



ARTICLE

SINALIZANDO CONFIANÇA E REPUTAÇÃO: O EFEITO DA CERTIFICAÇÃO E DO CROWDFUNDING NA INTENÇÃO DE DOAÇÃO PARA O EMPREENDEDORISMO SOCIAL

SIGNALING TRUST AND REPUTATION: THE EFFECT OF CERTIFICATION AND CROWDFUNDING ON DONATION INTENTION FOR SOCIAL ENTREPRENEURSHIP

¹ Luiza Chaves Gastal. Universidade Federal de Pelotas (UFPel), Rio Grande do Sul (Brazil). ORCID: <https://orcid.org/0009-0000-6360-159X>

² Vilmar Tondolo. Universidade Federal de Pelotas (UFPel), Rio Grande do Sul (Brazil). ORCID: <https://orcid.org/0000-0002-3116-2585>

³ Napiê Galve Araújo Silva. Universidade Federal Rural do Semi-Árido (UFERSA), Rio Grande do Norte (Brazil). ORCID: <https://orcid.org/0000-0002-7966-3311>

⁴ Gabrielito Rauter Menezes. Universidade Federal de Pelotas (UFPel), Rio Grande do Sul (Brazil). ORCID: <https://orcid.org/0000-0001-7649-5132>

Corresponding Author:

Luiza Chaves Gastal
E-mail: luizagastal@gmail.com

Editor in Chief

Eliana Severo
Alumni.In Editors

How to cite this article:

Chaves Gastal, L., Tondolo, V., Galve Araújo Silva, N., & Rauter Menezes, G. (2024). Signaling trust and reputation: The effect of certification and crowdfunding on donation intention for social entrepreneurship. *Journal of Sustainable Competitive Intelligence*, 14, e0454. <https://doi.org/10.24883/eagleSustainable.v14i.454>

ABSTRACT

Purpose: This study investigated the effect of external certification and registration on a crowdfunding platform on donation intentions for social projects, mediated by trust and reputation.

Methodology/approach: This study employed a full-factorial vignette-based experiment. Participants were 151 potential donators. The hypotheses were tested through multiple regression analysis.

Originality/Relevance: This study is one of the first to analyze the role of trust and reputation in mediating the effect of external certification and registration on a crowdfunding platform on donation intentions for social projects.

Key findings: The results show that external certification and registration on crowdfunding platforms increase a project's trust and reputation, thus elevating donation intentions.

Theoretical/methodological contributions: These findings highlight the importance of credibility and transparency signals in donor behavior. The research underscores how trust elements can positively influence donation decisions for social initiatives.

Keywords: Social entrepreneurship; Transparency; Experiment; Signaling Theory.



DOI: <https://doi.org/10.24883/eagleSustainable.v14i.454>



RESUMO

Objetivo: Este estudo investigou o efeito da certificação externa e do registro em uma plataforma de *crowdfunding* nas intenções de doação para projetos sociais, mediados pela confiança e pela reputação.

Metodologia/Abordagem: Este estudo empregou um experimento fatorial baseado em vinheta. Os participantes foram 151 doadores em potencial. As hipóteses foram testadas por meio de análise de regressão múltipla.

Originalidade/Relevância: Este estudo é um dos primeiros a analisar o papel da confiança e da reputação na mediação do efeito da certificação externa e do registro em uma plataforma de *crowdfunding* nas intenções de doação para projetos sociais.

Principais conclusões: Os resultados mostram que a certificação externa e o registro em plataformas de *crowdfunding* aumentam a confiança e a reputação de um projeto, elevando assim as intenções de doação.

Contribuições teóricas/metodológicas: Os achados destacam a importância da credibilidade e dos sinais de transparência no comportamento do doador. A pesquisa ressalta como elementos de confiança podem influenciar positivamente as decisões de doação para iniciativas sociais.

Palavras-chave: Empreendedorismo Social; Transparência; Experimento; Teoria da sinalização.

1 INTRODUCTION

Social entrepreneurship and crowdfunding have emerged as social and economic transformation drivers, promoting innovation and sustainable development. Social entrepreneurship is a process that drives social change by addressing significant needs without focusing solely on direct financial benefits, seeking to create social value (Mair & Martí, 2006a). Characterized by innovation, identifying opportunities, and mobilizing resources to achieve a social mission, this type of entrepreneurship faces financing difficulties and a lack of institutional support (Gupta et al., 2020; Zahra et al., 2009; Zahra & Wright, 2016).

Crowdfunding is the efforts of individuals and entrepreneurial groups – cultural, social, or for-profit – to finance their ventures with minor contributions from many individuals using the Internet without standard financial intermediaries (Mollick, 2014). There are several modalities of crowdfunding, such as donation, reward, loans, royalties, and equity, each with its particularities and impacts (Belleflamme & Lambert, 2016). In social entrepreneurship, donation-based crowdfunding stands out for mobilizing resources for social and environmental causes, positively influencing the likelihood of obtaining financing (Bento et al., 2019).

