PERSUASION IN PROSOCIAL DOMAINS: EXPLAINING THE PERSUASIVE AFFORDANCES OF VOLUNTEERING WEBSITES

Research-in-Progress

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Abstract

As technology becomes increasingly pervasive and invasive, it increasingly facilitates and instigates behaviour. Prosocial behaviours, such as volunteering, activism and philanthropy, are activities that are considered to be particularly beneficial to others. Prosocial behaviours are important within IS as: (i) they are encouraged by IS stakeholders including volunteering organisations and charities, and; (ii) they contribute to tackling social issues. However, while information technology is poised to become increasingly important for facilitating prosocial behaviour, little is known about how digital artefacts can encourage it. To address this research gap, this study seeks to explain how website features persuade in prosocial online contexts. The study uses the Repertory Grid Technique (RGT) to examine individuals’ experiences of persuasion on live volunteering websites. The analysis reveals that ease of use, trust, and creating positive emotion are important factors in persuading users to volunteer.

Keywords: Persuasion, Prosocial behaviour, Volunteering, Behaviour change
1  Introduction

“Our future is becoming increasingly dependent on a multiplicity of pervasive and invasive technological artifacts. As IS researchers we have the opportunity and responsibility to influence what future is enacted with those technological artifacts” (Orlikowski and Iacino, 2001, p.133)

As the richness and reach of information and communication technology (ICT) increases, so too does its capability for changing human behaviour. One facet of this process relates to using digital artefacts to facilitate and instigate behaviours such as philanthropy, activism, and volunteering. These activities are prosocial behaviours - a broad range of acts that “are defined by some significant segment of society and/or one’s social group as generally beneficial to other people” (Penner, Dovidio, Piliavin and Schroeder, 2005 p. 366). For many volunteering organisations and charities, encouraging prosocial behaviours through digital artefacts is fast becoming a core competency. However, many such organisations do not use digital artefacts effectively to encourage prosocial behaviour (Horvath, 2011; National Volunteering Strategy Consultation, 2011). Unfortunately, as many social issues such as disaster relief (Hodgson, 2004), disease (Scaife, 2008) and poverty (Werlin, 2009) are mediated by prosocial behaviours, this ineffectiveness may have serious societal implications.

To encourage prosocial behaviour we may need to use persuasion which involves “creating, reinforcing, modifying, or extinguishing beliefs, attitudes, intentions, motivations, and/or behaviours within the constraints of a given communication context” (Gass and Seiter, 2011, p.33). As Gass and Seiter (2011, p.4) argue “very little of the good that we see in the world could be accomplished without persuasion”. However, persuasion techniques which are effective in offline domains (e.g. Isen and Levin, 1972; Weyant, 1978), are not easily reapplied to ICT contexts, as (i) they do not accommodate the role of the digital artefact and; (ii) the effectiveness of persuasion differs based on context (Gass and Seiter, 2011) and modality (e.g., online versus face to face) (Pfau, Holbert, Zubric, Pasha and Lin, 2000).

When examining factors relating to persuasion in online contexts, Information Systems (IS) researchers have extensively investigated motivators which underpin systems usage (e.g. Venkatesh, Morris, Davis and Davis, 2003). However, different motives underpin different types of behaviours (cf. Higgins, 2012). Therefore the factors that predict behaviours such as technology adoption or online purchasing are unlikely to fully explain prosocial behaviour, which may have motives such as empathy (Einolf, 2008), guilt (Gass and Seiter, 2011), moral norms (Heiser, 2006) or social responsibility (e.g., (Benabou and Tirole, 2010; Tusing and Dillard, 2000)).

