



# Cognitive predictors of consumers' intention to comply with social marketing email appeals



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## ABSTRACT

Email is used increasingly by social marketers to appeal to consumers, however, relatively little is known regarding the cognitive processes which lead consumers to comply with actions that marketers request in email messages. This exploratory study tests the direct effects of five cognitive factors that characterize the message receiver on intention to comply with an email appeal. These cognitive factors are benefit goals and cost goals related to the message, trusting beliefs in the message sender, involvement with the message, and perceived effort of complying with the appeal. We find four of the five factors are significant predictors of intention to comply, jointly explaining 70% of variance in this measure.

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## 1. Introduction

Email is a fast, inexpensive, and easy-to-use Internet communication medium, and these characteristics have led many commercial organizations to use email to contact consumers. However, consumers frequently resist being contacted via unsolicited email, and they may react unenthusiastically even to contacts via permission-based (opt-in) email (Cases, Fournier, Dubois, & Tanner, 2010; DuFrene, Engelland, Lehman, & Pearson, 2005; Moustakas, Ranganathan, & Duquenoy, 2006). Researchers have responded to these observations with a growing literature stream that investigates consumers' reactions to commercial uses of email, for example, measuring the conversion rate at which consumers click on hyperlinks in email advertisements (Martin, Van Durme, Raulas, & Merisavo, 2003), identifying optimal email contact frequency (Micheaux, 2011), and studying the process by which consumers decide to engage with the email message (Ellis-Chadwick & Doherty, 2012).

Significantly less attention has been paid to consumers' reactions to social marketing conducted via email. Kotler and Zaltman (1971) launched the study of social marketing by proposing to apply marketing principles to promote social change. Since that time, the social marketing field has developed by integrating a focus on consumers' needs and wants with the objective of changing consumers' behaviors to achieve some social benefit (2011).<sup>1</sup> Lee

and Kotler (2011, p. 7) offer four themes that broadly define social marketing: "(a) influencing behaviors, (b) utilizing a systematic planning process that applies marketing principles and techniques, (c) focusing on priority target audience segments, and (d) delivering a positive benefit to society."

Because social marketing utilizes "tools, techniques and concepts derived from commercial marketing in pursuit of social goals" (Peattie & Peattie, 2009, p. 262), we might anticipate that many aspects of consumers' reactions to social marketing conducted via email will be explained from findings in the commercial marketing literature. However, the context in which email messages are used can significantly impact individuals' reactions to them (Wilson, 2002; Wilson & Sheetz, 2008). For example, Kim, Haley, and Koo (2009) find that even simple contextual differences between product advertising (focusing on a product or service) and corporate advertising (focusing on the overall corporate image) can determine whether consumers' existing level of product knowledge will influence their development of attitudes and intentions toward purchasing a product after viewing the ad.

A number of contextual differences distinguish social marketing from commercial marketing. Social marketing often diverges from commercial marketing in the approaches it uses, for example, by focusing on anti-consumption appeals (Lee, Fernandez, & Hyman, 2009). In addition, social marketing campaigns frequently face environmental challenges that are not present in commercial marketing and are in some cases actually caused by commercial marketers, for example, by promoting fattening foods without regard for societal costs of obesity and chronic disease (Wymer, 2010). A further difference is illustrated by Brennan and Binney (2010), who study negative emotional appeals of fear, guilt, and shame

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<sup>1</sup> Recent reviews of the social marketing field are provided by Dann (2010) and Dibb (2014).

that frequently are employed in social marketing but are rare in commercial marketing research. These differences caution against assuming that commercial marketing research can necessarily be generalized to social marketing contexts or that it is capable of guiding all aspects of social marketing, and suggest that researchers should direct greater attention toward study of consumers' reactions in contexts that are specific to social marketing.

This paper studies a social marketing use of email in which an unsolicited appeal is made to consumers to take a socially-beneficial action, a use which we refer to hereafter as an *email appeal*. We were interested in identifying the major cognitive factors that predict development of consumers' intention to comply with email appeals. Despite conducting an extensive review of the persuasion, advertising, and marketing literatures, we found no research that comprehensively studies this issue in the context of social marketing. The lack of existing research in this area motivated us to conduct an exploratory study to assess the role of five key cognitions in predicting intention to comply with a representative email appeal.

## 2. Background

We drew from research in related areas of persuasion, advertising, and marketing to identify cognitive factors that may be expected to contribute to consumers' willingness to comply with email appeals. Our review identified five factors that prior research suggests will exert direct effects on compliance intention. These factors represent a diverse set of cognitions, including the message receiver's *benefit goals* and *cost goals* related to the message, *trusting beliefs* in the message sender, *involvement* with the message, and *perceived effort* of complying with the appeal. We discuss the background literature and present our research hypotheses relating to these factors in the following sections.

### 2.1. Perception of benefits and costs

The marketing and advertising literatures tend to discuss benefits and costs from the perspective of the message sender, highlighting email as a quick, cost effective, and simple-to-use medium for targeting specific groups of consumers (e.g., Cases et al., 2010; DuFrene et al., 2005; Moustakas et al., 2006). Yet benefits are also important to consumers, who are known, for example, to be much more likely to open and read email appeals if they believe a monetary benefit can be gained (Chang, Rizal, & Amin, 2013). Costs are important as well, as unsolicited email can be taxing and irritating to receivers (Moustakas et al., 2006; Renaud, Ramsay, & Hair, 2006). Where receivers foresee a high ratio of costs to benefits they often avoid opening email (Baek & Morimoto, 2012) or set up message filters to block it (Park, Sharman, Rao, & Upadhyaya, 2007; Renaud et al., 2006).

