shows the means and standard deviations of total trust in non-profit agency and donation compliance ratings across the three experimental conditions.

Table 5
Mean Donation Compliance and Trust in Non-Profit Agency Ratings and Standard Deviations Across Level of Transaction-Specific Certainty

	Control	Less Uncertain	Least Uncertainty
Mean Donation Compliance Rating	2.2 (.8)	2.2 (1.0)	2.3 (1.0)
Mean Rated Trust in Non-Profit Agency	3.0 (0.9)	2.8 (0.9)	2.9 (0.9)

No significant effect was found for level of transaction-specific certainty on donation compliance when controlling for total dispositional trust and student, $F(2, 37)= 0.08$, *ns*. Additionally, no significant effect was found for level of transaction-specific certainty on total trust in non-profit agency when controlling for total dispositional trust and student, $F(2,55)= 0.08$, *ns*. In this instance therefore, Hypothesis 1, that iconic manipulation of the 'Donate Now' button would increase donation compliance and rated transactional trust in the non-profit agency, was not supported.

4.24 Investigation into the Effects of Non-Profit Agency Trust on Donation Compliance

Hypothesis 3, that aid agency trust would have a significant effect on donation compliance was also investigated in Experiment 1. The sample of credit card holders (N= 42) was divided into three groups based on participants' ratings on the donation compliance scale ('Would you be willing to make an online donation to New Zealand Aid International's relief work?') in order to examine any between-group differences in rated aid-agency trust. Those who gave a rating of 1 ('I would definitely not donate') or 2 ('I would be unlikely to donate') were placed in the would not donate group (N=24). Those who gave a rating of 3 ('I am neutral') were placed in the neutral group (N=13). Finally, those who gave a rating of 4 ('I would be likely to donate') or 5 ('I would definitely donate') were placed in the would donate group (N=5). Mean agency rated trust scores were generated for the three groups and are displayed in Table 6.

Table 6
Mean Rated Trust in Non-Profit Agency and Standard Deviations for the Would Donate, Neutral and Would Not Donate Groups

	Would Not Donate	Neutral	Would Donate
Mean Rated Trust in Non-Profit Agency	2.6 (0.9)	3.1 (0.8)	4.1 (0.5)

An Analysis of Covariance (ANCOVA) (with total dispositional trust and the student dummy variable as covariates) was conducted to explore any differences in rated agency trust between the three groups. A significant between-groups difference in rated agency trust was found $F(2, 37)= 5.2$, $p<.05$ (partial eta squared= 0.22).

Follow up tests were conducted to evaluate pairwise differences amoung the means. Post-hoc comparisons using the LSD test revealed that there was a significant difference in mean non-profit agency trust ratings between the would donate and neutral

groups and the would donate and would not donate groups. There was no significant difference between the would not donate group and the neutral group. Inspection of Table 5 indicates that those who indicated that they would donate to the non-profit agency had significantly higher aid agency rated trust than those participants who were neutral in relation to donating and those who indicated that they would not donate.

4.25 Conclusions

The results indicate that donation compliance and rated trust in the non-profit agency did not differ when level of transaction-specific certainty was manipulated. Hypothesis 1 was, therefore, not supported as increases in transaction-specific certainty, manipulated by increasing the amount of donation-relevant information on the 'Donate Now' button across the conditions, failed to generate increases in donation compliance and agency rated trust.

Despite this, the results showed a significant difference in rated agency trust between those who indicated that they would donate and those who indicated that they would not. Those in the would donate group had significantly higher mean rated agency trust scores than those in the neutral and the would not donate group. This result supported Hypothesis 3 and replicated the results found by Burt and Dunham (2009), adding strength to the argument that aid agency trust has an effect on willingness to donate. Furthermore, it stresses that trust remains an important consideration when investigating online donation behaviour despite the null result reported above.

5. Experiment 2

While Experiment 1 suggested that there was no effect of website donation button design on aid agency trust and donation compliance, the donation relevant information presented to participants in an attempt to decrease consumer uncertainty across the experimental conditions was iconic in nature. It is possible that this iconic donation-relevant information was too arbitrary. Therefore, an issue is raised of whether the experimental manipulation in Experiment 1 was too weak, failing to have the desired effect of progressively increasing transaction-specific certainty across the conditions. Experiment 2, therefore, allowed investigation of whether presenting a different form of donation relevant information on the 'Donate Now' buttons, namely crisis/need and response photographs, may be more effective in decreasing transaction-specific uncertainty and increasing agency trust and donation compliance. This experiment allowed a more precise replication of Burt and Dunham's (2009) study and further exploration of the effects of website design on trust and donation compliance.

