



Limitations of the Use of E-Mail as Communication Strategy in Downstream Social Marketing for the People from Espírito Santo- Brazil

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Abstract

Objective: Based on social cognitive theory, this study has three objectives: i) identify receivers' attitudes regarding the decision to read or delete a message sent via e-mail; ii) discuss the perceived intrusiveness in the intentions of receivers to respond to the appeals of the message; and iii) identify cognitive factors that predict receivers' intention, after deciding to read, toward compliance with an e-mail appeal.

Methodology: It is quantitative, cross-sectional research with students from a higher education institution, in the state of Espírito Santo, Brazil. The data were interpreted through three analyses: structural equation modeling, Probit and cross-frequency.

Originality / relevance: This research advances the exploratory study of Wilson et al. (2015) by analyzing the attitudes of email recipients based on permission, in addition to considering the perceived intrusive aspect.

Results: Evidence show that, although half of the respondents chose to read the e-mail message, their perception of little utility, relevance, and familiarity with the subject may have contributed to negative attitudes towards e-mail. This perception may be interfering with the respondents' social cognitive factors, preventing them from changing and maintaining new attitudes, especially in regions with low per capita income.

Theoretical contributions: The focus of downstream social marketing lies in changing individual behaviour, therefore, reliance on communication strategy is based on sending a social marketing message via e-mail only and may limit its effectiveness to change behaviour, especially to help people in other continents.


Management contributions: Results can also act as contributory factors for the formulation of more effective social marketing strategic actions to instigate new attitudes and behaviours, regarding the help of strangers.

Keywords: Attitudes. Behaviour change; Social cognitive theory; Downstream marketing; Decision to read the e-mail.

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1 Introduction

Based on the Cognitive Social Theory, this study investigates the attitudes of individuals when using as communication strategy, only sending social marketing messages by e-mail.

Social marketing initiatives are used by many non-governmental and non-profit private organizations and focus on behavior changes to increase wellbeing of individuals, groups, and society (Brennan & Binney, 2010; Inoue & Kent, Peattie & Peattie, 2009). The primary objective of these initiatives is social change and. behavior change involves changing attitudes and beliefs (Dibb, 2014; Rangun & Karim, 1991). Thus, social marketing acts as a facilitator to generate positive behavior by prompting people to give up negative habits or to reduce habits considered “comfortable” (Dann, 2010; Fox & Kotler, 1980). Such initiatives can be applied to a range of social issues (Peattie & Peattie, 2009), for example: breastfeeding (breastfeeding is good for the health of the mother, baby and the planet); healthy diet (#foodtreatynow); medical examinations (Pink October, Blue November); financial education promoted by commercial banks (Bacen, Itaú); humanity assistance (Médecins Sans Frontières, International Aid), hiring inmates of the prison system (Social Responsibility and Resocialization Program in the state of Espírito Santo), among others.

While in upstream, the focus of social marketing is on environmental factors that generate social problems, targets social marketing actions (Gordon, 2013), downstream social marketing, sense of clients, and individual behavior change (Wymer, 2011). In this case, trust in promotional strategies transfers responsibility for responding to campaign appeals (Rundle-Thiele et al., 2013). To be successful, social marketing actions entail encouraging people to change behaviors that may not be relevant or not in agreement with the individual’s personal motivations (Brennan & Binney, 2010).

For this reason, several scholars defend the use of traditional or commercial marketing concepts and techniques to achieve social goals (Dibb, 2014 and Smith & Sullivan, 2014). Among these techniques, communication is one of the ways to promote social marketing actions and instigate new attitudes and behaviors. It aims to “encourage the acceptance, adoption and maintenance of a particular proposition or social behavior” (Peattie & Peattie, 2009, p.264). This

is the most widely used marketing mix element in social marketing (Kubacki, Rundle-Thiele, & Buyucek, 2015).

Social marketing has used non-mainstream or unconventional actions, through new media technologies to promote their campaigns to encourage the adoption of new behaviors, as a result, a discussion can be made with the support of Social Theory Cognitive. It is a theoretical lens that favors social learning and guiding changes in behavior (Hill & Moran, 2011), and is based on actions of attention, retention, behavior reproduction and motivation (Bandura, 2004, 1977). According to this theory, human behavior, the environment in which the individual is inserted, and social and psychological factors are interdependent elements. New behaviors are acquired through the interaction between the individual and the environment (Bandura, 1977).

In this research, the environment concerns new media, such as internet, e-mail, and social networks (Peattie, 2007). Among these media, due to the interactivity and cost-benefit nature of e-mail, mobile marketing has attracted the attention of different audiences (Kumar, Zhang, & Luo, 2014; Shankar et al. al., 2010). For example, tobacco companies, given the constraints of marketing actions, direct e-mail marketing is one of the ways to reach their consumers and comply with imposed regulations (Brock et al., 2016, Lewis & Ling, 2015).

Thus, in this research, behavioral change of individuals is the product of social marketing (Kotler & Lee, 2008; Andreasen, 2002). According to the argument of Thackeray, Fulkerson, & Neiger (2012, p. 96), "relying on communication as a behavior change strategy may not be a source of competitive advantage for social marketing and may limit its effectiveness as a strategy of social change." This research has three objectives: i) identify receptors' attitudes regarding the decision to read or delete the social marketing message sent via e-mail; ii) discuss the intrusiveness perceived in recipients' intentions to respond to the appeals of the message sent by e-mail; iii) identify cognitive factors that predict the intention of the recipients to respond to the calls of the social marketing message sent by e-mail after reading the message.

On the use of e-mail to promote social marketing campaigns, Wilson et al. (2015), have shown that five cognitive factors - benefit goals, cost goals, message engagement, perceived efforts, and trust and confidence in the sender of e-mail - are predictors of consumers' intent to respond to e-mail social marketing. However, this study does not address permission-based e-mail.

To clarify, the attitudes of decision-makers in reading or deleting marketing messages sent by e-mail, after reading the subject, were not evaluated. Studies have shown that most receivers, decision makers, tend to have negative attitudes toward e-mail marketing messages (Andersson, Fredriksson, & Berndt, 2014). It also does not consider the perceived intrusive aspect, which has significant effects on consumers' intentions regarding advertising messages received by e-mail (Chang, Rizal, & Amin et al., 2013). Finally, although in social marketing, e-mail has often been used to attract consumers, studies on the use of this medium to support this field of knowledge are still lacking. Not to mention, the need to learn more about the underlying cognitive processes to improve the effectiveness of social marketing actions (Wilson et al., 2015).

2 The connection between the use of e-mail as a communication strategy and social cognitive theory

Actions of social change are based on the principles, concepts and techniques of commercial marketing (Silva et al., 2013, Kotler & Zaltman, 1971). The main objective of social marketing is to promote changes in both attitudes and behaviors at the individual and societal levels (Wymer, 2011; Opel et al., 2009; Peattie & Peattie, 2009; Donovan, 2011).