To better understand the role of digital artefacts in encouraging prosocial behaviour we specifically examine volunteering websites. Such websites aim to encourage volunteering; a planned prosocial action in an organisational context, which continues for an extended period of time (Penner et al., 2005). For example, this might involve voluntary contribution of time to help in one’s local community or going overseas to work in an underdeveloped community. The area of volunteer recruitment is of specific interest as it has been revolutionised by the ubiquity of information systems (UN Volunteers, 2011) and volunteers are increasingly using ICT to identify and commit to volunteer opportunities (National Volunteering Strategy Consultation, 2011). However, while more and more volunteering is facilitated by digital artefacts, it has also been recognised that digital artefacts which are used to encourage volunteering “can be better harnessed by volunteer-involving organisations” (National Volunteering Strategy Consultation, 2011, p.4)

The objective of this study is to examine experiences of persuasion in the prosocial domain of volunteering websites. While doing this we aim to answer two research questions (i) What persuasive affordances are evident on volunteering websites and, (ii) how do these persuasive affordances influence individuals’ intentions to volunteer. When complete, this research will contribute to the IS field in two capacities. First, it will increase our understanding of prosocial domains by developing causal mechanisms to explain persuasion in volunteering domains. Second, it will help IS practitioners...
to design digital artefacts that are more effective at encouraging prosocial behaviours. It is also hoped that the study will encourage further investigation of the areas of volunteering and prosocial behaviour within online domains, particularly research which examines the use of digital artefacts to encourage behaviour change in these domains.

This research in progress paper has the following structure. Section two briefly summarises key concepts to provide a background to the study. Section three reports the methodology, and outlines the research method and the data collection and analysis techniques. Section four outlines preliminary findings from our research - specifically identifying three factors that are linked to intentions to volunteer. Finally, section five outlines the next steps in our research agenda.

2 Conceptual Grounding

2.1 Prosocial behaviour

Prosocial behaviours are acts defined by some significant segment of society as being generally beneficial to others (Penner et al., 2005). Here, to introduce prosocial behaviour, we discuss activism, philanthropy and volunteering and provide evidence for why they are socially beneficial behaviours that are important to encourage.

Activism is arguably the broadest form of prosocial behaviour as it occurs when ‘some person or group recognizes a problem … and takes some action(s) to address it … in order to create … social change’ (Martin, Hanson and Fontaine, 2007 p.78). It can therefore incorporate other prosocial behaviours such as volunteering (Kleidman, 1994) and philanthropy (Baldwin, 2007). By raising awareness of social issues and forcefully promoting social change, activism contributes to tackling social issues (Spar and La Mure, 2003) including: AIDS (Dunbar, 1991), human rights (Sheather, 2009), and child labour (Chowdhry and Beeman, 2001).

Philanthropy, or charitable giving, is generally considered to be the act of giving money to a cause. It can be considered both as a prosocial behaviour (Penner et al., 2005) and a form of activism (Baldwin, 2007). Through providing financial aid, philanthropy impacts on many social issues for example, disease (Scaife, 2008) and poverty (Werlin, 2009). Aside from the social benefits, promoting philanthropy may be beneficial for the benefactor in various ways, for example by increasing happiness (Dunn, Akinin and Norton, 2008).

Volunteering is generally considered to involve giving time to a cause (e.g. James, 2006). Volunteers are important for many social issues including disaster relief (Hodgson, 2004), community development (Haski-Leventhal, Hustinx and Handy, 2011) and poverty alleviation (Mooney, 2008). Additionally, engaging in volunteering has been shown to benefit the volunteer (Dass-Brailsford, Thomley and de Mendoza, 2011) and to lead to a greater chance of engaging in other prosocial behaviours (Liu and Aaker, 2008).

2.2 Persuasion and persuasion techniques

The process of persuasion is often conceptualised as involving a source, a message, a channel and a receiver (e.g. Laswell, 1948; McGuire, 1972; Scholten, 1996; Shannon and Weaver, 1949). The persuasion process involves the source attempting to modify the receivers responses by changing their attitudes, emotions, intentions and/or behaviours (Pfau and Parrott, 1992, p.6). Drawing from the definition of ‘technique’ as an effective way of carrying out a particular task (Oxford dictionary, 2013) we can conceptualise a persuasion technique as being an effective way for a particular source to persuade a particular receiver within a particular channel (communication context). However, identifying and classifying persuasion theories and persuasion techniques is not without difficulty (O’Keefe, 1994). Depending on the criteria used, anywhere from four to 160 persuasion techniques
may exist (Rhoads, 2007). Here our examination of persuasion is limited to examining four techniques that have been subject to a high degree of agreement in the literature, and which are relevant to our preliminary findings. These are briefly summarised in table 1 below.