5.1 Method

5.11 Participants

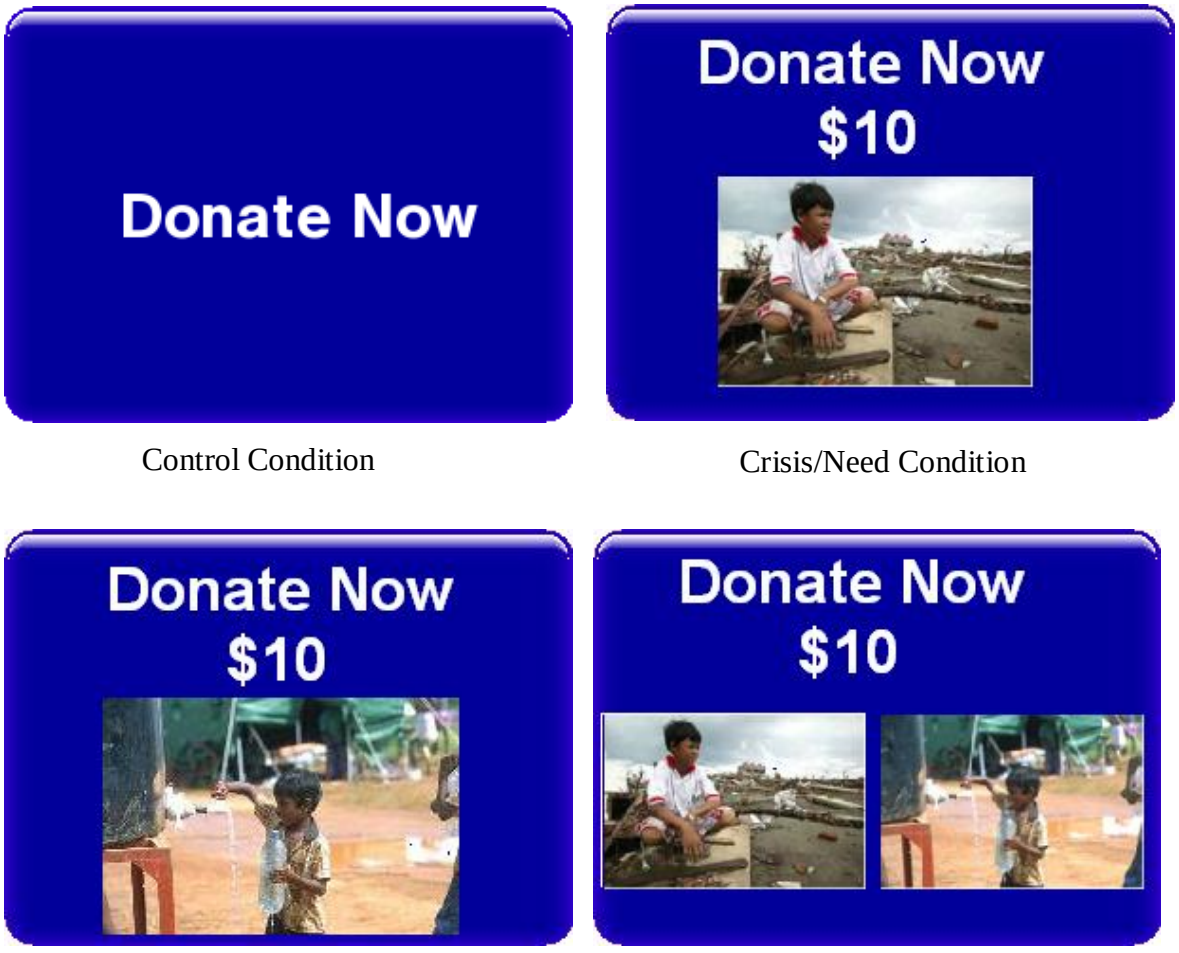
Fifty four participants from the University of Canterbury and 44 participants from the general public participated in Experiment 2. Students were approached either through the first year participant pool at the University of Canterbury, or by email, and asked to volunteer. Individuals from the general public were approached by email and asked to volunteer. Those who volunteered completed an online research questionnaire. The participants were randomly assigned to one of four groups representing one of four experimental conditions.

The *control* group contained 14 males (mean age 23.2 years) and 10 females (mean age 25.2 years). Of these 14 were students and 10 were members of the general

public. The *crisis/need* group contained 12 males (mean age 31.5 years) and 17 females (mean age 29.7 years), of which 14 were students and 15 members of the general public. The *response* group contained 7 males (mean age 27.7 years) and 16 females (mean age 25.6 years). Within this group 15 were students and 8 were members of the general public. Finally, the *need/response* group contained 3 males (mean age 23.0 years) and 19 females (mean age 25.5 years). In this group 11 were students and 11 were members of the general public.

5.12 Materials

The surveys contained the same informed consent blurb and general instructions as Experiment 1. Those participants who were allocated Website Link 4, 5, 6 or 7 participated in Experiment 2. The web homepage template was also identical to that used in Experiment 1. However, in order to create the four different experimental conditions, *Control, Crisis/Need, Response* and *Need/Response,* four different donation buttons were created and one of the four was positioned on each respective web homepage (Appendix D; Appendix E; Appendix F; Appendix G). Figure 4 shows the donation buttons used in the *Control, Crisis/Need, Response* and *Need/Response* conditions respectively (actual size and colour depicted).



Control Condition

Crisis/Need Condition

Response Condition

Need/Response Condition

Figure 4. Donation buttons used in Experiment 2

As in Experiment 1, the size of the donation buttons (7.5 cm wide and 5.5 cm high) was controlled across the four conditions. Each button was blue and rectangle in shape. Due to the inclusion of photographic images in three of the four experimental conditions, the donation button was larger than those most commonly used by charities surveyed from the Charity Navigator database in Study 1 (which most commonly only included a phrase such as 'Donate Now'). The words 'Donate Now', printed in white, were included on every button and this text measured 5 cm in width and 0.6 cm in height. To replicate the 3D style of the surveyed buttons the experimental buttons were created online using the website: http://www.netdenizen.com/buttonmill/glassy.php.

In the *Control* condition, the same 'Donate Now' button used in the *Control* condition in Experiment 1 was used (see Figure 4). In the *Crisis/Need* condition, a button with a photo of the crisis (boy sitting amongst the wreckage of his town) that the aid agency was seeking donations for with the words 'Donate Now' positioned above it was used (see Figure 4). In the *Response* condition, a button with a photo of what the agency was to use the donation for (providing fresh water) with the same 'Donate Now' phrase above it was used (see Figure 4). Finally, in the *Need/Response* condition, a button with two photos side by side (which were taken from the *Need* and *Response* conditions) with the words 'Donate Now' printed above was used (see Figure 4). In the *Crisis/Need, Response* and *Need/Response* conditions a controlled donation amount ($10) was placed on the donation button; the participant was asked to donate ten dollars in every condition.

After the web homepage screenshot, the same questions and scales used in Experiment 1 were used to measure donation compliance, rated aid agency trust and personality trust and altruism. Questions requesting the same demographic information from participants was also included.

5.13 Procedure

The survey was completed online at the participants' convenience. Participants who volunteered were randomly assigned a Website Link (from 4-7) and instructed to read the same informed consent blurb and instructions page that was presented to participants in Experiment 1. They were informed that there was no time limit on the survey and that it was anonymous, so they should try to answer as honestly as possible.

5.2 Results and Discussion

5.21 Descriptive Statistics and Outliers in Data Set

Descriptive statistics, shown in Table 7, were initially inspected to screen the data set for errors and outliers.