One approach to understanding how perceived benefits and costs influence consumers' reactions to email appeals is presented by Wilson and Lu (2008). They investigated effects of message receivers' benefit and cost goals in an email persuasion study based upon the goals-planning-action (GPA) model (Dillard, 1990). The GPA model was developed to explain the behaviors of message senders within a two-tiered goal structure in which *primary goals* are considered to be instrumental to the sender's task and *secondary goals* encompass motivations to manage the sender's identity, level of arousal, and relationship and interactions with the receiver. Wilson and Lu theorized that message receivers utilize a similar two-tiered goal structure in which obtaining benefits and avoiding costs constitute the primary goals in forming a response to email messages. They report that benefit goals and cost goals appeared frequently in their students subjects' stated rationales for responding

to a request made in an email message related to university sports activities, and both factors were significant independent contributors to the receivers' intention to comply with the request. Subsequent research confirmed the original findings, demonstrating that benefit and cost goals arise immediately when subjects receive an email message and continue to be formed as the message is subsequently opened and read (Wilson, 2015).

These findings suggest that benefit goals and cost goals may also be important predictors of consumers' responses to email appeals in the context of social marketing, relationships that are tested in our first two hypotheses.

**H1.** Greater goals of obtaining benefits related to the message (benefit goals) increase message receivers' intention toward compliance with an email appeal.

**H2.** Greater goals of avoiding costs related to the message (cost goals) decrease message receivers' intention toward compliance with an email appeal.

### 2.2. Trusting beliefs

Trust is "a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another" (Rousseau, Sitkin, Burt, & Camerer, 1998, p. 395). In online settings, research attention focuses on consumers' beliefs that the other party will be honest, i.e., trusting beliefs (Cases et al., 2010), and researchers report that trust improves responses toward advertising, advice, and requests by reducing perceptions of risk in online transactions (Nicolau & McKnight, 2006; Van der Heijden, Verhagen, & Creemers, 2003). Trust of online sellers, e-commerce marketplaces (such as eBay), and members of a marketplace are reported to increase intentions to revisit a website or make a purchase (Cases et al., 2010; Everard & Galletta, 2006; Hsu, Chang, Chu, & Lee, 2014; Kim, Kim, & Park, 2010; Lu, Zhao, & Wang, 2010; McKnight, Choudhury, & Kacmar, 2002; Pavlou & Gefen, 2004; Weisberg, Te'eni, & Arman, 2011). None of these studies specifically addresses the role of trust in relation to email appeals, however, development of trust has been linked previously to related aspects of online advertising, including design and structural elements (Wang & Emurian, 2005).

Researchers have examined consumer trust in both permission-based and unsolicited email marketing contexts. Chang et al. (2013) find that consumers evaluate the trustworthiness of the sender when deciding to opt-in to receive permission-based email, and Park et al. (2007) report that individuals are generally averse to receiving unsolicited email messages because of privacy concerns. Yet DuFrene et al. (2005) demonstrate that trust is malleable. They report that consumers who are repeatedly exposed to opt-in messages from the same retailer tend to synchronize their trusting beliefs toward the sender with their overall trust evaluation of the retailer and their purchase intentions.

Based on these studies, we anticipate that viewing an email appeal can cause consumers to develop trusting beliefs in the integrity and benevolence of the message sender (McKnight et al., 2002). Where trust is developed, we propose it will tend to overcome perceived risks of responding to the email appeal similar to reports from studies of other types of online transactions. These observations lead to our third hypothesis.

**H3.** Greater trusting beliefs toward the message sender increase message receivers' intention toward compliance with an email appeal.

### 2.3. Message involvement

Zaichkowsky (1985, p. 342) defines involvement as “a person’s perceived relevance of the object based on inherent needs, values, and interests,” where the prototypical “object” of interest is an advertising message. Researchers have studied numerous aspects of consumers’ involvement with advertising messages in the context of commercial marketing (Andrews, Durvasula, & Akhter, 1990; Muehling, Laczniak, & Andrews, 1993), generally finding strong association between message involvement and a variety of consumer responses, such as selling point recall, belief confidence, brand thoughts, and message-related thoughts (Laczniak, Kempf, & Muehling, 1999). In online research, message involvement has been linked to numerous additional outcomes, including improved attitude toward web banner ad messages and increased product purchase consideration (Fortin & Dholakia, 2005), increased intention to purchase products, such as books and greeting cards (Jiang, Chan, Tan, & Chua, 2010), and increased intention to use mobile Internet phones (Mills, 2006) and weblogs (Shiau & Luo, 2010). No studies of message involvement were found in which email was used as the study medium. However, findings from both the historic involvement research literature and the recent online studies motivate our fourth hypothesis.

**H4.** Greater message involvement increases message receivers’ intention toward compliance with an email appeal.

### 2.4. Perceived effort

Perceived effort plays an important role in determining how individuals use email and other computer applications. According to the cost–benefit framework of cognition (Payne, 1982), individuals often are faced with the dual objectives of maximizing accuracy and minimizing effort when utilizing computer applications (Djamasbi, 2007; Djamasbi, Siegel, Skorinko, & Tullis, 2011; Todd & Benbasat, 1992; Wilson & Addo, 1994). Because of the conflicting nature of these two objectives, individuals make trade-offs between accuracy maximization and effort minimization and tend to place a greater value on trade-offs that minimize effort (Djamasbi, 2007; Todd & Benbasat, 1992). For example, although decision performance is significantly improved when all the available information is incorporated into a decision, individuals typically consider only a subset of the information that is available to them (Djamasbi, 2007).