Although there are limitations to applying such principles and techniques to certain types of situations, causes, or social problems (Wood, 2008), there have been suggestions for a lesser adoption of the concepts of commercial marketing and a greater use of the concepts of other areas of knowledge (Wymer, 2011). Promotion is one of the most used concepts and techniques of traditional or orthodox marketing (Kubacki et al., 2015, and Peatty & Peatty, 2009), and is part of the social marketing composite, formed by the combination of the traditional 4Ps - social product, social price, social positioning, and social promotion (Wood, 2008), and public policies and partnerships, among various social actors (Wasan & Tripathi, 2014).

In the new environment of interactive media technologies available to social marketing (Hill & Moran, 2011), for promotion, e-mail is a means of communication whose contributory factors for its use as one of the main channels of communication (Kumar et al., 2004; Shankar et al., 2004), and the interaction between the two types of interaction (Wilson et al., 2015; Cases et al., 2012).

In 2017, the daily commercial e-mail audience was 269 billion messages, and by 2021, numbers are estimated to reach 320 billion messages, an average annual growth of 4%. The number of users worldwide is about 3.7 billion in 2017, and could reach 4.1 billion in 2021, which is an average annual growth of 3%. Despite the growth of other media, such as social networking and instant messaging, e-mail usage remains strong in the business world, and is primarily used in online transactions (The Radicati Group, 2017).

In social marketing studies, to promote behavioral changes, for example, in the health area, Cognitive Social Theory has been one of the most adopted as a theoretical framework to understand such interventions (Webb et al., 2010), through new media technologies, such as e-mail (Hill & Moran, 2011). Personal contacts, via e-mail, are one of the supports to facilitate social marketing actions (Webb et al., 2010). The adoption of this theory is adequate to the context of the use of new technologies by social marketing, to benefit social learning and, therefore, behavior change processes (Hill & Moran, 2011). In this theory, “people are seen as products and producers of the environment in which they live, and can act as agents, that is, with the intentionality that their action produces an effect on the environment and is transformed by it” (Azzi, 2011, pg 211).

Bandura (2001), the forerunner of studies on Social Cognitive Theory, explains the adoption of the agency perspective for the criteria of self-development, adaptation and behavior change. To be an agent, one must understand the processes of how to influence one's functioning and intentionally conduct the aspects of life. According to this theory, in the social environment, learning occurs due to continuous interaction between individuals, behavior, and the environment. Behavior change, or the acquisition of new behaviors is not due to any environment or people or behavior, but rather to the interaction of all these elements. This theory emphasizes that social factors, such as social influence and reinforcement, play a fundamental role in acquiring, maintaining and changing behavior. In this sense, individual behavior is the result of reinforcement, individual experiences, aspirations, etc. Some of the key concepts of Cognitive Social Theory are modelling (observation learning), outcome expectations, self-efficacy, goal setting, and self-regulation (Bandura et al., 2008).

For social learning through observation to occur, four actions are triggered: i) attention, which is the ability to observe and capture a model behavior; ii) retention, which is the storage of

the acquired information or observed behavior; iii) reproduction, or replication of observed behavior; iv) motivation, which is the will to perform the behavior. This motivation, in turn, can be triggered by internal factors (expectations, emotions, positive or negative outcomes, punishments) as well as by external factors (incentives, positive reinforcements) (Bandura, 2004, 1977).

In the context of social marketing, based on the assumption that “the view of man in the Cognitive Social Theory is that of an individual that is constituted in social systems and it is through the exchanges with this social environment that adaptation and change occur” (Azzi, 2010: 254), it is possible to understand how people react to the stimuli of the media, and in this case, the e-mail, and how they respond to promotional appeals. Thus, it is understood that some cognitive factors can act as facilitators of consumers ‘willingness to respond to the appeals of a message sent by e-mail, namely: i) recipients’ perception of benefits (gains, positive feelings) and costs (adversities generated by the message, negative feelings) in responding to the appeals of an e-mail message; ii) trust, which is the belief in the loyalty and honesty of the e-mail issuer; iii) involvement with the message, which is the perception about the relevance of the subject (importance, value, need, etc.); and iv) perceived efforts (difficulties, facilities, and the search for a balance of factors that are not attainable at the same time) to meet such calls (Wilson et al., 2015).

For the purposes of behavior change, recruitment, and retention, there are opportunities when it comes to using new media tactics, as emphasized by Hill and Moran (2011, p. 824).

New media allow constant communication with consumers and provide opportunities for individuals to receive feedback and thus serve as a way to encourage behavior change on a regular basis. Studies have found that the use of a personalized “trigger” of new media (e.g. e-mail or text message) has been effective in influencing consumer involvement in interventions and keeping people motivated to act.

2.1 The Factor Permission to Receive E-mail Messages

Even though it is a convenient communication tool, e-mail can generate dissatisfaction and annoyance due to the exaggerated number of correspondences received daily (Andersson et al., 2014). In the relationship between sender and recipient, the permission factor is one of the

components that can define the success of an e-mail marketing message. Being able to differentiate permission-based e-mail from the practice of spamming can be decisive for businesses. Permission-based e-mail is by far the best-performing for both marketers and users (Ellis-Chadwick; Doherty, 2012; Dufrene et al., 2005).

When it comes to the user's decision regarding the treatment of an e-mail message received, a concept used by e-commerce and online marketing helps to understand attitudes. Unsolicited Commercial Communication, also known as spam, which is also known as junk mail, scam, malicious, offensive or unwanted messages that directly interferes with the privacy of the average user of the internet, with respect to the user's expenses, either by reading or deleting the message, or by actually spending its connection (Chang et al., 2013, Moustakas et al., 2006). Based on loss that the consumer has, the idea of rejecting an electronic correspondence assumes a coherent justification, therefore, it is considered as one of the reasons that leads most decision makers to have negative attitudes toward marketing messages by e-mail, deleting them without opening them (Andersson et al., 2014).

User concerns about malicious content spread across the internet are mitigated by software and browser technologies designed to address these threats. Even so, e-mail is still the form of message that manages to have a high penetration rate. Those accustomed to spam develop a series of tactics to minimize this hassle (Kumar et al., 2014; Shankar et al., 2010).

The decision to read or ignore e-mail is based on a quick and almost instinctive analysis by the recipient, which is based primarily on their previous experiences, the sender's degree of knowledge, and the perceived interest in the subject line (Renaud et al., 2006). The work of Andersson et al. (2014), found that attitudes are typically not positive for this form of communication, and it is necessary to develop ways to generate positive attitudes by establishing relationships with the recipients of the e-mail. Attitudes were more negative in the age group of 40 and 49 because they understood that younger people are better able to deal with the new technologies.