Table 7
Descriptive Data for Experiment 2

	Minimum Value	Maximum Value	Mean	Standard Deviation
Age	16	68	26.7	9
Website Viewing Time	3	163	35.2	22.8
Number of Volunteer Hours	0	2400	45.7	243.7
Number of Donations	0	75	4.6	9
Dispositional Altruism Score	25	49	39.5	4.9
Dispositional Trust Score	20	49	36	4.9
Trust in Non-Profit Agency	5	25	15.4	4.4
Donation Compliance	1	5	2.5	0.9

Of the 98 questionnaire respondents in Experiment 2, two were excluded from analyses after inspection of website viewing time descriptive statistics suggested there were outliers. The respondents with website viewing times of three and four seconds respectively were deemed to have not spent sufficient time viewing the web homepages and were thus excluded. Analyses were performed on the remaining sample of 96 participants.

5.22 Identification of Possible Covariates

A standard multiple regression of possible covariates onto donation compliance was conducted to identify which variables (if any) were to be statistically controlled for in later analyses. As in Experiment 1, the dichotomous variable, student, was converted into a dummy variable ('Student/General Population') before the analysis was conducted. Table 8 shows the Beta coefficients, standard errors and *t*-values of possible covariates when regressed onto donation compliance.

Table 8
Beta Weights, t-values and p-values of Possible Covariates When Regressed onto Donation Compliance

	Beta Weight	t-value	p-value
Website Viewing Time	0.29	2.98	0.00**
Age	-0.09	-0.86	0.38
Student/General Population	0.18	1.67	0.09
Number of Volunteer Hours	0.02	0.24	0.80
Number of Donations	0.11	1.14	0.25
Dispositional Altruism Score	0.13	1.11	0.26
Dispositional Trust Score	0.05	0.44	0.65

** Significant at $p<.01$

Website viewing time was found to be a significant predictor of donation compliance.

A second standard multiple regression of possible covariates onto trust in non-profit agency was then conducted. Table 9 shows the Beta coefficients, standard errors and *t*-values of possible covariates when regressed onto donation compliance.

Table 9
Beta Weights, t-values and p-values of Possible Covariates When Regressed onto Trust in Non-Profit Agency

	Beta Weight	t-value	p-value
Website Viewing Time	0.13	1.32	0.19
Age	0.07	0.68	0.49
Student/General Population	0.23	2.07	0.04*
Number of Volunteer Hours	0.00	0.06	0.94
Number of Donations	-0.02	-.234	0.81
Dispositional Altruism Score	0.05	0.44	0.65
Dispositional Trust Score	0.25	2.09	0.03*

* Significant at $p<.05$

Two significant predictors of trust in non-profit agency were found; the student dummy variable and dispositional trust.

The results of these regressions suggest there is a need to statistically control for the student dummy variable, individual differences in dispositional trust and website viewing time in the analysis of the effects of varying levels of transaction-specific certainty on donation compliance and rated trust in the non-profit agency.

Because credit cards are most often required to donate online, it was possible that those participants who did not own a credit card may have given a low donation compliance rating based on their real-world inability to donate online. The decision was made to remove all non-credit card holders (n=20) from the data set in the analysis of the effects of varying levels of transaction-specific certainty on donation compliance specifically, and was thus performed on the remaining 76 participants.

5.23 Analysis of Covariance

To ensure that the analysis of the main independent variable was valid, an Analysis of Covariance (ANCOVA) was conducted with student dummy, total dispositional trust and website viewing time as covariates to explore the effect of varying levels of transaction-specific certainty on rated donation compliance and trust in non-profit agency. Table 10 shows the means and standard deviations of trust in non-profit agency and donation compliance ratings across level of transaction-specific certainty.

Table 10
Mean Total Donation Compliance and Trust in Non-Profit Agency Ratings and Standard Deviations Across Level of Transaction-Specific Certainty

	Control	Need	Response	Need/ Response
Donation Compliance Rating	2.3 (0.9)	2.3 (1.0)	2.3 (0.9)	2.8 (0.9)
Rated Trust in Non-Profit Agency	2.3 (0.9)	2.4 (1.0)	2.5 (1.0)	2.9 (0.9)

No significant effect was found for level of transaction-specific certainty on donation compliance when controlling for student dummy, dispositional trust and website viewing time, F (3, 69)= 1.2, *ns*. A significant effect was found for level of transaction-specific certainty on rated trust in non-profit agency when controlling for age, total dispositional trust and website viewing time, F (3, 89)= 2.7, $p<.05$ (partial eta squared= 0.08). Hypothesis 2 was partially supported: although level of transaction specific certainty did not have a significant effect on donation compliance it had a significant effect on aid agency trust.

Follow up tests were conducted to evaluate pairwise differences amoung the rated trust in non-profit agency means. Post-hoc comparisons using the LSD test

revealed that the mean rated non-profit agency trust for the need/response group was significantly different from the control group. On average, participants in the need/response group reported higher non-profit agency trust than those in the control group. No other significant differences were found between the remaining groups.

5.24 Investigation into the Effects of Non-Profit Agency Trust on Donation Compliance

As in Experiment 1, further investigation was conducted into the relationship between non-profit agency trust and donation compliance. The sample of credit card holders (N=76) was divided into three groups based on participants' ratings on the donation compliance scale ('Would you be willing to make an online donation to New Zealand Aid International's relief work?') in order to examine any between-group differences in rated aid-agency trust. Those who gave a rating of 1 '(I would definitely not donate') or 2 ('I would be unlikely to donate') were placed in the would not donate group (N=42). Those who gave a rating of 3 ('I am neutral') were placed in the neutral group (N=21). Finally, those who gave a rating of 4 ('I would be likely to donate') or 5 ('I would definitely donate') were placed in the would donate group (N=13). Mean agency rated trust scores were generated for the three groups and are displayed in Table 11.

Table 11
Mean Rated Trust in Non-Profit Agency and Standard Deviations for the Would Not Donate, Neutral and Would Donate Groups

	Would Not Donate	Neutral	Would Donate
Mean Rated Trust in Non-Profit Agency	2.8 (0.9)	3.0 (0.7)	3.8 (0.6)

Analysis of Covariance (ANCOVA) (with total dispositional trust, the student dummy variable and website viewing time as covariates) was conducted and a

significant between-groups difference on rated non-profit agency trust was found $F(2, 70)= 5.2$, $P<.01$ (partial eta squared = 0.13). These results again supported Hypothesis 3 that aid agency trust would have a significant effect on willingness to donate.