Perceptions of the difficulty or complexity of an action can have a significant impact on whether behaviors are performed (Nadkarni & Gupta, 2007; Yzer, Hennessy, & Fishbein, 2004). In a study where participants attempted to use an airline website to schedule several flights, for example, Reynolds and Ruiz de Maya (2013) find that perceived effort is an important inhibitor to subjects’ intention to revisit the site. These observations suggest perceived effort may also be an important determinant of consumers’ reactions to email appeals, leading to our final hypothesis.

**H5.** Greater perception of effort in complying with an email appeal reduces message receivers’ intention toward compliance with it.

## 3. Research method

We conducted an online study that asked subjects to evaluate a message portrayed as email sent to them by a person with the address of “bdayo@texts2africa.com” (see Fig. 1). The survey was

administered using a custom-developed web application. This message was designed to be relevant to college-age students while fitting key objective characteristics of an email appeal, i.e., an unsolicited email message used for social marketing.

After subjects viewed the message, they were then asked to complete an online questionnaire containing measurement scales that assessed their benefit goals and cost goals associated with the message, their perception of trust in the sender, their involvement with the message, the degree of perceived effort they associated with complying with the sender’s request to donate used textbooks, and their intention to comply with the request. Administration order of all rating items was individually randomized for each subject by the survey application, as recommended by Wilson and Lankton (2012). Following administration of the rating items, the subject’s age and gender demographic data were collected, and the subject exited the study.

### 3.1. Subjects

Subjects were 248 students attending undergraduate business communications and information systems courses at a large university in the Midwest U.S. Gender distribution of subjects is 131 males (53%) and 117 females (47%), with average age of 20 years. By voluntarily participating in the study or completing an alternative assignment, subjects earned extra course credit.

Subjects who had signed up to participate in the study were notified via an email message that contained participation instructions and a hyperlink to access the online survey. The survey was available for completion during a period of one week following notification, and subjects who had not completed the survey after five days were sent a follow-up reminder message via email.

### 3.2. Rating measures

Benefit goals and cost goals were assessed using measures developed and validated by Wilson and Lu (2008). Trusting beliefs measures were drawn from Gefen, Karahanna, and Straub (2003), message involvement used the personal involvement inventory developed by Zaichkowsky (1986, 1994), and perceived effort used items adapted from prior studies to fit the research context (Nadkarni & Gupta, 2007; Reynolds & Ruiz de Maya, 2013). New items were developed to measure intention to comply with the message request based on the conceptual definition of behavioral intention (Warshaw & Davis, 1985). All responses to rating measures were collected using seven-point end-marked scales (see Table 1). A small number of measures loading between .60 and .70 were reviewed, and the decision was made to retain these measures in the analysis in order to maintain consistency with the original scales.

## 4. Results

Prior to evaluating our research model and performing hypothesis tests, we conducted manipulation checks to assess whether our student subjects were reasonably engaged in the study and whether our treatment produced a satisfactory range of responses. We then conducted confirmatory factor analysis (CFA) to assess our measurement model and partial least squares (PLS) analysis to assess our structural model and test our research hypotheses. PLS is a form of structural equation modeling (SEM), a technique that simultaneously models relationships among a network of latent variables. Unlike covariance-based SEM methods, PLS analysis does not require variables to be normally distributed (Chin, 1998).

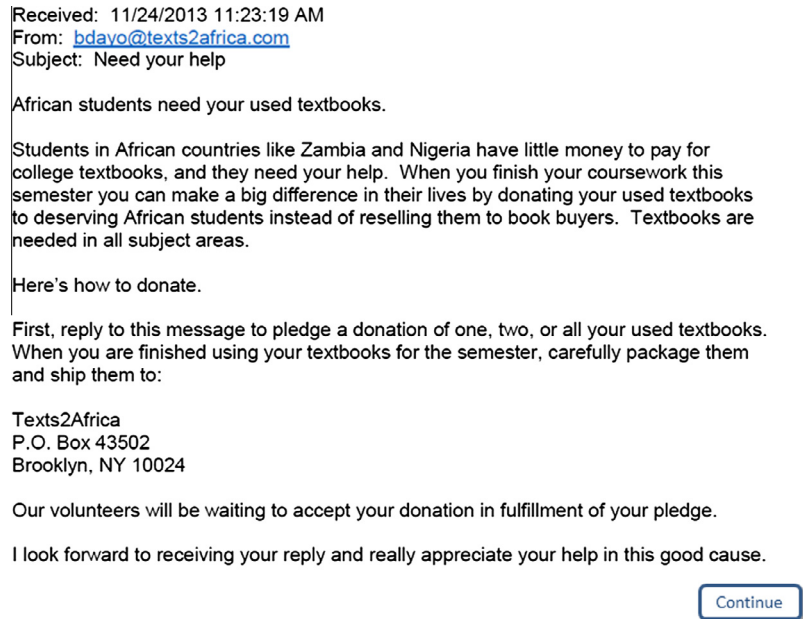


Fig. 1. Message treatment.

#### 4.1. Manipulation checks

We recognize that university student subjects may not be appropriate for some types of research, especially where they do not have appropriate background experience or are not representative of the general population in key ways (Gordon, Slade, & Schmitt, 1986). We addressed this issue by developing a targeted email appeal topic for which university students are well-equipped to respond and would find to be sufficiently engaging to motivate their sincere and interested responses across a range of response levels.

As a manipulation check for engagement we analyzed summated descriptive statistics of the personal involvement inventory (Zaichkowsky, 1994). The mean message involvement rating was 3.53, slightly under the midpoint of the seven-point response scale (s.d. = 1.33). We interpret results of this manipulation check to support our contention that the research design was reasonably engaging to students, given that the unsolicited request contained in the message treatment may have discomforted some of our subjects.