<table>
<thead>
<tr>
<th>Technique</th>
<th>Explanation</th>
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<tbody>
<tr>
<td>Social proof</td>
<td>People are persuaded by the actions and/or opinions of those around them (Cialdini, 2009). Consequently, trust in organisations is influenced by social proof (Amblee and Bui, 2011).</td>
</tr>
<tr>
<td>Authority</td>
<td>People are more likely to trust authorities and organisations linked with authorities and therefore to be persuaded by them (Cialdini, 2009).</td>
</tr>
<tr>
<td>Incentives</td>
<td>Suggesting rewards contingent for performing a behaviour will usually encourage people to perform it (Dolan, Hallsworth, Halpern, King, Metcalfe and Vlaev, 2012).</td>
</tr>
<tr>
<td>Simplicity</td>
<td>Simplicity is an important component of persuasion, as the simpler it is to do something the less motivated one needs to do it (Fogg, 2009).</td>
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</table>

Table 1. Relevant persuasive techniques

Table 1 demonstrates outlines four persuasive techniques that are highly relevant within online prosocial domains. Further, it is important to consider that persuasion techniques may occur in combination, which may lead to mediation, moderation, or amplification, of individual effects (Howard, Shu and Kerin, 2007). It is also important to consider that persuasion may differ in effectiveness depending on the behaviour it is directed at. For example certain persuasion techniques are more effective at encouraging prosocial behaviours than other types of behaviour (Dillard, Hunter and Burgoon, 1984).

2.3 Persuasion and prosocial behaviour

According to Gass and Seiter (2011, p. 354), persuasion “can be used to advance all manner of positive, prosocial interests” and has a long history of achieving this. Indeed, the authors argue that “persuasion is the cornerstone” of many prosocial endeavours (p.4) and “crucial to the fund-raising efforts of charities and philanthropic organizations” (p.3). However, as this research is examining online persuasion directed at prosocial outcomes, it is important to consider that persuasion techniques may differ in effectiveness based on the modality used (e.g. Chaiken and Eagly, 1983). For example, it has been found that certain persuasion techniques are less effective online (e.g. Smilowitz, Chad Compton and Flint, 1988). Accordingly, while research in offline contexts has demonstrated the effectiveness of persuasion techniques for encouraging different types of prosocial behaviours, such as philanthropy (Isen and Levin, 1972; Weyant, 1978) and volunteering (Cialdini, Vincent, Lewis, Catalan, Wheeler and Darby, 1975), much remains to be learned about persuasion in online domains (e.g. Guadagno and Cialdini, 2005; Torning and Oinas-Kukkonen, 2009). As Torning and Oinas-Kukkonen (2009) argue, to understand persuasion within online domains, we need to examine it within specific behavioural contexts.

2.4 Persuasion in volunteering domains

Despite a rich research tradition of examining behaviour change and its antecedents within IS contexts (Bhattacherjee, 2001; Davis, 1989; Venkatesh et al., 2003; Wang, Lin and Luarn, 2006), IS research hasn’t extensively examined persuasion as a means of behaviour change in prosocial contexts. While certain research has examined aspects of persuasion (Angst and Agarwal, 2009; Bhattacherjee and Sanford, 2006; Tam and Ho, 2005; Warkentin, Johnston and Shropshire, 2011) little research has examined how manifestations of persuasion techniques which use digital artefacts can cause behaviour change (cf. Oinas-Kukkonen and Harjumaa, 2009).