Follow up tests were conducted to evaluate pairwise differences amoung the means. Post-hoc comparisons using the LSD test revealed that there was a significant difference in mean non-profit agency trust ratings between the would donate and neutral groups and the would donate and would not donate groups. There was no significant difference between the would not donate group and the neutral group. As hypothesised, those who indicated that they would donate to the non-profit agency had significantly higher mean aid agency rated trust than those participants who were neutral in relation to donating and those who indicated that they would not donate.

5.25 Conclusion

The results indicate that increasing transaction-specific certainty through varying the presentation of crisis/need and response photographs on the 'Donate Now' button increases trust in the non-profit agency. The manipulation of the donation button design, however, did not significantly influence donation compliance; participants were no more willing to donate in the condition of highest transaction-specific certainty than in the control condition. Hypothesis 2, therefore, was partially supported and the results of Burt and Dunham (2009) were replicated.

As in Experiment 1, Hypothesis 3 was supported; a significant difference in rated agency trust was found between those who indicated that they would donate, those who were neutral and those who indicated that they would not donate.

6. General Discussion

The current research was conducted to explore the effects of website design on aid agency trust and donation compliance. It specifically aimed to extend preliminary research suggesting that consumer uncertainty can be reduced, and trust increased, through the considered design of aid agency web pages (Burt & Dunham, 2009). An attempt was made to vary the level of transaction-specific certainty across the experimental conditions by providing varying levels of donation-relevant information on the websites' 'Donate Now' buttons. The resulting effects on participants' trust and willingness to donate were then investigated.

Experiment 1 indicated that varying levels of transaction specific certainty through iconic manipulation of the 'Donate Now' button did not increase participants' aid agency trust and donation compliance. The specific manipulation of the website design, in this case, was not successful in generating higher levels of aid agency trust and greater willingness to donate. Thus, Hypothesis 1 was not supported.

Experiment 2 again examined the effects of varying levels of transaction-specific certainty on participants' aid agency trust and donation compliance. The donation relevant information provided on the 'Donate Now' buttons in this experiment was in the form of crisis/need and response photographs. The results suggested that participants' rated aid agency trust was increased to the greatest extent when the donation button contained photographic representations of both the crisis/need and agency response. However, there was no effect of level of transaction specific certainty on donation compliance and Hypothesis 2 was thus only partially supported; the website donation button manipulation was not successful in generating increased willingness to donate in the condition of highest transaction specific certainty compared to the conditions of lesser certainty.

Taken together, these results suggest that attempts to increase non-profit agency trust through manipulation of the 'Donate Now' button design *can* be successful. However, the donation relevant information required to *actually* decrease transaction specific uncertainty, and increase trust, across the experimental conditions may be specific in nature.

This supposition is supported by the fact that the results from Experiment 1 were inconsistent with those of Burt and Dunham (2009), who found that increasing transaction-specific certainty through manipulation of non-profit agencies' webpage design did lead to actual increases in agency trust. In contrast to Experiment 1, manipulation of the web page design in Burt and Dunham (2009) was conducted through the inclusion of photographs of what crisis/need the charity was responding to and how the agency was responding to this need. This differed from the donation relevant information utilised in Experiment 1, which included the addition of a donation amount to the *Control* button in the *Less Certain* condition and the further addition of a medical kit icon in the *Least Uncertainty* condition.

The current research suggests that the donation-relevant information utilised in Experiment 1 was perhaps too arbitrary, failing to increase with the level of precision required to actually generate increases in transaction-specific certainty across the conditions.

This proposition can be further investigated through comparison of results from Experiment 1 with those from Experiment 2. Based on Burt and Dunham's (2009) research, photographic representations of the crisis/need the aid agency was attempting to raise funds for, and the agency's response to this need, were positioned on the donation buttons across the four conditions in Experiment 2 in an attempt to generate varying levels of transaction-specific certainty. A significant difference was found in participants' rated agency trust across the experimental conditions. Presenting a combination of crisis/need and response photographic images on the donation button

was the most successful means of generating aid agency trust. These results extended the research of Burt and Dunham (2009) to apply to online donation buttons as well as web homepages more generally. Additionally, the results suggest that there is worth in considering the design of the donation button beyond the mere inclusion of the words 'Donate Now'.

Thus, the results from Experiment 1 should not be interpreted as evidence against the effectiveness of web donation button design as a means of increasing individuals' aid agency trust. Rather, comparison of results from Experiment 1 and Experiment 2 suggests that aid agencies *are* able to increase individuals' agency trust through careful manipulation of their website design. However, the donation relevant information chosen to do so should be specifically selected. In particular, the current research suggests that photographic images are a more effective, and less arbitrary, means with which to portray donation-relevant information to consumers on aid agency web donation buttons. Future studies could look to extend this research, and that which addresses the use of imagery in charitable marketing (e.g. Burt & Strongman, 2005; Fox & Carr, 2000), by more closely investigating the effectiveness of photographic imagery as a means of portraying donation relevant information on donation buttons.

The current research also suggested that manipulation of the donation button design, through inclusion of varying levels of donation relevant information, does not affect donation compliance. This result is inconsistent with some previous research which suggests that Internet website design, and more specifically the inclusion of carefully selected imagery, can impact individuals' intention to donate. Whilst Jillbert's (2003) charity website review did not utilise a hypothesis testing methodology, the recommendations for constructing a webpage which maximises donation compliance was grounded in issues of website design. Moreover, Fox and Carr (2000) concluded that the inclusion of imagery depicting the situational causes of poverty on non-profit agency websites optimised participants' donation intention. Use of situational rather

than human imagery directed attention back towards the situational causes of poverty, such as climate change or government corruption, and prevented the attribution of poverty to character traits in the poor themselves (Fox & Carr, 2000). Research such as this seems to suggest that website design manipulation, particularly the inclusion/exclusion of visual information (photographs/images), can indeed have an effect on individuals' willingness to donate.