We assessed response range by analyzing frequency of subjects' summated intention to comply ratings, calculated as the sum of responses to intention items divided by the number of those items. Over 86% of our subjects responded with some indication of intention to comply, and summated intention ratings were above the midpoint (4.0) of the seven-point scale for over one-third of our subjects. We interpret these results to support our contention that the manipulation achieved a satisfactory range of responses.

#### 4.2. Confirmatory factor analysis

We used WarpPLS version 4.0 (Kock, 2014) for CFA and structural model analysis in order to account for the presence of significant skewness in cost goals, benefit goals, perceived effort, and intention to comply measures. In addition to linear analysis, WarpPLS is effective at modeling and estimating important non-linear relationships which often are encountered in cognitive and behavioral research (Kock, 2013).

CFA results show a prominent factor structure in which all measurement items loaded on the anticipated factor with negligible cross-loading on other factors (see Table 1). Convergent validity of measures was assessed by calculating Cronbach's alpha and

composite reliability (see Table 2). Cronbach's alpha was .76 or greater and composite reliability was .85 or greater for items comprising each factor, exceeding the .70 criteria proposed by Hair, Black, Babin, and Anderson (2009). Discriminant validity was assessed through analysis of average variance extracted (AVE) calculated using WarpPLS. The AVE for each measure is greater than .50, and the square root of AVE is higher than any correlation of that factor with another measure, thereby meeting criteria proposed by Fornell and Larcker (1981).

#### 4.3. Structural model

Results of PLS analysis of the direct-effects structural model are shown in Fig. 2. Overall, the cognitive factors we selected for evaluation explain 70% of the observed variance in our subjects' intention to comply with the email appeal. WarpPLS 4.0 provides measures of model fit including average path coefficient, average *R*-squared and adjusted *R*-squared, and Tenenhaus goodness of fit measure (Tenenhaus, Amato, & Esposito Vinzi, 2004). The structural model meets established criteria for each measure (Kock, 2014). In addition, full collinearity variance inflation factors for each scale are lower than 3.30, indicating that analysis of the structural model is acceptably free from both vertical and lateral collinearity effects (Kock & Lynn, 2012).

#### 4.4. Hypothesis tests

Of the five hypotheses we tested, those addressing direct effects of benefit goals, trust, message involvement, and perceived effort were supported by significant relationships with intention to comply. Hypothesis 2 was not supported; no significant effects were found between cost goals and intention to comply.

### 5. Discussion

The cognitive factors we studied provide very good overall prediction of intention to comply with an email appeal, explaining 70% of the variance in this measure. Four of the five cognitive factors we assessed—benefit goals, trust, involvement, and perceived effort—are significant and unique predictors of intention to comply

**Table 1**  
Results of confirmatory factor analysis.

Constructs and measurement items <sup>a</sup>	Loading
<i>Benefit Goals (BG)</i>	
BG1. I feel complying with this request would actually be good for me	0.889
BG2. I am looking forward to positive things resulting from this message	0.885
BG3. I am interested in benefits the message might have for me	0.826
<i>Cost Goals (CG)</i>	
CG1. I am concerned about personal costs of complying with this request	0.742
CG2. I am concerned that complying with this request might be bad for me	0.846
CG3. I worry about the downsides for me that this message might produce	0.871
<i>Trusting Beliefs (TB)</i>	
TB1. I believe the sender of this message is honest	0.887
TB2. I believe the sender of this message cares about me	0.637
TB3. I believe the sender of this message is trustworthy	0.906
<i>Message Involvement (MI)</i>	
Inv1. My feeling is that this message is: (Important/Unimportant)	0.815
Inv2. My feeling is that this message is: (Boring/Interesting)	0.830
Inv3. My feeling is that this message is: (Relevant/Irrelevant)	0.790
Inv4. My feeling is that this message is: (Unexciting/Exciting)	0.805
Inv5. My feeling is that this message: (Means Nothing To Me/ Means A Lot To Me)	0.834
Inv6. My feeling is that this message is: (Appealing/Unappealing)	0.868
Inv7. My feeling is that this message is: (Fascinating/Mundane)	0.796
Inv8. My feeling is that this message is: (Worthless/Valuable)	0.830
Inv9. My feeling is that this message is: (Involving/Uninvolving)	0.609
Inv10. My feeling is that this message is: (Not needed/Needed)	0.796
<i>Perceived Effort (PE)</i>	
PE1. Doing what this message requests would be difficult for me	0.766
PE2. Doing what this message requests would be hard to accomplish	0.782
PE3. It would not be difficult for me to comply with this message. (Reverse coded)	0.696
PE4. It would be very easy for me to do what this message requests. (Reverse coded)	0.835
<i>Intention to Comply (IC)</i>	
IC1. How likely is it you would comply with the request made in this message? (Very Unlikely/Very Likely)	0.903
IC2. If I actually received this message, I would do what it requests	0.864
IC3. I would pledge to donate at least one book if I actually received this message	0.865
IC4. I would not pledge to donate any books if I received this message. (Reverse coded)	0.844

<sup>a</sup> All responses used 7-point scales end-marked as 1 = strongly disagree and 7 = strongly agree except where an alternate response set is shown in parentheses.

within the direct effects model as describe in Fig. 2. The findings present several interesting implications for research and practice.

5.1. Multifaceted cognitive predictors

It is noteworthy that the four significant predictors encompass a complex array of cognitions, indicating that receivers evaluate not only the elements that arise from the contents of the email

appeal—how relevant to their interests (i.e., involving) the contents are and whether they trust the sender—but also weigh the effort of complying and consider how compliance may benefit them.

5.1.1. Message involvement

Of the cognitive factors we studied, message involvement has the strongest effects on intention to comply, explaining over 30% of variance in this outcome. This finding corroborates numerous prior researchers, such as Fortin and Dholakia (2005), who find message involvement to be more important than arousal in predicting attitude toward the message and purchase consideration.