2.2 The Intrusiveness Factor

In this perspective, perceived intrusiveness assumes relevance in the efficacy of the message, which refers to “distraction, forced disturbance and intrusive and obstructive interference” or “the cognitive process of an individual in which he may perceive something is disruptive to his process or thought activity” (Li et al., 2002, pp. 39-40). On the other hand, if the recipient perceives the value of the message (Edwards et al., 2002), or its utility (Merisavo & Raulas, 2004), the recipient may have positive feelings and attitudes.

The optional acts of “disregard,” “block,” and “exclude,” bring other concerns, such as the loss of an important messages due to one of these filtering processes. This generates a feeling of discomfort and a sense of disrespect for their privacy (Morimoto & Chang, 2006).

The pressure on the content sent by the sender is a factor described by Micheaux (2011), which describes the expected utility in relation to the utility perceived by the recipient. What determines the difference between the two utilities is exactly the degree of relevance at first sight in relation to the content of the e-mail. If the expected content proves useful, the perceived pressure decreases, while the discovery of a utility considered low increases the pressure. In response to this, the consumer tends to have a reaction that will culminate in negative attitudes toward the brand. The studies conducted by Hsin Chang et al. (2013), have demonstrated the importance of the utility question in reducing the perceived intrusiveness factor, based on the premise that the more an e-mail is relevant, the less intrusive it seems to the recipient.

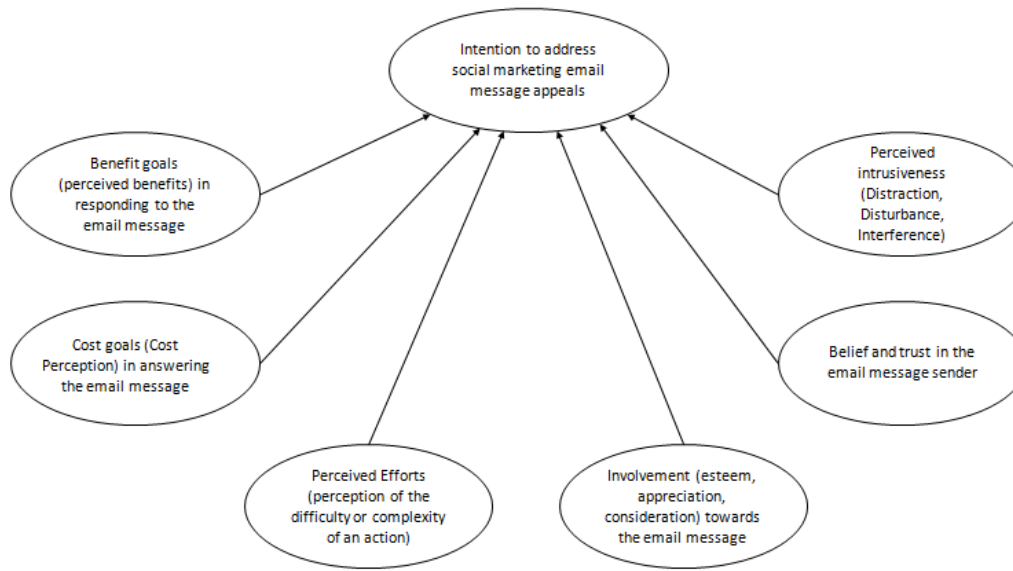


Figure 1 – Theoretical Model
Figure 1 presents the theoretical model of this research.
Source: the authors

3 Method

We conducted a quantitative, cross-sectional study, whose subjects were students of a higher education institution.

For data collection, a questionnaire was used based on the scale of Wilson et al. (2015), with five cognitive factors: BG: benefits goals (perceived benefits) in responding to the e-mail message (three items); CG: cost targets (cost perception) in responding to the e-mail message (three items); TB: belief and trust in the sender of the e-mail message (three items); EP: perceived efforts, i.e., the perception of the difficulty or complexity of an action (four items); and involvement (esteem, appreciation, consideration) with the e-mail message (nine items), in addition to the IC construct: intention to respond to e-mail message appeals (four items). The responses were measured by a Likert scale of seven points: 1 [totally disagree] to 7 [totally agree]. The exception is the MI construct and one of the IC construct items, where a categorical scale was used to measure opinions nominally (Hair Jr. et al, 2005). We also included the perceived intrusiveness factors (five items), from Cheng et al. (2013), and the attitudes of individuals when reading messages sent by

e-mail (three items), from the scale of Andersson, et al. (2014), both measured by a categorical scale to measure opinions nominally. The questionnaire was complemented with questions about respondent characterization data - gender, age, income, city of residence, area of studies. The same e-mail message used by Wilson et al. (2015), which refers to a social marketing action aimed at helping African students.

For all the factors, reverse translation was done to generate a questionnaire as faithful as possible to the original study, following the steps: i) the original was translated into Portuguese by the researchers; ii) this manuscript in Portuguese was re-translated into English by an experienced translator in scholarly articles; iii) the two manuscripts were compared to eliminate discrepancies and make adaptations. A pre-test was then applied to verify their understanding and consistency (Hair Jr. et al., 2005), together with a sample of 62 respondents. After verifying there were no problems of understanding, the questionnaire was made available on the Google Forms platform and sent via e-mail directly to the students. Therefore, it is a non-probabilistic sample, due to accessibility, given the researchers' ability to contact students.

A total of 349 valid responses were received, following the verification of the absence of atypical observations, such as analysis of missing data and data that are outside the normality curve (outliers) which could impact data analysis and results (Hair Jr. et al. 2009). After characterization of the sample profile (Table 1), three data analysis procedures were performed.

First, a Probit regression analysis (Linear Probability Model) was made, which refers to a binary response model, since the researcher's interest is in the probability of a response. A binary variable takes only zero values and one is an example of a bounded dependent variable (VDL). This model is often applied in cross-sectional studies (Wooldridge, 1960), which is the case of this research, whose objective was to know the probability of occurrence of reading an e-mail message requesting help for African students or not to read such message (ignore it or consider it as spam). In this analysis, the dependent variable was measured in: (1) not reading the message; (0) read the message. The independent variables include demographic categorical variables: city where they reside, income, marital status, gender and level of schooling (Table 2).

Next, a cross-frequency analysis was performed to evaluate whether there is a homogeneous behavior among several variables, simultaneously (Table 3). In this research, this is a multidimensional, cross-table, in which the 349 valid responses were classified according to the

three decision types when receiving the message: read the e-mail message, ignore the message, and erase it or consider it as spam; and according to the five types of feelings about the subject of the message: it interferes (affects), I feel forced to read, it is inconvenient, it is intrusive (it was not authorized), it is disturbing (Agresti, 2002).