To date IS studies have not examined the use of persuasion on volunteering websites. IS research which has examined volunteering has generally examined Open Source Software (e.g. Fang and Neufeld, 2009; Von Krogh, Haefliger, Spaeth and Wallin, 2012) or online volunteer work (e.g. Moon
and Sproull, 2008). This research has not directly focused on persuasion or persuasion techniques and their roles within this context. Outside of IS, little research has been conducted. For example, Grimm and Needham (2012) examined volunteer tourism using interviews and found that a website’s appearance (whether it was professional or organised) and content (whether it had photographs, testimonials, project descriptions or buzzwords) affected volunteer decisions. Similarly, Nyahunzvi (2013) analysed volunteering tourism websites and found that their rhetoric had common persuasive themes; for example these websites imply that volunteering would make a “real difference” to others and would be a win-win situation for all parties involved. While such research is useful and offers a foundation for understanding this context, it is insufficient to explain the mechanisms through which people might be persuaded to volunteer, or the aspects of digital artefacts that underpin that experience.

3 Methodology

Given the objective of the study to explain (i) how digital artefacts contribute to persuasive experiences, and (ii) why these persuasive experiences can lead to intent to volunteer, it is appropriate that we assume a methodological approach that is capable of developing explanatory theory. Explanatory theory examines (i) the connections between an observed phenomenon and the factors that cause it, and (ii) the casual logic within this process (Gregor, 2006). In contrast to predictive theory which tries to predict when antecedents leads to outcomes, without uncovering the casual logic that underpins that outcome, explanatory theory focuses on addressing why and how antecedents cause specific outcomes (Avgerou, 2013b). Explanatory theory, therefore, attempts to identify and expound the processes that underpin observed outcomes to a greater extent than predictive theory (Avgerou, 2013a; Avgerou, 2013b).

We use the Repertory Grid Technique (RGT) as part of interviews to compare live volunteering websites and gain insight into the causal mental processes which link antecedents (web characteristics) to outcomes (intent to volunteer). RGT is a type of structured interview where participants compare similar phenomena (elements) and specify differences (constructs) between them on a particular dimension. The researcher then probes the reasoning behind each of the suggested differences. This process is called laddering and allows the researcher to understand what people think about a topic (Jankowicz, 2003). Here we examined volunteering websites (elements), in order to identify differences (constructs) and therefore better understand individual experiences of persuasion in online volunteering contexts.

Constructs were elicited by presenting three elements (websites) at a time and asking the question, “With respect to how these websites make you want to volunteer, how are two alike but different from the third?” In answering the elicitation question, a participant might state: “This website made me feel guilty, whereas these other two had no emotional effect”. In this case the construct recorded would be “Invokes feelings of guilt – Does not invoke feelings of guilt”. The researcher would then begin the process of laddering, which involved investigating why the construct made the participant feel persuaded to volunteer. Finally, at the conclusion of the process all interviewees were asked to review the recorded constructs and verify that they were satisfied that this information accurately represented their views.

3.1 Data Collection

Data were collected between June and September 2013. The first round of data collection involved selecting and coding websites to use as elements, whereas the second round involved collecting the interview data. RGT requires an element set which will cover the phenomena of interest with suitable amount of variation (Hunter and Beck, 2000). Based on the guidelines of Hunter and Beck (2000) we chose to use six elements. To identify six specific volunteering websites to be used as elements in the
study we used ALEXA which is the dominant website categorisation service (Perez, 2013). From the selection of websites that ALEXA classified as volunteering websites, 100 were chosen at random. To select six websites from this 100, these websites were coded by the lead author for the frequency with which they used persuasive techniques. Ideally elements should differ somewhat in terms of their characteristics, as this provides higher contrast and makes construct elicitation more effective (Hunter and Beck, 2000). Accordingly, based on the rankings given for usage of persuasion techniques, the two websites which scored lowest, and the four which scored highest were selected. The high persuasion websites were from the following organisations: GoEco, Inter-Cultural Youth Exchange UK, Coral Cay Conservation and, Volunteers of America. The low persuasion website chosen were: Volunteers for Rural Development and, The International DRH Movement.

Criterion sampling (cf. Patton, 1990) was used to select the interview sample of (i) students who were (ii) regular internet users and (iii) fluent in English. The demographic of students is appropriate for examining experiences of volunteering websites as volunteering website are commonly targeted at students and young people (e.g. Cousins, 2007). The sample recruited consisted of 40 participants with an average age of 22, and with gender fairly evenly distributed (21 of whom were female). As RGT samples are usually relatively small, between 10 and 20 interviewees being typical, (e.g. Tan and Hunter, 2002), the sample size of 40 constitutes a large and sufficient sample for the purposes of the research.