We hypothesized that message involvement would have direct effects on intention to comply, following research including Kim et al. (2009) and Huang and Shyu (2009). However, other researchers model involvement as having mediating relationships (Fortin & Dholakia, 2005; Jiang et al., 2010) or moderating relationships (Oreg & Sverdluk, 2014; San Martín, Camarero, & José, 2011) with intentions or behavioral outcomes. To test for presence of these relationship forms we created and ran two alternative models in WarpPLS. In the mediated effects model, message involvement was placed between the other cognitive predictors (benefit goals, cost goals, trusting beliefs, and perceived effort) and intention to comply. With the exception of cost goals, message involvement did significantly mediate effects of all other cognitive antecedents, resulting in 66% explained variance in message involvement. However, explained variance of intention to comply was reduced from 70% in the direct effects model to 60% in the mediated effects model.

In the moderated effects model, message involvement was placed to moderate the relationships between the other cognitive predictors and intention to comply. Only the relationship between perceived effort and intention to comply was significantly moderated by message involvement, and explained variance in intention to comply was reduced to 66% from 70% in the direct effects model. These findings indicate that although message involvement shares significant variance with other cognitive factors in our research model, the direct effects approach is appropriate within the context of the present study.

5.1.2. Trusting beliefs

Trusting beliefs have been studied in numerous aspects of online transactions, including advertising and sales of products and services. However, new research will be needed to understand how trust is developed in response to email appeals from senders that consumers have little or no prior knowledge of. Under those conditions, we anticipate that propensity to trust (Gill, Boies, Finegan, & McNally, 2005) will be a key antecedent to trusting beliefs or, potentially, that this factor could replace trusting beliefs as an alternative predictor of intention to comply.

5.1.3. Perceived effort

Perceived effort has a sizable direct effect on intention to comply. However, we question whether the strength of this effect may be an

**Table 2**  
Measurement scale characteristics.<sup>a</sup>

	Mean	SD	AVE	Alpha	CR	BG	CG	TB	MI	PE	IC
Benefit Goals (BG)	4.63	1.67	0.76	0.83	0.90	<b>0.87</b>					
Cost Goals (CG)	3.83	1.70	0.68	0.76	0.86	-0.19	<b>0.82</b>				
Trusting Beliefs (TB)	3.57	1.16	0.67	0.86	0.86	0.36	-0.24	<b>0.82</b>			
Message Involvement (MI)	4.00	1.44	0.64	0.94	0.95	-0.19	-0.15	0.72	<b>0.80</b>		
Perceived Effort (PE)	4.00	1.48	0.60	0.77	0.85	-0.29	0.19	-0.43	-0.56	<b>0.77</b>	
Intention to Comply (IC)	3.32	1.68	0.76	0.89	0.93	0.44	-0.21	0.67	0.76	-0.67	<b>0.87</b>

<sup>a</sup> Means and standard deviations (SD) are calculated as averaged summations of the raw data; Cronbach's alpha (Alpha), and composite reliability (CR) are shown as reported by WarpPLS; the square root of average variance extracted (AVE) for each latent factor as reported by WarpPLS is shown as a bolded entry in the diagonal.

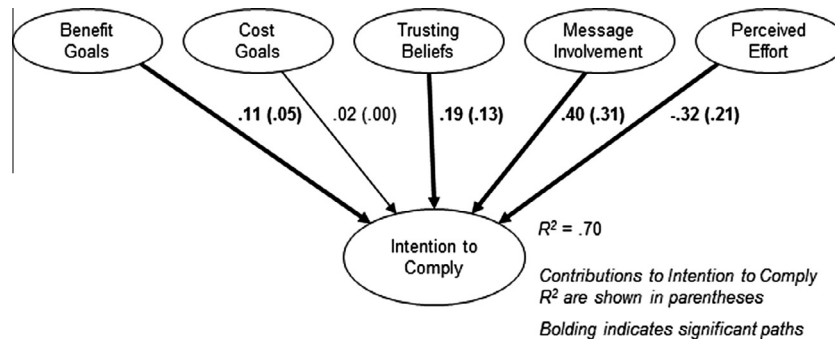


Fig. 2. Results of PLS analysis of direct effects model.

artifact of our research treatment, which asked students to commit to package and arrange to mail one or more textbooks to a New York City address. We anticipate that perceived effort will play some role in virtually all compliance decisions involving email appeals, as some effort is always involved in compliance. However, further research will be necessary to assess how predictive this factor is in situations where less effort is required to comply with a request.

#### 5.1.4. Benefit goals

Benefit goals explained a small but significant and unique portion of variance in intention to comply. No material benefits were offered by the research treatment, therefore our subjects were limited to considering intangible benefits, such as the feeling of doing a good deed. Because social marketing is characterized by an altruistic focus, we feel that our research design is appropriate to the objectives of the research. However, we anticipate that benefit goals could become more prominent in predicting intention to comply where email appeals include potential for material benefits to accrue to receivers. In addition, it is not clear what portion of benefit goals derives from individuals' reactions to an email appeal vs. their innate tendencies. Wilson and Lu (2008, p. 2571) caution that

“Our findings do not tell us whether goals vary substantially based on perceived characteristics of the message and its sender or the extent to which goals are applied as ‘preformatted’ scripts or templates. It is not clear from the prior literature or from our findings whether communication goals are stable characteristics of the individual, as suggested by Wilson and Zigurs (2001) or occupy a more ephemeral tier within a goals hierarchy.”

We note that items in the benefit goals measure we used focus on perceptions that the email appeal would be personally beneficial to the receiver (see Table 1), supporting face validity of the assumption that our subjects did react to contents of the message treatment. However, it will be useful for future research to address the role that static individual characteristics, e.g., optimistic vs. pessimistic outlook, may play in development of goals related to email appeals and other persuasive messages.