Finally, structured modeling analysis (Tables 4 and 5) was performed to analyze the theoretical model to identify cognitive factors that predict the recipients' intention to respond to the social marketing message sent by e-mail after the decision-making to read the message. This model of analysis allows the incorporation of latent constructs represented by several observable variables, improving the statistical estimation, besides considering some degree of measurement error, not considered in other techniques of multivariate data analysis, such as multiple linear regression (Hair Jr et al., 2009).

Calculations were made with the support of Stata / IC 12.1 and Excel.

4 Data analysis

4.1 Individual attitudes to the decision to read or delete the marketing message sent by e-mail

Table 1 presents the sample of students, predominantly from the human and exact sciences, female, young, with a low income of up to R \$1,500 and residents of the Metropolitan Region of Greater Vitória. These results present similarity between the groups represented by those who decided to read and delete the social marketing message sent by e-mail.

Table 1 - Demographic characterization of the sample

		Total	Read the message	Did not read the message
		%	%	%
Decision to read the subject of the e-mail message	Read message	54.0	-	-
	Ignore message and delete	23.0	-	-
	Consider it as spam	23.0	-	-
Gender	Feminine	67.0	69.0	65.0
	Masculine	33.0	31.0	35.0
Ages	Between 18 and 25 years	54.0	53.0	54.0
	Between 26 and 35 years	39.0	39.0	38.0
	Between 36 and 45 years	6.0	7.0	6.0
	Up to 46 years	1.0	1.0	2.0
Montly Incomes	Between R\$620 and R\$1,000	29.0	36.0	19.0
	Between R\$1,001 and R\$1,500	29.0	29.0	29.0
	Between R\$1,501 and R\$ 2,000	15.0	15.0	17.0
	Between R\$2,001 and R\$3,000	15.0	13.0	17.0
	Over R\$3,001	12.0	7.0	18.0
City	Vila Velha	71.0	76.0	65.0
	Vitória	10.0	6.0	16.0
	Serra	10.0	9.0	12.0
	Cariacica	7.0	8.0	5.0
	Guarapari + Interior do estado do Espírito Santo	2.0	1.0	2.0
Field of study	Human Sciences	62.5	57.0	69.0
	Exact Sciences	35.5	41.0	29.0
	Computing Sciences	1.0	1.0	1.0

Healthy Sciences	0.6	1.0	0
Biological Sciences	0.4	0	1.0

Source: research data

Of these respondents, 54% decided to read the e-mail message and 46% chose to ignore it or consider it as spam. Regarding the demographic variables to explain the probability of not reading the message, the evidence, according to Table 2, shows that only the demographic variable income was significant in the Probit model. If the individual has an income between R\$1,001 and R\$1,500, the probability was reduced by 18% that the message would be ignored. If the individual has an income between \$620 and \$1,000, it decreases the probability by 27% of ignoring the message.

Table 2 – Probit Model – Average marginal effect

Demographic variables	Delta-method					
	dy/dx	Standard error	z	P> z	[95% Trust]	Interval
Cariacica	-.1785501	.2545834	-0.70	0.483	-.6775244	.3204242
Serra	-.0112149	.2516933	-0.04	0.964	-.5045246	.4820949
Vila Velha	-.0853354	.2433338	-0.35	0.726	-.5622609	.39159
Vitória	.018732	.2519167	0.07	0.941	-.4750157	.5124798
Between R\$620 and R\$1000	-.2718149	.087071	-3.12	.002	-.442471	-.1011588
Between R\$1,001 and R\$ 1,500	-.1803326	.0861129	-2.09	.036	-.3491108	-.0115544
Between R\$1,501 and R\$ 2,000	-.0804459	.0921202	-.87	.383	-.2609981	.1001063
Between R\$2,001 and R\$ 3,000	-.1231916	.0936898	-1.31	.189	-.3068202	.060437
Between 18 and 25 years old	.1725189	.1861992	.93	.354	-.1924247	.5374626
Between 26 and 35 years old	.0721987	.1856068	.39	.697	-.291584	.4359814
Between 36 and 45 years old	-.0661405	.2017439	-.33	.743	-.4615512	.3292703
Married	-.0254945	.1930518	-.13	.895	-.403869	.35288
Divorced	-.2695245	.2193671	-1.23	.219	-.6994762	.1604271
Single	-.1056962	.1869126	-.57	.572	-.4720381	.2606457

Gender	-.0146211	.0469206	-.31	.755	-.1065838	.0773415
Higher Education	-.0804801	.1338781	-.60	.548	-.3428764	.1819163
It interferes (to affect)	-.3932615	.0856276	-4.59	.000	-.5610885	-.2254345
I feel compelled to read the message	-.3429032	.089106	-3.85	.000	-.5175477	-.1682587
It is inconvenient	.1071824	.0990404	1.08	.279	-.0869331	.301298
Is intrusive (not allowed)	.0072269	.0976696	.07	.941	-.184202	.1986559

Notes:

Dependent Variables: (1) Do not read the message; (0) Read the message.

This table shows estimates of the model whose equation is: Dependent variable (Intention to respond to e-mail message appeals) = β_1 *Cariacica + β_2 *Serra + β_3 Vila Velha + β_4 *Vitória + β_5 *Between R\$620 and R\$1,000 + β_6 *Between R\$1,001 and R\$1,500 + β_7 *Between R\$1,501 and R\$2,000 + β_8 *Between R\$2,001 and R\$3,000 + β_9 *Between 18 and 25 years old + β_{10} *Between 26 and 35 years old + β_{11} Between 36 and 45 years old + β_{12} Married + β_{13} Divorced + β_{14} Single + β_{15} Gender + β_{16} Higher Education + β_{17} *It interferes (to affect) + β_{18} *I feel compelled to read the message + β_{19} *It is inconvenient + β_{20} *It is intrusive (not allowed); dy/dx = the mean marginal effect (impact of explanatory demographic variables on the dependent binary variable, standard error of coefficients needed to compose coefficients, z-statistic (quartile of probability used to calculate p-value); $P > |z|$, which is the p-value considering p-value <0.05; and the confidence intervals for each of the variables, if other samples are used.

4.2 Effects of perceived intrusiveness on recipients' intentions to respond to e-mail message appeals

According to Table 3, among respondents who elected to read the message, 29% said the message affects them in some way, that is, it interferes in their cognitive processes - interrupts the fulfillment of their goals and/or their thoughts (Li et al., 2002), at the moment they are triggering their devices, such as computers or cell phones. 16% of the respondents felt compelled to read the message. One of the reasons may have been the content or relevance (Micheaux, 2011) of the message: donating school books to students in Africa, reducing the pressure to have negative attitudes. For 7% of the participants in the survey, the message is indeed inconvenient and its receipt has not been authorized.