Prior to their interviews, participants were emailed instructions explaining the research process and a task to complete the day before the interview. This task required them to spend five minutes reviewing each of the six volunteering websites selected and to explore one opportunity to volunteer on each website. In line with prior research such as (Lai Lai, Yun and Tan, 2009; Tan, Tung and Xu, 2009) the purpose of this task was to ensure that participants had a sufficient amount of experience with the websites to allow them to differentiate between the sites and to elicit constructs. To ensure participants had completed this task they were asked to complete an information sheet about each website and opportunity. The interview did not proceed unless this information was provided to the researcher in advance (all participants did this).

The interviews were conducted face-to-face. During the interview, participants were able to simultaneously view (revisit) the websites they were comparing on three different computer screens and to navigate these websites using a mouse. During this time, their verbal responses were recorded using two separate audio devices (one was a backup) and a researcher recorded the constructs, which were elicited, on a computer. The entire interview procedure lasted between 45 and 90 minutes in total and all interviews took place over the period of one month. All websites used in the study were downloaded using the HTTrack website copier (to be used if the websites changed – to ensure consistency in the websites across all participants). However, the websites did not change in appearance over the duration of the research and the downloaded backups were not used.

### 3.2 Data Analysis

When analysing repertory grids, the construct can be used as the unit of coding (Tan and Hunter, 2002). In this study, the analysis of constructs was based on the grounded theory process. First, categories of constructs were identified using open coding which involves examining, comparing, conceptualizing, and categorizing data (Strauss and Corbin, 1998) (this process is currently ongoing). In doing this we followed the suggestions of (Urquhart and Fernández, 2013) and tried to detach ourselves from the prior literature. Once all constructs had been categorised, they were defined so as to ensure that their conceptual basis is clear (Jankowicz, 2003) and analysed to determine if hierarchies or overlaps exist. After this, axial coding which is “the process of relating categories to their subcategories” (Strauss and Corbin, 1998, p.123) was used to re-evaluate the categories and a final set of categories, which represent persuasive meta-categories, will established. Selective coding was then used to identify data which corresponds with the persuasive meta-categories outlined. For the
purposes of parsimony and ease of dissemination, we attempt to link these categories with persuasive techniques or other pre-existing theory where possible. Data analysis is still ongoing, so our preliminary findings are discussed below.

4 Preliminary Analysis

As table 2 shows, our initial analysis identified three different persuasive meta-categories, which appeared to lead to intent to volunteer. We refer to the first of these meta-categories as ease of use. This relates to individuals’ perceptions of the difficulty of using the digital artefact to volunteer. The second meta-category, trustworthiness related to the degree to which the digital artefact engendered trust in the organisations ability to perform various roles. The third meta-category, positive emotion, is the digital artefact’s competence at creating positive emotions within the participant. We now discuss each of these initial findings.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Ease of Use</td>
<td>Ease of use is an individual's assessment of the effort involved in the process of using the system. Definition adapted from Venkatesh (2000)</td>
</tr>
<tr>
<td>Trustworthiness</td>
<td>The degree to which an artefact interacts with the user to create trust beliefs, such as integrity, benevolence, ability, and predictability, toward the artefact and the entity or entities that it is associated with. Definition adapted from Gefen, Karahanna and Straub (2003)</td>
</tr>
<tr>
<td>Positive Emotion</td>
<td>The extent to which a person feels pleasurable engagement, for example, being enthusiastic, active, and alert. Definition adapted from Watson, Clark and Tellegen (1988).</td>
</tr>
</tbody>
</table>