#### 5.1.5. Balancing multiple cognitions

The finding that consumers balance multiple cognitions in deciding whether to comply with an email appeal holds interesting implications for social marketing practice. First, the findings suggest that success of email appeals can be enhanced by implementing a multi-pronged approach in which messages are carefully targeted to be relevant to receivers, effortful requirements to consumers are eliminated or minimized, and message cues are included to promote perceptions of the message sender's trustworthiness and honesty and emphasize benefits the receiver will gain by complying with the message.

Second, consumers bring significant preconceptions to their evaluation of email appeals, especially in their willingness to trust message senders and the degree to which they are optimistic regarding potential benefits. Such preconceptions often take the form of situational stereotypes that individuals draw upon to support quick decision making (West & Wilson, 1995). Identifying situations that drive consumers' perceptions of trust and benefits could boost success of email appeals.

#### 5.2. Non-predictiveness of cost goals

The findings call into question why the cost goals factor did not predict intention to comply. We anticipated that consumers with strong goals toward avoiding costs would tend to respond negatively to an email appeal that asked them to give away something of value, however, no corresponding effect was found. One plausible explanation for this finding is that cost goals were subsumed by perceived effort, as complying with the message treatment would require significant effort on the receivers' part. To test the idea, we reran the WarpPLS analysis with the perceived effort factor removed, yet cost goals remained a nonsignificant predictor of intention in this follow-up analysis. Wilson and Lu (2008) previously questioned whether cost goals should be reclassified as a secondary communication goal due to lack of prominence of costs goals in their findings relative to benefit goals, and our findings add to that concern.

#### 5.3. Other potential cognitive predictors

The finding that four antecedents in the present study explain 70% of variance in intention to comply implies that it will be difficult to make large gains in predictiveness by adding other cognitions to the model. Yet future researchers should consider factors that we did not assess. For example, Chang et al. (2013) report that perceived intrusiveness mediated by attitudes toward the message can have important effects on intentions toward the senders of email advertising. In addition, Chiu, Hsieh, Kao, and Lee (2007) contend that characteristics of the message source play a vital role in determining trust of the information presented in email messages and in subsequently influencing the receivers' behavioral response.

#### 5.4. Limitations

The exploratory nature of our study entails a number of limitations which will require further research to overcome. First, our research design does not address permission-based (opt-in) email, thus the findings should not be generalized to permission-based email pending further study. Second, the present study does not investigate consumers' decisions to open or discard email appeals.

Andersson, Fredriksson, and Berndt (2014) report that antipathy toward marketing email messages causes many recipients to delete suspect messages without even opening them. Our findings are relevant by design only to those situations where email appeals are opened and read. Third, the research treatment we chose was designed to be representative of social marketing email appeals, however, it is not possible in a single treatment to represent all aspects of such a large field. Finally, our subject pool comprised of undergraduate university students may not be representative of older or less educated consumers.

## 6. Conclusion

Despite the large body of work on commercial uses of email within the marketing literature, there is a lack of knowledge surrounding the use of email to support social marketing. Our study begins to fill this void by identifying a comprehensive set of cognitive factors that jointly drive consumers' intention to comply with a social marketing email appeal. We further demonstrate that email appeals are evaluated on multifaceted criteria that address relevance, effort, trust, and benefits—but not costs—from the consumers' perspective.

The findings prompt a number of questions that will require future research to address, especially regarding issues of generalizability to other message treatments and research settings. Yet the excellent joint predictiveness of cognitive factors in our research model implies that consumers respond to email appeals with consideration and thought. Learning more about the cognitive processes underlying these responses will be a productive area of investigation for social marketing researchers and has potential to improve the effectiveness of future social marketing practice.