Despite this, the current research was supported by the results of Burt and Dunham (2009), who also investigated the effects of aid agency website design on trust and donation compliance. Burt and Dunham (2009) also found no significant difference between groups in their ratings of interest in exploring the 'make a donation link'. Individuals who viewed websites with photographic information on the crisis/need the charity was raising funds for and the agency's intended response to this need were no more inclined to donate than individuals in the control condition. Additionally, comparison of the experimental groups (using only participants who indicated that they would make a donation) on how much they indicated they may donate to the charity yielded no significant differences. Including all participants (even those who indicated they would not donate) in a similar analysis also produced non-significant results (Burt & Dunham, 2009).

As in Burt and Dunham (2009), the current research measured donation compliance and trust as two separate dependent variables, and hypothesised that the donation button manipulations would have an effect on donation compliance as well as trust. However, results from both Experiment 1 and Experiment 2 supported Hypothesis 3 and suggested that whilst no effects of level of transaction specific certainty on donation compliance were found, trust itself had a significant effect on willingness to donate. Those individuals who reported higher aid agency trust also reported significantly higher donation intention. These results suggest that in considering the effects of website donation button design on donation compliance, trust and donation

compliance may be better conceptualised as two related, rather than separate, variables. As pictured in Figure 1, it could be suggested that the experimental effects of website donation button design on trust have flow-on effects for donation compliance; thus, those agencies which focus on generating higher levels of aid agency trust may also optimise the number of individuals who go on to make an online donation.

Extending this, the results from Experiment 2 (supported by Burt & Dunham, 2009) suggest that the inclusion of crisis and response photographs on the website donation button was the most successful method for increasing aid agency trust in the current experiment. Therefore, this particular donation button design could be considered an initial template for future research looking to further investigation into the optimal button design for motivating online donation transactions.

6.1 Limitations

A limitation of the current research is that in investigating donation compliance, an intention, rather than an actual behaviour, was measured. Whilst the study did not measure actual donation behaviours, research suggests that donation intentions are strongly predictive of donation behaviour (Cheung & Chan, 2000; Fox & Carr, 2000). Thus, much research addressing non-profit website design measures intention to donate as a predictor of donation behaviour, especially when carrying out simulated experiments where participants are not presented with the real world opportunity to donate (Burt & Dunham, 2009; Fox & Carr, 2000; McWah & Carr, 2009). This research, therefore, followed this trend and measured donation intention on a five-point scale. As well as this, the current experiments were conducted on a computer (rather than in pen and paper format), and attempted to closely mimic the first stage of the online donation process by presenting participants with web homepages which were based on both Study 1 and Burt and Dunham (2009), comprehensive surveys of real-world donation button design and homepage layouts respectively. It was thus hoped that

participants' reported intention to donation would be an accurate prediction of whether they would actually donate if given the opportunity.

6.2 Conclusions and Implications

The present findings do not purport to be a full and complete guide to aid agency website design. They do, however, provide evidence that non-profit agencies need to adjust their conceptualisations of the Internet as an information provider (Goatman & Lewis, 2007; Rowley, 2001) to capture the full potential of the website as a transaction based, fundraising tool. The comprehensive charity website survey conducted as Study 1 in the present research ensured that the *Control* buttons, and the icons positioned on the buttons in Experiment 1, were a realistic interpretation of real-world donation button design, used by a large majority of non-profit agencies. The non-significant results obtained in Experiment 1, and the significant difference in agency trust between individuals in the *Control* (real-world) and *Need/Response* conditions in Experiment 2, suggest that the donation buttons currently used by aid agencies may be ineffective in maximising individuals' aid agency trust and subsequent online donation compliance.

The current research, therefore, suggests that non-profit agencies *can* and *should* do more than simply provide a donation button with the words 'Donate Now' on it to individuals who visit their web homepages. The findings from Experiment 2 could act as a preliminary guide for non-profit agencies looking to refine their donation button design and optimise the number of donations generated from individuals' web homepage visits. Furthermore, results suggest that the small effort or cost that would be associated with positioning crisis and response photographs on aid agency web donation buttons would likely be outweighed by the resulting benefits of increased agency trust and donation compliance.

An additional implication for non-profit agencies is created by the results which indicate that aid agency trust itself has a significant impact on individuals' willingness

to donate. Thus, it seems that the building and maintenance of aid agency trust should be considered a pivotal stepping stone to increased donation compliance within an online donating framework (Burt & Dunham, 2009). This suggestion that the generation of trust should be of primary interest to aid agencies may at first seem counterintuitive to the above recommendation that charities approach their websites as commercially-based, fundraising tools. Rather, instead of considering trust and donation compliance as mutually exclusive concepts, commercially-driven issues of donation generation should be considered alongside the psychological concept of trust, which the current research suggests is intrinsic to any discussion of online donating (supported by Burt & Dunham, 2009; Grabner-Krauter & Kaluscha, 2003; Wang & Emurian, 2005).

Non-profit agencies which combine an overarching, commercial focus with careful consideration of how best to generate trust through website and donation button design are perhaps best positioned to optimise the Internet as a successful, fundraising tool.