Table 2. Dimensions of prosocial persuasion competence

4.1 Ease of Use

The artefact’s ease of use was mentioned by nearly all participants. Making something simple lowers the threshold to action (Fogg, 2009) and here it led to prosocial intent by reducing the barriers to engaging in volunteering. Participants wanted to easily be able to find information that was relevant to their decision making. For example, some participants were very interested in knowing the organisation’s values as they “wanted to relate with the organisation” therefore seeing this information on the homepage was persuasive as it was a “time saver”. Similarly, participants were persuaded when information was presented in ways they could easily process. For example, pictures and videos were described as “bringing you into the context”, and allowing viewers to “see and feel how it is to be there.” Characteristics of the artefact, which made volunteering related behaviours easy to perform, also led to experiences of prosocial intent. For example, features of a website which made it easy to contact the organisation, such as pop-up chat boxes, were argued to be more persuasive as they made it easier for participants to get involved by lowering their threshold for action.

4.2 Trustworthiness

When discussing the websites and their persuasive experience, trustworthiness was one of the most common recurring meta-categories. Different aspects of the digital artefact appeared linked with different trust expectations of the organisations, for example, (i) their ability to keep volunteers safe, (ii) their ability to make an impact in tackling a cause and (iii) their ability to make things enjoyable for the volunteer. For example, visual media such as pictures and videos were linked to trusting the organisation in all of these capacities. This was because they allow the user to see (i) “that they really do what they say they do” (ii) “(that) the work is real” and (iii) “that you will have fun if you are going there”. Additionally, seeing “that other people had done it” from pictures and testimonials was also important for trust as it provided social proof. Similarly, websites that displayed credentials or
associations with other recognisable authorities led to organisations being perceived as being more credible and therefore more trustworthy. Such content “(showed that a website) was credible and recognised” and therefore that the organisation “must be good”.

4.3 Positive Emotion

Many participants found websites that created positive emotion were more persuasive in making them want to volunteer. We therefore use the meta-category of “positive emotion” to refer to when an artefact created positive feelings, such as happiness, engagement, and positive expectation, which were then linked to prosocial intent. Positive emotion was linked with several different aspects of the digital artefact, including the use of visual media. For example, pictures were important for experience of positive emotion as “seeing all the things you can do, photographs of the people you will help, and pictures of the area makes you more excited and gives you anticipation of your experience”. Appearance was also important: commenting on a website with an attractive background, one participant stated that: “it gives you a peaceful sensation to read, which makes it easier for them to persuade you about volunteering”. What the website emphasised was also important as some individuals preferred websites that presented volunteering as a vacation. For example one stated “(it) seems the (volunteering) opportunity would be more entertaining and fun rather than work.” In such cases this led to intent to volunteer as participants felt the promise of fun “makes you feel you will get something back from (volunteering)”.

5 Summary and Next Steps

Our preliminary findings suggest that creating experiences of ease of use, trustworthiness and positive emotions are important ways of persuading in volunteering domains. While showing that there may be a role of subjective personal factors, our findings suggest that the digital artefact partially mediates prosocial intent. Indeed, each of the three meta-categories found appeared as an interaction between the artefact and the subjective perceptions of the user. As a result of showing this linkage, our preliminary findings tentatively connect (i) the broad characteristics of a digital artefact and (ii) the subjective user experience, to (iii) the prosocial intent that can occur as a result of their interaction. The findings therefore contribute to (i) explaining persuasion in prosocial online domains and (ii) enabling IS practitioners to develop persuasive digital artefacts within prosocial domains.

We believe that there is considerable potential for future research on online persuasion in prosocial domains. In particular, we believe the sub-dimensions of the constructs identified, for example the level of guilt inducement, will form the basis for useful and novel constructs. This research paper therefore constitutes the first phase in a series of papers that will examine this phenomenon. Once current research has identified the individual factors involved in persuading people to volunteer, the second phase of research will examine how individual factors group in prosocial artefacts to determine if persuasive typologies exist. The third phase will build on the mechanisms and typologies found to attempt to model persuasion in prosocial online contexts and examine how it interacts with personal factors to cause intention to engage in prosocial behaviour. Finally, the fourth phase will attempt to develop or redesign actual prosocial artefacts that epitomise the best practices found. Using an experimental method these will then be tested against controls by observing their effectiveness at convincing users to engage in specific prosocial behaviours.
References