## References

- Andersson, M., Fredriksson, M., & Berndt, A. (2014). Open or delete: Decision-makers' attitudes towards E-mail marketing messages. *Advances in Social Sciences Research Journal*, 1(3), 133–144.
- Andrews, J. C., Durvasula, S., & Akhter, S. H. (1990). A framework for conceptualizing and measuring the involvement construct in advertising research. *Journal of Advertising*, 19(4), 27–40.
- Baek, T. H., & Morimoto, M. (2012). Stay away from me. *Journal of Advertising*, 41(1), 59–76.
- Brennan, L., & Binney, W. (2010). Fear, guilt, and shame appeals in social marketing. *Journal of Business Research*, 63(2), 140–146.
- Cases, A. S., Fournier, C., Dubois, P. L., & Tanner, J. F. Jr., (2010). Web site spill over to email campaigns: The role of privacy, trust and shoppers' attitudes. *Journal of Business Research*, 63(9), 993–999.
- Chang, H. H., Rizal, H., & Amin, H. (2013). The determinants of consumer behavior towards email advertisement. *Internet Research*, 23(3), 316–337.
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. In G. A. Marcoulides (Ed.), *Modern methods for business research* (pp. 1295–1336). Mahwah, NJ: Lawrence Erlbaum Associates.
- Chiu, H.-C., Hsieh, Y.-C., Kao, Y.-H., & Lee, M. (2007). The determinants of email receivers' disseminating behaviors on the Internet. *Journal of Advertising Research*, 47(4), 524–534.
- Dann, S. (2010). Redefining social marketing with contemporary commercial marketing definitions. *Journal of Business Research*, 63(2), 147–153.
- Dibb, S. (2014). Up, up and away: Social marketing breaks free. *Journal of Marketing Management*, 30(11–12), 1159–1185.
- Dillard, J. P. (1990). A goal-driven model of interpersonal influence. In J. P. Dillard (Ed.), *Seeking compliance: The production of interpersonal influence messages* (pp. 41–56). Scottsdale, AZ: Gorsuch Scarisbrick.
- Djamasbi, S. (2007). Does positive affect influence the effective usage of a decision support system? *Decision Support Systems*, 43(4), 1707–1717.
- Djamasbi, S., Siegel, M., Skorinko, J., & Tullis, T. (2011). Online viewing and aesthetic preferences of generation y and the baby boom generation: Testing user web site experience through eye tracking. *International Journal of Electronic Commerce*, 15(4), 121–157.
- DuFrene, D. D., Engelland, B. T., Lehman, C. M., & Pearson, R. A. (2005). Changes in consumer attitudes resulting from participation in a permission e-mail campaign. *Journal of Current Issues and Research in Advertising*, 21(1), 65–77.
- Ellis-Chadwick, F., & Doherty, N. F. (2012). Web advertising: The role of e-mail marketing. *Journal of Business Research*, 65(6), 843–848.
- Everard, A., & Galletta, D. F. (2006). How presentation flaws affect perceived site quality, trust, and intention to purchase from an online store. *Journal of Management Information Systems*, 22(3), 56–95.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
- Fortin, D. R., & Dholakia, R. R. (2005). Interactivity and vividness effects on social presence and involvement with a web-based advertisement. *Journal of Business Research*, 58, 387–396.
- Gefen, D., Karahanna, E., & Straub, D. W. (2003). Trust and TAM in online shopping: An integrated model. *MIS Quarterly*, 27(1), 51–90.
- Gill, H., Boies, K., Finegan, J. E., & McNally, J. (2005). Antecedents of trust: Establishing a boundary condition for the relation between propensity to trust and intention to trust. *Journal of Business and Psychology*, 19(3), 287–302.
- Gordon, M. E., Slade, L. A., & Schmitt, N. (1986). The 'science of the sophomore' revisited: From conjecture to empiricism. *Academy of Management Review*, 11(1), 191–207.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2009). *Multivariate data analysis*. Upper Saddle River, NJ: Prentice Hall.
- Hsu, M. H., Chang, C. M., Chu, K. K., & Lee, Y. J. (2014). Determinants of repurchase intention in online group-buying: The perspectives of DeLone & McLean IS success model and trust. *Computers in Human Behavior*, 36, 234–245.
- Huang, J. H., & Shyu, S. H. P. (2009). Building personalised relationships with customers via emails. *Total Quality Management*, 20(6), 585–601.
- Jiang, Z., Chan, J., Tan, B. C. Y., & Chua, W. S. (2010). Effects of interactivity on website involvement and purchase intention. *Journal of the Association for Information Systems*, 11(1), 34–59.
- Kim, S., Haley, E., & Koo, G. Y. (2009). Comparison of the paths from consumer involvement types to ad responses between corporate advertising and product advertising. *Journal of Advertising*, 38(3), 67–80.
- Kim, J. U., Kim, W. J., & Park, S. C. (2010). Consumer perceptions on web advertisements and motivation factors to purchase in the online shopping. *Computers in Human Behavior*, 26(5), 1208–1222.
- Kock, N. (2013). *WarpPLS 4.0 user manual*. Laredo, TX: ScriptWarp Systems.
- Kock, N. (2014). *WarpPLS* <<http://www.scriptwarp.com/warppls/>>.
- Kock, N., & Lynn, G. S. (2012). Lateral collinearity and misleading results in variance-based SEM: An illustration and recommendations. *Journal of the Association for Information Systems*, 13(7), 546–580.
- Kotler, P., & Zaltman, G. (1971). Social marketing: An approach to planned social change. *Journal of Marketing*, 35(3), 3–12.
- Laczniak, R. N., Kempf, D. S., & Muehling, D. D. (1999). Advertising message involvement: The role of enduring and situational factors. *Journal of Current Issues & Research in Advertising*, 21(1), 51–61.
- Lee, M. S., Fernandez, K. V., & Hyman, M. R. (2009). Anti-consumption: An overview and research agenda. *Journal of Business Research*, 62(2), 145–147.
- Lee, N. R., & Kotler, P. (2011). *Social marketing: Influencing behaviors for good* (4th ed.). Thousand Oaks, CA: Sage Publications.
- Lu, Y., Zhao, L., & Wang, B. (2010). From virtual community members to C2C e-commerce buyers: Trust in virtual communities and its effect on consumers' purchase intention. *Electronic Commerce Research and Applications*, 9(4), 346–360.
- Martin, B. A., Van Durme, J., Raulas, M., & Merisavo, M. (2003). Email advertising: Exploratory insights from Finland. *Journal of Advertising Research*, 43(3), 293–300.
- McKnight, D. H., Choudhury, V., & Kacmar, C. (2002). The impact of initial consumer trust on intentions to transact with a web site: A trust building model. *Strategic Information Systems*, 11, 297–323.
- Micheaux, A. L. (2011). Managing E-mail advertising frequency from the consumer perspective. *Journal of Advertising*, 40(4), 45–66.
- Mills, A. M. (2006). Understanding involvement in technology adoption. In *ACIS 2006 proceedings*, paper 78. <<http://aisel.aisnet.org/acis2006/78>>.
- Moustakas, E., Ranganathan, C., & Duqueno, P. (2006). E-mail marketing at the crossroads: A stakeholder analysis of unsolicited commercial e-mail (spam). *Internet Research*, 16(1), 38–52.
- Muehling, D. D., Laczniak, R. N., & Andrews, J. C. (1993). Defining, operationalizing, and using involvement in advertising research: A review. *Journal of Current Issues & Research in Advertising*, 15(1), 21–57.
- Nadkarni, S., & Gupta, R. (2007). A task-based model of perceived website complexity. *MIS Quarterly*, 31(3), 501–524.
- Nicolaou, A. I., & McKnight, D. H. (2006). Perceived information quality in data exchanges: Effects on risk, trust, and intention to use. *Information Systems Research*, 17(4), 332–351.
- Oreg, S., & Sverdluk, N. (2014). Source personality and persuasiveness: Big five predispositions to being persuasive and the role of message involvement. *Journal of Personality*, 82(3), 250–264.
- Park, I., Sharman, R., Rao, H. R., & Upadhyaya, S. (2007). The effect of spam and privacy concerns on e-mail users' behavior. *Journal of Information System Security*, 3(1), 39–62.
- Pavlou, P., & Gefen, D. (2004). Building effective online marketplaces with institution-based trust. *Information Systems Research*, 15(1), 37–59.
- Payne, J. W. (1982). Contingent decision behavior. *Psychological Bulletin*, 92, 382–402.
- Peattie, K., & Peattie, S. (2009). Social marketing: A pathway to consumption reduction? *Journal of Business Research*, 62(2), 260–268.