7. References

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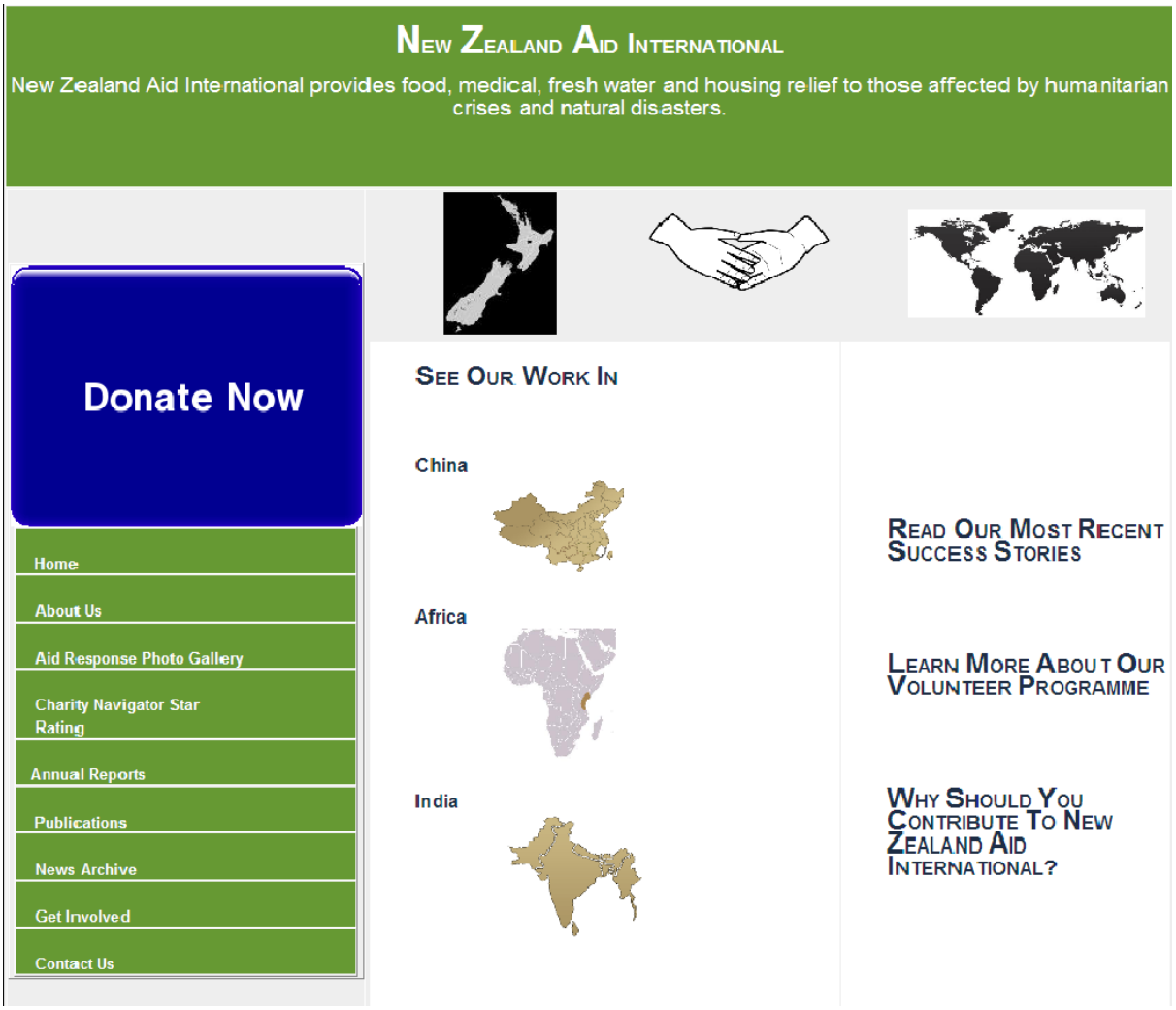
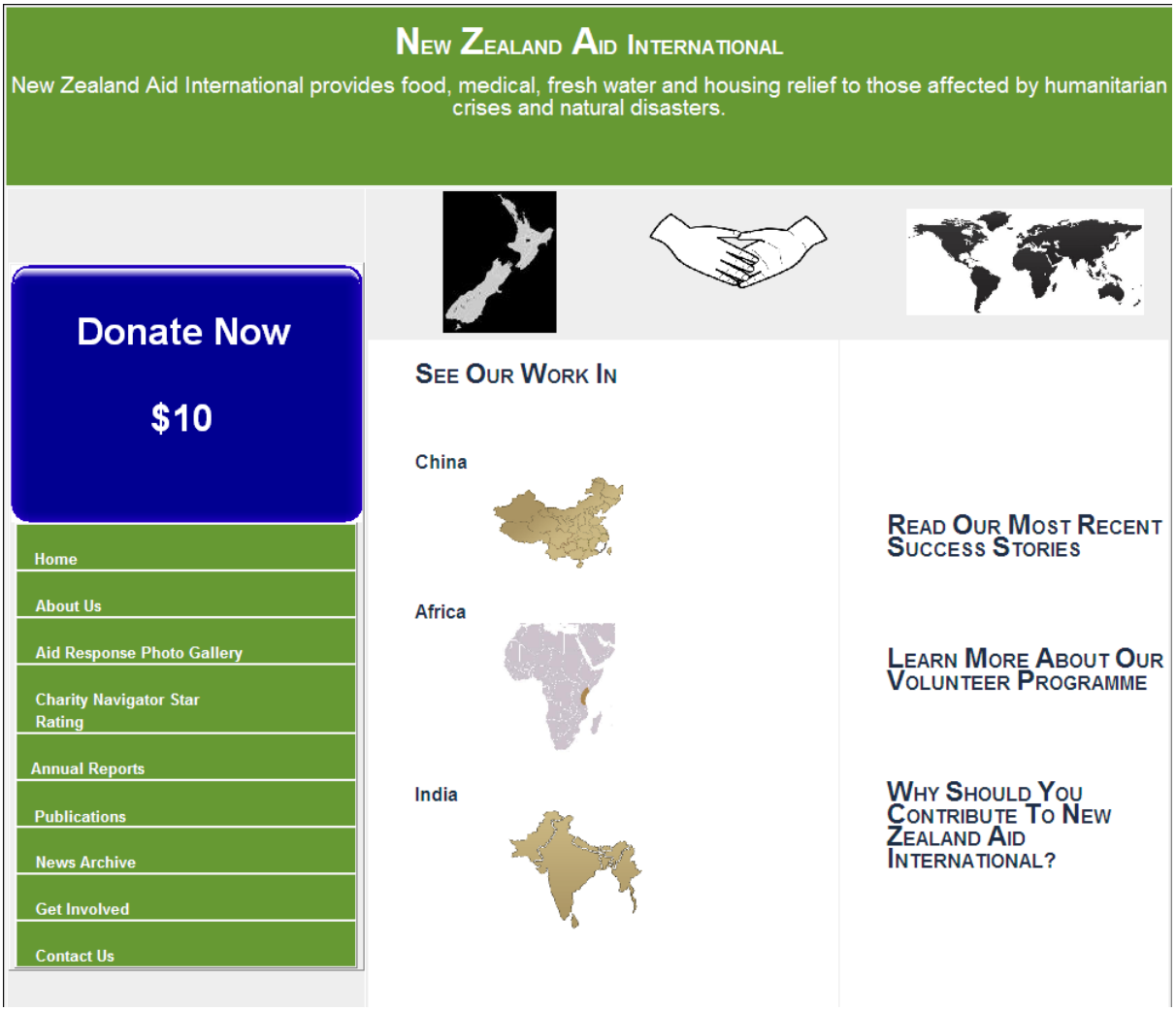
Appendices