Table 3 - Cross-frequency - decision when receiving the e-mail message

	Read the e-mail message	Ignore message and delete	Consider it is <i>spam</i>	Total
It interferes (to affect)	29%	3%	5%	37%
I feel compelled to read it	16%	3%	2%	22%
It is inconvenient	3%	10%	5%	18%
It is intrusive (not allowed)	4%	4%	8%	16%
It is disturbing	2%	2%	2%	7%
Total	54%	23%	23%	100%

Source: research data

Among those who decided not to read the message (ignore it or consider it spam), the main reasons are: 15% thought it inconvenient or inappropriate; 12% thought it was an intrusive message because they did not authorize the receipt, and 8% think the message has disrupted their cognitive processes. Only 3% of respondents felt compelled to read the message. Finally, only 2% of respondents who read the message and 4% of those who decided not to read the message, considered the message to be disturbing, causing distraction (Li et al., 2002), that is, it can cause embarrassment or leave the receiver confused as to their reaction. Message motivation, donor-driven behavior, may have triggered this reaction.

The individual's feeling of reading the message, whether the question interferes (affects) their cognitive processes in some way, decreases the probability that they ignore or consider the message as spam, as shown in Table 2. If the feeling of the individual, when reading the message, is a feeling of being forced to read the message, this decreases the likelihood of ignoring the message or considering the message to be spam. All evidence *ceteris paribus*, which states that all other conditions that may influence this decision.

4.3 Cognitive factors that predict the intention of the recipients to respond to the appeals of the message sent by e-mail after the decision to read the message

In the confirmatory factorial analysis, although the mean variance extracted for most of the constructs is at least 0.5, with the exception of benefit and cost targets, the convergent validity of the model is supported primarily by the reliability coefficient (CR) of at least 0.7 for all constructs, as shown in Table 4, and also by Cronbach’s alpha coefficient of 0.7 for most constructs, as recommended by Fornell and Lacker (1981).

A plausible explanation for these results may be the sample size for the group that chose to read the e-mail message (n = 190), noting that the total sample is 349 respondents, an average of 7.34 observations per variable, meeting the requirements recommended by Hair Jr. et al. (2009). In addition, it is a replication study aiming at a generalization of the results and extension of the exploratory research of Wilson et al. (2015), in which incremental methodological procedures were employed (Tsang and Kwan, 1999), as explained in item 3 of this section.

Table 4 – Summary measures for the measurement model

	Mean	Standard deviation	Cronbach’s Alpha	CR	IC	BG	CG	EP	TB	MI	INT
IC	3.7	1.2	0.6	0.8	0.5	0.9	0.0	0.0	0.5	0.2	0.1
BG	4.6	1.4	0.7	0.7	0.9	0.4	0.0	0.0	0.5	0.2	-0.3
CG	3.5	1.4	0.8	0.7	-0.2	0.0	0.4	0.4	0.0	0.0	0.0
EP	3.6	1.0	0.7	0.7	-0.2	0.0	0.7	0.5	0.0	0.0	0.2
TB	4.1	1.5	0.7	0.8	0.7	0.7	0.0	0.0	0.6	0.1	-0.3
MI	0.8	0.2	0.7	0.9	0.5	0.4	-0.1	-0.2	0.3	0.6	-0.3
INT	2.6	1.8	0.7	-	-0.4	-0.3	0.3	0.2	-0.3	-0.3	-

Notes: Mean variance extracted from the constructs is shown diagonally in bold. Dependent variable is IC: Intention to respond to e-mail message appeals. Independent variables are BG: Benefit goals; CG: Cost targets; EP: Perceived Efforts; TB: Belief and trust in the e-mail message sender; MI: Engagement with the e-mail message; INT: Intrusiveness is an observed variable and not a construct.

The discriminant validity was also supported because estimates of extracted variance are larger than the estimates of square correlation between the constructs representing the independent variables. In addition, most of the standard factor loads are above 0.5 (MI1 = 0.9, MI2 = 0.7, MI3 = 0.7, MI7 = 0.9, MI8 = 0.6, MI9 = 0, 7, BG1 = 0.8, BG2 = 0.7, BG3 = 0.5, CG1 = 0.4, CG2 = 0.8, CG3 = 0.6, EP1 = 0.9, EP2 = 0.7, EP4 = 0.4, TB1 = 0.9, TB2 = 0.6, TB3 = 0.9, IC1 = 0.5, IC2 = 0.8, IC3 = 0.8), according to the practical rule (Hair Jr et al., 2009). Two loads, with estimates below 0.5 (CG1: 0.4, EP4 = 0.4), were maintained. This decision was taken to meet the practical rule of at least three indicators for each construct, as recommended by Hair Jr. et al. (2009).

Finally, based on the p-value of Table 5, the estimated coefficients were significant at 99% confidence for three factors, suggesting that the benefit targets (BG) impact the intention to meet the calls of the marketing e-mail message (78%), belief and trust in the message sender (TB) by 33% and involvement with the e-mail message (IM) by 18%.

Table 5 - Summary measures for the structural model

		Standardized regression coefficients	OIM Standard error	Z	p-value
	← Benefit goals	0.78	0.76	10.25	*0.000
	← Cost targets	-0.15	0.09	-1.65	0.098
Intention to read the e-mail message	← Belief and trust in the sender	0.33	0.08	3.94	*0.000
	← Perceived efforts	-0.57	0.08	-0,69	0.491
	← Engagement with the message	0,18	0.07	2.58	*0.010
	← Intrusiveness	-0,12	0,69	-1,73	0,083

Notes: IOM - Matrix of information observed; Z: value t that measures the size of the difference in relation to the variation in the sample data; p-value: level of significance used to test the hypotheses of the model (p-value <0.01) *.

In particular, in this sample, with regard to engagement with the marketing message sent via e-mail, the evidence shows there is a predominance of positive feelings over negative feelings, as shown in Table 6. The exception is negative feeling in which the message is seen as appealing to 62% of respondents.

Table 6 - Feelings about engagement with the marketing message sent by e-mail

Positive feelings (%)		Negative feelings (%)	
Important	89.5	Not important	10.5
Interesting	89.0	Boring	11.0
Relevant	89.5	Irrelevant	10.5
Exciting	50.5	Not exciting	49.5
Nothing racy	38.0	Racy	62.0
Fascinating	78.0	Mundane	22.0
Valuable	88.0	Without value	12.0
Compelling	77.0	Not compelling	23.0
Necessary	86.0	Not necessary	14.0

Source: research data

5 Discussion

Returning to research objective, what are the attitudes of individuals when using as a communication strategy the sending of a social marketing message by e-mail only?