- Renaud, K., Ramsay, J., & Hair, M. (2006). "You've got e-mail!"... shall I deal with it now? Electronic mail from the recipient's perspective. *International Journal of Human-Computer Interaction*, 21(3), 313–332.
- Reynolds, N., & Ruiz de Maya, S. (2013). The impact of complexity and perceived difficulty on consumer revisit intentions. *Journal of Marketing Management*, 29(5–6), 625–645.
- Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer, C. (1998). Not so different after all: A cross-discipline view of trust. *Academy of Management Review*, 23(3), 393–404.
- San Martín, S., Camarero, C., & José, R. S. (2011). Does involvement matter in online shopping satisfaction and trust? *Psychology & Marketing*, 28(2), 145–167.
- Shiau, W., & Luo, M. M. (2010). Continuance intention of blog users: The impact of perceived enjoyment and user involvement. In *PACIS 2010 proceedings*. Paper 85. <<http://aisel.aisnet.org/pacis2010/85>>.
- Tenenhaus, M., Amato, S., & Esposito Vinzi, V. (2004). A global goodness-of-fit index for PLS structural equation modelling. In *Proceedings of the XLII SIS scientific meeting* (Vol. 1, pp. 739–742).
- Todd, P., & Benbasat, I. (1992). The use of information in decision making: An experimental investigation of the impact of computer-based decision aids. *MIS Quarterly*, 16(3), 373–393.
- Van der Heijden, H., Verhagen, T., & Creemers, M. (2003). Understanding online purchase intentions: Contributions from technology and trust perspectives. *European Journal of Information Systems*, 12(1), 41–48.
- Wang, Y. D., & Emurian, H. H. (2005). An overview of online trust: Concepts, elements, and implications. *Computers in Human Behavior*, 21(1), 105–125.
- Warshaw, P. R., & Davis, F. D. (1985). Disentangling behavioral intention and behavioral expectation. *Journal of Experimental Social Psychology*, 21(3), 213–228.
- Weisberg, J., Te'eni, D., & Arman, L. (2011). Past purchase and intention to purchase in e-commerce: The mediation of social presence and trust. *Internet Research*, 21(1), 82–96.
- West, P., & Wilson, E. V. (1995). A simulation of strategic decision making in situational stereotype conditions for entrepreneurial companies. *Simulation and Gaming*, 26(3), 307–327.
- Wilson, E. V. (2002). Email winners and losers. *Communications of the ACM*, 45(10), 121–126.
- Wilson, E. V., & Addo, T. B. A. (1994). The joint effects of interactions between data display and task variables on task performance. In J. I. DeGross, S. L. Huff, & M. C. Munro (Eds.), *Proceedings of the 15th international conference on information systems* (pp. 241–353). Vancouver, B.C.
- Wilson, E. V., & Lankton, N. K. (2012). Some unfortunate consequences of non-randomized, grouped-item survey administration in IS research. In *Proceedings of the 2012 International Conference on Information Systems (ICIS)*, Orlando, FL.
- Wilson, E. V., & Lu, Y. (2008). A communication goals model of compliance-gaining in computer-mediated communication. *Computers in Human Behavior*, 24, 2554–2577.
- Wilson, E. V. (2015). Understanding how message receivers' communication goals are applied in online persuasion. In T. MacTavish & S. Basapur (Eds.), *Proceedings of persuasive 2015 conference*. Chicago, IL (USA), June 4–5, 2015. *Lecture Notes in Computer Science*. London: Springer.
- Wilson, E. V., & Sheetz, S. D. (2008). Context counts: Effects of work vs. non-work context on participants' perceptions of fit in email vs. face-to-face communication. *Communications of the Association for Information Systems*, 22(17), 311–338.
- Wilson, E. V., & Zigris, I. (2001). Interpersonal influence goals and computer-mediated communication. *Journal of Organizational Computing and Electronic Commerce*, 11(1), 59–76.
- Wymer, W. (2010). Rethinking the boundaries of social marketing: Activism or advertising? *Journal of Business Research*, 63(2), 99–103.
- Yzer, M. C., Hennessy, M., & Fishbein, M. (2004). The usefulness of perceived difficulty for health research. *Psychology, Health & Medicine*, 9(2), 149–162.
- Zaichkowsky, J. L. (1985). Measuring the involvement construct. *Journal of Consumer Research*, 12, 341–352.
- Zaichkowsky, J. L. (1986). Conceptualizing involvement. *Journal of Advertising*, 15(2), 4–14.
- Zaichkowsky, J. L. (1994). The personal involvement inventory: Reduction, revision, and application to advertising. *Journal of Advertising*, 23(4), 59–70.