NB. Web homepages are not to scale

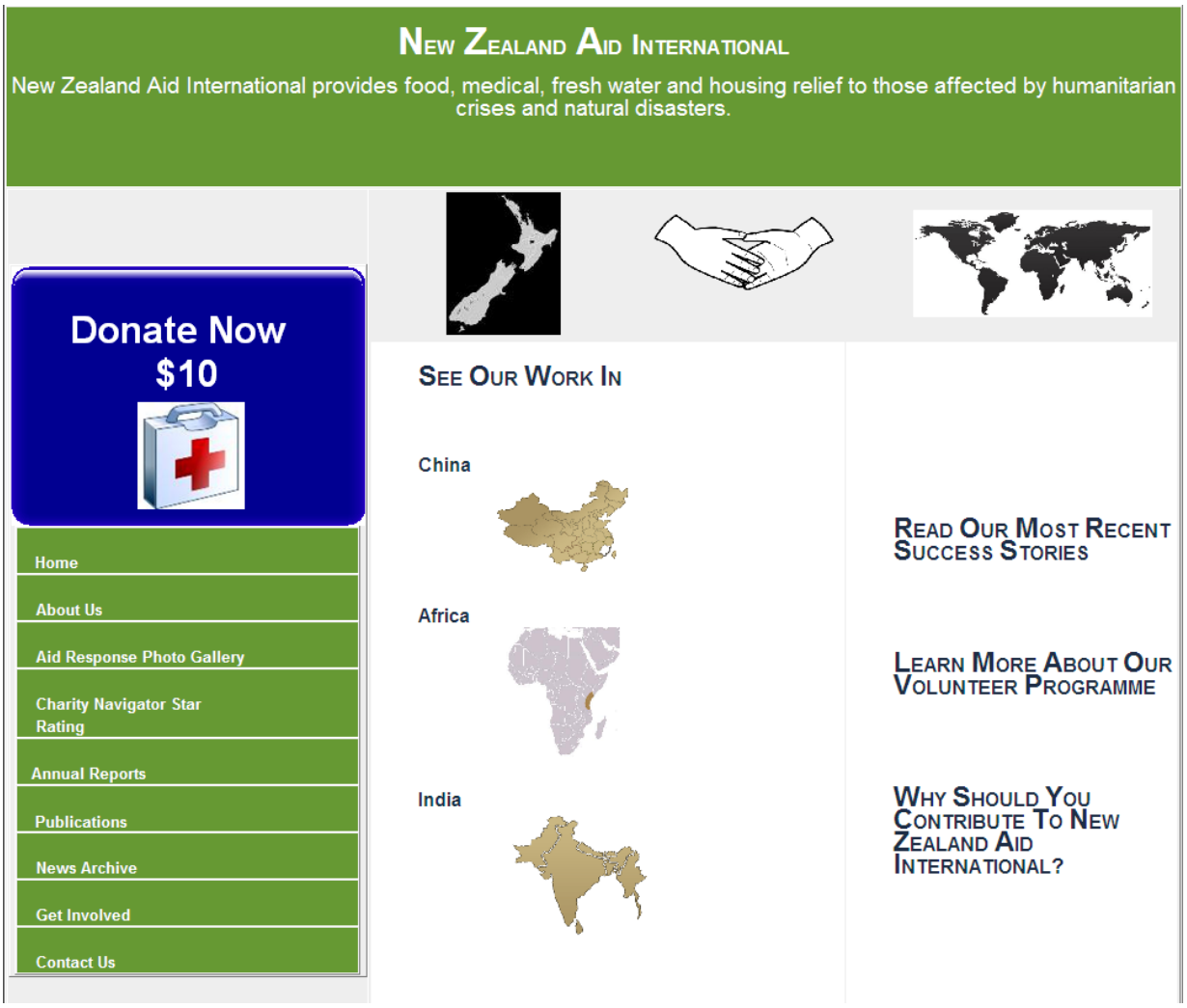
Appendix A: Control Condition Web Homepage, Experiment 1