The results show that half of the respondents opted to read the e-mail message and one reason may have been the motivation of the message: donating school books to students in Africa. Thus, the content of the message may not have been perceived by the receiver as exaggerated, confusing, or false (Li et al., 2002). Another reason may have been the perception of relevance to the content, contributing to the reduction of a possible negative attitude (Micheaux, 2011) in relation to the e-mail message.

This may explain why those who read the message had the perception of intrusiveness more focused on the obligation to read the message or that there has been an interference in their cognitive processes. That is, an interruption in the fulfillment of their goals and/or the route of their thoughts (Li et al., 2002), at the time they were triggering their devices, such as computers or cell phones. Few have perceived it as untimely or unlicensed (Cheng et al., 2013). On the other hand, the perception of the low utility or low relevance of the subject - African students need their

textbooks - may have contributed to an increase in the perception of intrusiveness (Chang et al., 2013), for those who did not read the message, who perceived it as untimely and not authorized. These feelings can be attributed to concerns about malicious content (Morimoto & Chang, 2006), since it is an e-mail whose sender is “book@tests2africa.com” and about helping strangers on another continent. According to the E-mail Statistics Report, “By 2017, the average number of successful malware attacks by e-mail is growing, even as anti-malware solutions become increasingly comprehensive and effective against the latest threats of malware.” (The Radicati Group, 2017).

As the decision to read or ignore e-mails is based on previous experiences, on the degree of knowledge and on the interest of message recipients (Renaud et al., 2006), respondents who chose not to read may also be unfamiliar with the thematic donation. In Brazil, there is still a long way to change people’s behavior so that they become more generous, because in the world ranking of donors, Brazil occupies the 75th position. In particular, in assisting strangers, it occupies the 54th position; in donation of money, the 85th position; and in giving time to volunteer work, 63rd position (Caf World Giving Index, 2017). This little familiarization may also explain why some of these students have difficulties in changing their behaviors, indicating few references and social influences in the environment in which they are inserted. The absence of such reinforcements prevents them from observing behaviors congruent to the donation, retaining them or reproducing them and, therefore, changing and maintaining new attitudes, beliefs and behaviors, as advocated by Cognitive Social Theory (Bandura, 2008; & Moran, 2011).

These results contradict the study by Andersson, Fredriksson and Berndt (2014), who found that most of the respondents had negative attitudes towards marketing messages received by e-mail. They have discussed attitudes toward e-mail marketing messages in general, through a survey, and not attitudes towards a specific social marketing message.

Evidence shows that, unlike the study by Wilson et al. (2015), which addresses neither permission-based e-mail nor the intrusiveness factor, only three factors influence the intention to respond to the appeals of the social marketing message sent by e-mail for the public from Espírito Santo. One of these factors refers to perceived benefit goals in relation to the e-mail message. In other words, when students feel that fulfilling the request for the e-mail message would be really

good for them, they are eager for the positive result from that message and are interested in the benefits that the message can have for them, to the e-mail message appeals. Another factor relates to the trust or belief in the loyalty and honesty of the sender of the e-mail message. Namely, the more confident they feel about the issuer, the more likely they will be in meeting that request. The greater the engagement with the message, i.e. the greater the perception of positive feelings, the more willing they will be to respond to the message (Wilson et al., 2015).

However, the cost goal factor was not significant, as in the study by Wilson et al. (2015), nor the factor of perceived efforts, contrary to what has been shown by these authors. This result is consistent with evidence that income was one of the demographic variables explaining the probability of not reading the message. One of the reasons may be the fact that 58% of the respondents are students with low incomes, up to R\$1,500, in addition to extra costs of courses, because it is a private higher education institution. The subject of the message says, "African students need their schoolbooks," and may have prompted respondents to feel they would have additional costs to buy or even send the books to the African continent. Moreover, as discussed above, the position occupied by Brazilians in the world donation ranking shows that they are not used to donating, and this may contribute to an increase in the perception of many efforts to complete the action of sending the books to Africa.

In this research, although respondents are attending a college course, regarding demographic variables, neither higher education nor age were statistically significant. The study by Andersson, Fredriksson and Berndt (2014), shows that more qualified people and a younger audience tend to have more positive attitudes concerning e-mail marketing messages because of technological skills. Older people tend to have negative attitudes toward e-mail marketing messages.

Results show that although half of the respondents chose to read the e-mail message, this discussion presents factors that contribute to limiting only the use of e-mail as communication strategy in downstream social marketing to the public of Espirito Santo: the practice of spamming - junk mail, scam, malicious, offensive or unwanted messages; the motivation of the message, its content and the perception of its relevance; the perception of intrusiveness; little familiarization with the theme of the social marketing message; poor perception of the benefits of responding to

the e-mail message; lack of confidence or belief in the loyalty and honesty of the sender of the message; or little involvement with the message or the perception of negative feelings.

This perception may be interfering with respondents' social cognitive factors, preventing them from changing and maintaining new attitudes, beliefs, and behaviors. As the focus of social marketing downstream is on changing individual behavior, trust in the communication strategy based only on sending a social marketing message by e-mail may be compromised, as asserted by Thackeray, Fulkerson, & Neiger (2012). That is, it can limit the effectiveness of a change of behavior and of the negative attitudes resulting from this means of communication. In this type of social marketing, the responsibility of responding to campaign appeals is transferred to individuals. It is recommended that it be a two-way trajectory based on communication, interaction, construction and maintenance of the relationship (Peattie & Peattie, 2009) between marketers and donors.

6 Final considerations

This discussion contributes to the downstream social marketing area by advancing the exploratory research of Wilson et al. (2015), using different and incremental methodological procedures, aiming to generalize and extend their results (Tsang and Kwan, 1999).

First, this empirical research shows there is a dichotomy between half of the sample reading the message and the other half who chose not to read the message, mainly due to the practice of spamming, spam, malicious messages, and offensive messages or not yet between the public of regions whose per capita income is low. In order to deal with this dichotomy, this research shows the return may be greater if social marketing professionals adopt other actions aimed at persuasion, education or communication (Trackera et al., 2012). It also contributes to the discussion on the differences between permission-based e-mails and spam, since there are few studies with this focus, as recommended by Hsin Chang et al. (2013). This dichotomy also shows that permission factor is one of the components that can define the success of a marketing message by e-mail, corroborating the studies of Kumar et al. (2014), and Shankar et al. (2010), when assessing the attitudes of

decision makers in reading or deleting marketing messages sent via e-mail, after reading the subject.

Second, this study discusses the perceived intrusive aspect regarding the message received by e-mail, as discussed by Hsin Chang et al. (2013). Thus, it is shown that respondents who have decided to read the message also perceive a forced, intrusive and obstructive distraction, disturbance or interference (Li et al., 2002), generating negative and positive attitudes (Edwards et al., 2002; Merisavo & Raulas, 2004). This result reinforces the need to develop two-way relationships (Peattie & Peattie, 2009), among social marketing professionals and donors or even partnerships among other social actors to add value, such as knowledge and skills to the project (Trackeray et al., 2012).

Third, the study also shows that income factor can impact donor behavior changes, also affecting the perception of efforts, including the costs to act. The original study was conducted in Australia, a country whose per capita family income in 2016 was \$29,720, while in Brazil in 2015 it was \$4,203 (Ceic Data, 2017), to maintain the same base of data. In particular, in the state of Espírito Santo, this income was approximately US \$3,705 or R \$1,157 (Ibge, 2017). It may be relevant to facilitate donor actions to minimize, mainly, the costs of adopting behavior of donation of tangible goods. This result reinforces the recommendation of Trackeray et al. (2012), to consider as a product of social marketing, not only behavior change, but also tangible items or services to support the adoption and maintenance of new attitudes, beliefs and behaviors, according to the Social Cognitive Theory. Agents involved need to understand the processes of how to influence one's behavior and intentionally conduct the aspects of life (Bandura, 2001). It is important to emphasize that the respondents were asked to indicate the main feeling of intrusiveness perceived when reading the subject of the message, before opening it.

This explanation is also plausible to understand why, by adding the intrusive aspect perceived in the model of structural relations proposed by Wilson et al. (2015), this was not significant. In this way, it shows that, considering e-mail is still a resource widely used by public organizations and agencies (Wilson et al., 2015; Andersson et al., 2014; Hsin Chang et al., 2013; Ellis-Chadwick; Doherty, 2012), this study helps academics and social marketing professionals learn more about the underlying cognitive processes to improve the effectiveness of social marketing actions (Wilson et al., 2015). In particular, for a greater understanding of the public's

motivation to perceive the relevance and usefulness of a particular message addressed to it, and how social marketing can use that information to foster new attitudes and behaviors.

Finally, since promotion, in particular, communication is one of the most widely used and advocated techniques of orthodox marketing in social marketing initiatives (Dibb, 2014, Kubacki et al., 2015, Smith & Sullivan, 2014), reflections may also have implications for traditional marketing actions. According to data from The Radicati Group (2017), the daily commercial e-mail audience, the number of users worldwide, and the number of messages are still in full steam, showing no signs of exhaustion. In this way, the findings evidenced in this study can also support initiatives in other areas of action in addition to social marketing. For example, to increase the effectiveness of e-mail reminders through persuasive technologies that send persuasive and adaptive messages to influence users' adoption of new behaviors (Kaptein & Halteren, 2013). Or to increase the effectiveness of mental health promotion actions to improve psychological well-being and develop a healthy lifestyle from e-mail-based exercises. Such interventions are easy to access and cover a considerable portion of the target audience at a lower cost than face-to-face interventions, without neglecting, ethical and procedural considerations of the medical field (Torniainen-Holm et al., 2016). They can also support people-management actions within organizations to reduce the amount of e-mail messages, as overhead can affect both productivity and engagement, and thus the exhaustion of workers (Reinke & Chamorro-Premuzic, 2014).

This research presents some limitations, such as the use of a non-probabilistic sample, for accessibility, due to the researcher's ability to access the students of this sample, as well as the sample size for the respondents who agreed to read the message. Therefore, it recommends the extension of this study to other Brazilian states, or even, at the national level, with larger samples or a research that addresses new communication technologies, such as instant messaging applications with text, voice and call capabilities with video, social network, according to the study of Teng et al. (2015). We also suggest a qualitative research to investigate upstream social marketing whose focus is more on understanding the environmental factors (Gordon, 2013), that lead Brazilians to help little strangers, especially those living in other continents.

References

- Agresti, A. (2002). *Categorical Data Analysis*. New York: Wiley.
- Andersson, M., Fredriksson, M., & Berndt, A. (2014). Open or delete: Decision-makers' attitudes toward e-mail marketing messages. *Advances in Social Sciences Research Journal*, 1(3), 133-144.
- Andreasen, A. R. (2002). Marketing social marketing in the social change marketplace. *Journal of Public Policy and Marketing*, 21(1), 3-13.
- Azzi, R. G. (2011). Desengajamento moral na perspectiva da teoria social cognitiva. *Psicologia: Ciência e Profissão*, 31(2), 208-219.
- Azzi, R. G. (2010). Mídias, transformações sociais e contribuições da teoria social cognitiva. *Psico*, 41(2), 5.
- Bandura, A., & Walters, R. H. (1977). *Social learning theory*(Vol. 1). Englewood Cliffs, NJ: Prentice-hall.
- Bandura, A. (2004). Health promotion by social cognitive means. *Health education & behavior*, 31(2), 143-164.
- Bandura, A., Azzi, R. G., & Polydoro, S. A. (2009). *Teoria social cognitiva: conceitos básicos*. Artmed Editora.
- Brennan, L., & Binney, W. (2010). Fear, guilt, and shame appeals in social marketing. *Journal of business Research*, 63(2), 140-146.
- Brock, B., Carlson, S. C., Moilanen, M., & Schillo, B. A. (2016). Reaching consumers: how the tobacco industry uses e-mail marketing. *Preventive medicine reports*, 4, 103-106.
- CAF World Giving Index. 2017. *A global view of giving trends*. Disponível em: https://et.al.cafonline.org/docs/default-source/about-us-publications/cafworldgivingindex2017_2167a_web_210917.pdf?sfvrsn=ed1dac40_10. Acesso em março 2018.
- Cases, A. S., Fournier, C., Dubois, P. L., & Tanner Jr, J. F. (2010). Web Site spill over to e-mail campaigns: The role of privacy, trust and shoppers' attitudes. *Journal of Business Research*, 63(9-10), 993-999.
- Chang, H., Rizal, H., & Amin, H. (2013). The determinants of consumer behavior towards e-mail advertisement. *Internet Research*, 23(3), 316-337.
- CEIC Data. (2017). *Household Income per Capita*. Disponível em: <https://et.al.ceicdata.com/en/indicator/australia/annual-household-income-per-capita>. Acesso em março 2018.
- 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.
- Donovan, R. (2011). Social marketing's mythunderstandings. *Journal of Social Marketing*, 1(1), 8-16.
- 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 & Research in Advertising*, 27(1), 65-77.
- Edwards, R. W., Jumper-Thurman, P., Plested, B. A., Oetting, E. R., & Swanson, L. (2000). Community readiness: Research to practice. *Journal of community psychology*, 28(3), 291-307. Ellis-Chadwick, F., & Doherty, N. F. (2012). Web advertising: The role of e-mail marketing. *Journal of Business Research*, 65(6), 843-848.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 39-50.
- Fox, K. F., & Kotler, P. (1980). The marketing of social causes: the first 10 years. *The Journal of marketing*, 24-33.
- Gordon, R. (2013). Unlocking the potential of upstream social marketing. *European Journal of Marketing*, 47(9), 1525-1547.