Appendix B: Less Uncertain Condition Web Homepage, Experiment 1

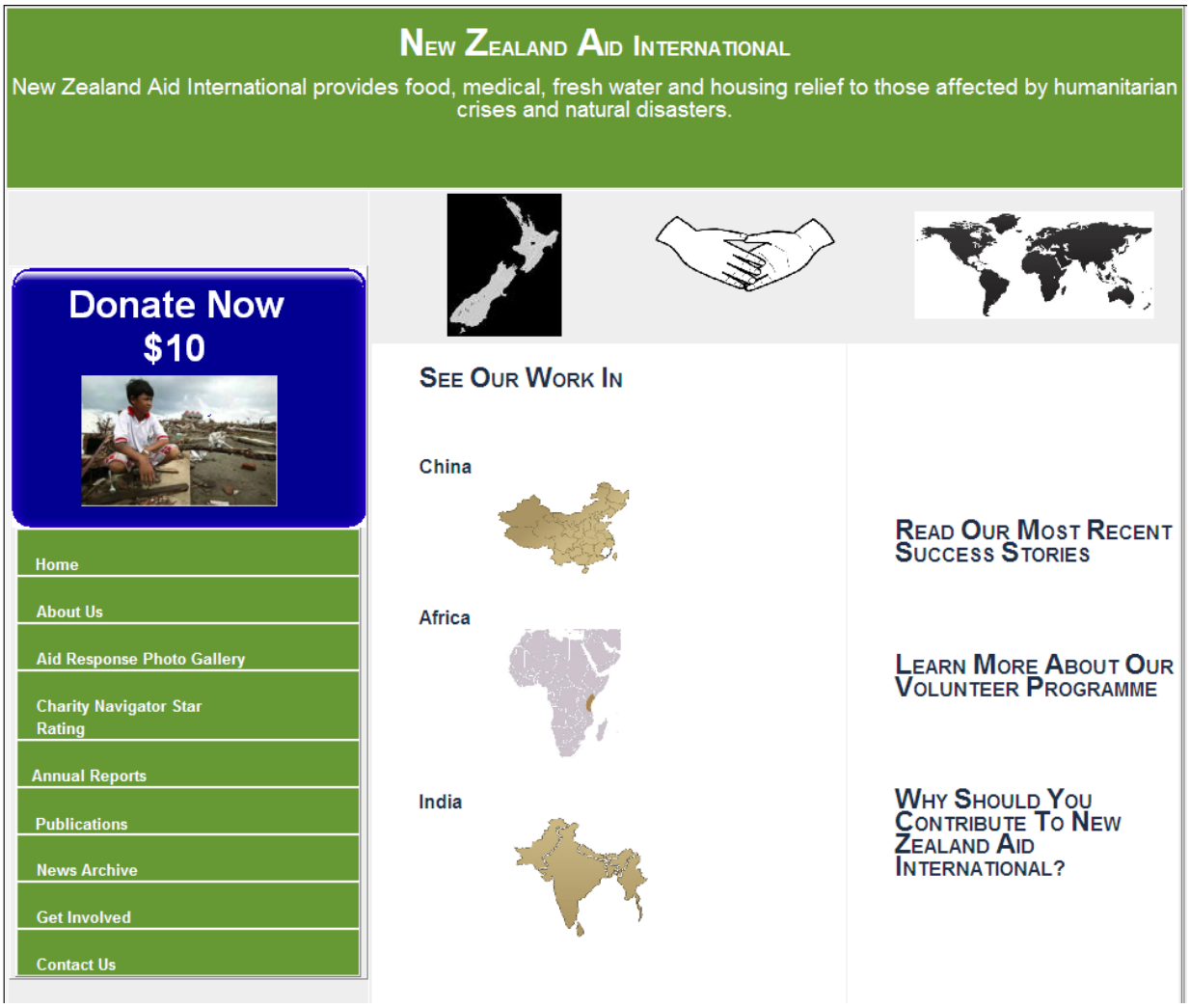


Appendix C: Least Uncertainty Condition Web Homepage, Experiment 1

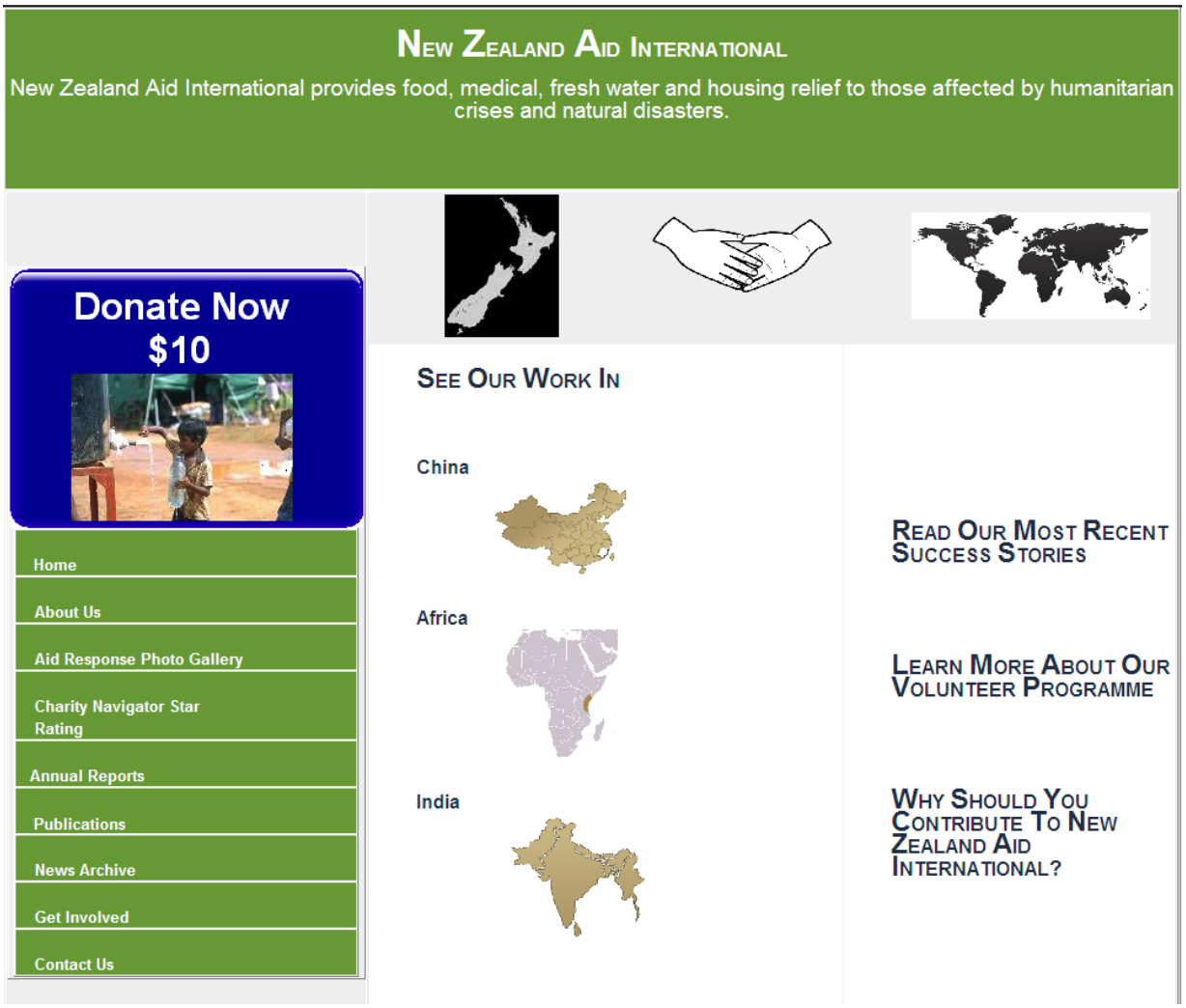


Appendix D: Control Condition Web Homepage, Experiment 2

Appendix E: Need Condition Web Homepage, Experiment 2



Appendix F: Response Condition Web Homepage, Experiment 2



Appendix G: Need/Response Condition Web Homepage, Experiment 2