- Hair, J., Babin, B., Money, A., & Samouel, P. (2005). *Fundamentos de métodos de pesquisa em administração*. Bookman Companhia Ed.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2009). *Análise multivariada de dados*. Bookman Editora.
- Hill, R. P., & Moran, N. (2011). Social marketing meets interactive media: Lessons for the advertising community. *International Journal of Advertising*, 30(5), 815-838.
- IBGE. Renda Domiciliar Per Capita. Disponível em: https://ww2.ibge.gov.br/home/estatistica/indicadores/trabalhoerendimento/pnad_continua/default_renda_percapita.shtm. Acesso em abril 2018.
- Inoue, Y., & Kent, A. (2014). A conceptual framework for understanding the effects of corporate social marketing on consumer behavior. *Journal of business ethics*, 121(4), 621-633.
- Kaptein, M., & Halteren, A. (2013). Adaptive persuasive messaging to increase service retention: using persuasion profiles to increase the effectiveness of e-mail reminders. *Personal and Ubiquitous Computing*, 17(6), 1173-1185.
- Kotler, P., & Zaltman, G. (1971). Social marketing: an approach to planned social change. *The Journal of Marketing*, 3-12.
- Kotler, P., & Lee, N. R. (2008). *Social marketing. Influencing behaviors for good* (3rd ed.). Thousand Oaks, CA: Sage.
- Kubacki, K., Rundle-Thiele, S., Pang, B., & Buyucek, N. (2015). Minimizing alcohol harm: A systematic social marketing review (2000–2014). *Journal of Business Research*, 68(10), 2214-2222.
- Kumar, V., Zhang, X., & Luo, A. (2014). Modeling customer opt-in and opt-out in a permission-based marketing context. *Journal of Marketing Research*, 51(4), 403-419.
- Lewis, M. J., & Ling, P. M. (2015). “Gone are the days of mass-media marketing plans and short term customer relationships”: tobacco industry direct mail and database marketing strategies. *Tobacco control*, tobaccocontrol-2015.
- Li, H., Edwards, S. M., & Lee, J. H. (2002). Measuring the intrusiveness of advertisements: Scale development and validation. *Journal of advertising*, 31(2), 37-47.
- Merisavo, M., & Raulas, M. (2004). The impact of e-mail marketing on brand loyalty. *Journal of Product & Brand Management*, 13(7), 498-505.
- Micheaux, A. L. (2011). Managing e-mail advertising frequency from the consumer perspective. *Journal of Advertising*, 40(4), 45-66.
- Morimoto, M., & Chang, S. (2006). Consumers’ attitudes toward unsolicited commercial e-mail and postal direct mail marketing methods: intrusiveness, perceived loss of control, and irritation. *Journal of Interactive Advertising*, 7(1), 1-11.
- Opel, D. J., Diekema, D. S., Lee, N. R., & Marcuse, E. K. (2009). Social marketing as a strategy to increase immunization rates. *Archives of pediatrics & adolescent medicine*, 163(5), 432-437.
- Peattie, S. (2007). The internet as a medium for communicating with teenagers. *Social Marketing Quarterly*, 13(2), 21-46.
- Peattie, K., & Peattie, S. (2009). Social marketing: A pathway to consumption reduction? *Journal of Business Research*, 62(2), 260-268.
- Rangun, V. K., & Karim, S. (1991). Teaching note: Focusing the concept of social marketing. *Cambridge, MA: Harvard Business School*.
- Reinke, K., & Chamorro-Premuzic, T. (2014). When e-mail use gets out of control: Understanding the relationship between personality and e-mail overload and their impact on burnout and work engagement. *Computers in Human Behavior*, 36, 502-509.
- 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.
- Rundle-Thiele, S.; Kubacki, K.; Leo, C.; Arli, D.; Cairns, J.; Dietrich, T. Palmer, J.; Szablewska, N. (2013).

- Social Marketing: Current Issues and Future Challenges. In: Rundle-Thiele, S.; Kubacki, K (Eds). *Contemporary issues in social marketing*, Cambridge Scholars Publishing, Newcastle. Cap. 12. p. 216-237.
- Silva, E. C., Minciotti, S. A., & Gil, A. C. (2013). Resgatando o conceito de Marketing Social. *Administração Pública e Gestão Social*, 5(2), 63-70.
- Shankar, V., Venkatesh, A., Hofacker, C., & Naik, P. (2010). Mobile marketing in the retailing environment: current insights and future research avenues. *Journal of interactive marketing*, 24(2), 111-120.
- Smith, A. M., & O'Sullivan, T. (2012). Environmentally responsible behaviour in the workplace: An internal social marketing approach. *Journal of Marketing Management*, 28(3-4), 469-493.
- Thackeray, R., Fulkerson, K. N., & Neiger, B. L. (2012). Defining the product in social marketing: An analysis of published research. *Journal of Nonprofit & Public Sector Marketing*, 24(2), 83-100.
- The Radicati Group, Inc. E-mail Statistics Report, 2017-2021. Disponível em: <https://et.al.radicati.com/wp/wp-content/uploads/2017/01/E-mail-Statistics-Report-2017-2021-Executive-Summary.pdf>. Acesso em março 2017.
- Torniainen-Holm, M., Pankakoski, M., Lehto, T., Saarelma, O., Mustonen, P., Joutsenniemi, K., & Suvisaari, J. (2016). The effectiveness of e-mail-based exercises in promoting psychological wellbeing and healthy lifestyle: a two-year follow-up study. *BMC psychology*, 4(1), 21.
- Wasan, P. G., & Tripathi, G. (2014). Revisiting social marketing mix: a socio-cultural perspective. *Journal of Services Research*, 14(2), 127.
- Webb, T. L., Joseph, J., Yardley, L., & Michie, S. (2010). Using the internet to promote health behavior change: a systematic review and meta-analysis of the impact of theoretical basis, use of behavior change techniques, and mode of delivery on efficacy. *Journal of medical Internet research*, 12(1).
- Wilson, E. V., Hall-Phillips, A., & Djasabi, S. (2015). Cognitive predictors of consumers' intention to comply with social marketing e-mail appeals. *Computers in Human Behavior*, 52, 307-314.
- Wood, M. (2008). Applying commercial marketing theory to social marketing: A tale of 4Ps (and a B). *Social Marketing Quarterly*, 14(1), 76-85.
- Wooldridge, J. M. (2006). *Introdução à econometria: uma abordagem moderna*. Pioneira Thomson Learning.
- Wymer, W. (2011). Developing more effective social marketing strategies. *Journal of Social Marketing*, 1(1), 17-31.