In this sense, philanthropy is significant in leading crowdfunding platforms (Agrawal et al., 2014). These platforms have proven to be a viable financial alternative to carry out social projects, providing the financial resources necessary for implementation, especially when access to capital is one of the main challenges in social entrepreneurship (Silva & Hassem, 2019). The social impact and the project's value strongly influence the decision to support projects on charitable crowdfunding platforms (Bagheri et al., 2019).

Reputation and trust are vitally important elements in crowdfunding (Agrawal et al., 2014). Crowdfunding platforms mitigate information asymmetry by acting as trusted intermediaries and certifying the quality and viability

of projects (Belleflamme & Lambert, 2016). The initiator's reputation and the project's popularity influence potential funders' perceived credibility and empathy (Becker, 2018; Liu et al., 2018; Rey-Martí et al., 2019).

Signaling theory, which addresses the asymmetry of information between two parties in an exchange relationship, offers a valuable analytical lens for understanding the success of crowdfunding campaigns. It posits that one party (the sender) can transmit specific signals to another party (the recipient) to indicate its quality or intentions, particularly relevant in contexts such as recruitment, investment, and organizational behavior. The theory originated from economic principles, particularly those articulated by Spence in labor market signaling, where potential employees signal their skills through educational credentials (Connelly et al., 2010; Sanders & Boivie, 2004). Information quality and interaction with funders are crucial to fundraising, while third-party intermediaries provide quality signals and facilitate participant trust (Agrawal et al., 2014; Wu et al., 2022).

The sender can use signals (such as certifications) to convey credible information to the receiver (stakeholders) about its capabilities or intentions (Connelly et al., 2010). The signaling value of certifications is enhanced when they are supported by third-party verification, which reduces information asymmetry and increases the credibility of the claims made by the company (Pelzer & Hogan, 2022). This is crucial in environments where trust in self-reported information is low, such as in contexts marked by corruption or regulatory challenges (Montiel et al., 2012).

This study analyzes the effect of external certification and registration on crowdfunding platforms on the intention to donate to social entrepreneurship projects, exploring the dynamics of trust and reputation in this context. A quantitative study was conducted using an experimental methodology with vignettes, in which potential donors were exposed to hypothetical and controlled scenarios with different conditions of certification and registration on crowdfunding platforms, aiming to verify how their decision to donate occurred. The research contributes to a better understanding of the mechanisms that drive the financing of social enterprises, offering practical insights into the use of crowdfunding and external certification as strategies for raising funds.

2 THEORETICAL FRAMEWORK AND DEVELOPMENT OF HYPOTHESES

The theoretical framework of this study establishes the conceptual basis for this research, focusing on three main concepts: social entrepreneurship, crowdfunding, and signaling theory. The objective is to understand the relationships and implications of these concepts in the contemporary context of entrepreneurial activities. These concepts will be detailed and explored to provide a comprehensive theme view.

2.1 Social Entrepreneurship

Social entrepreneurship drives social change by addressing critical social needs in a way that prioritizes social value creation over value capture (Mair & Martí, 2006a). It involves entrepreneurial activities, such as opportunity identification, exploration, resource mobilization, and innovation, to create or manage an organization to achieve its social mission (Zahra et al., 2009). Social entrepreneurs identify and realize opportunities arising from social problems, such as poverty and lack of access to health care or education (Zahra & Wright, 2016).

Although the nonprofit nature is a characteristic of social entrepreneurship, social entrepreneurial activities can occur in nonprofit and for-profit organizations. The choice is usually determined by the nature of the social needs addressed, the number of resources needed, the opportunities for raising capital, and the ability to obtain economic resources (Mair & Martí, 2006). For social entrepreneurs, markets are neither an end in themselves nor a means of appropriating value; they are seen as an important social structure and a mechanism for promoting social and economic development (Mair & Martí, 2009).

Social entrepreneurship involves the provision of goods or services, but this is not an end. It is an integral part of an intervention to achieve social goals and contribute to social change. Thus, social entrepreneurship initiatives are not just economic ventures; their main objective is pursuing a social mission and transforming their social environment (Mair et al., 2012).

By seeking consideration for others and addressing opportunities for value creation in a distributed manner, social entrepreneurship moves the economy closer to an efficient outcome, systematically identifying neglected problems with positive externalities and developing mechanisms to incorporate these externalities into the economic system (Santos, 2012). Despite the challenges faced, such as access to finance and lack of adequate support, social entrepreneurship remains a valuable approach to addressing urgent social problems (Gupta et al., 2020). This form of entrepreneurship can solve some of the most pressing problems of modern society, highlighting the importance of innovation and risk-taking in the social sector (Santos, 2012).

2.2 Crowdfunding

Crowdfunding has emerged as a new way to raise ventures' finances without relying on venture capital or other conventional investment sources (Mollick, 2014). Furthermore, crowdfunding can bring new forms of interaction between project creators and investors to social ventures, driving innovation and reducing the need for traditional intermediaries (Mollick & Robb, 2016).

Five different forms of crowdfunding are identified in the literature: donation-based, reward-based, lending, royalty-based and equity-based. In the donation-based model, contributors financially support projects without expecting anything in return. In contrast, in the reward-based model, they receive a non-financial reward proportional to their level of funding. In the loan-based model, contributors lend money to the project creator at a set interest rate; in the equity-based model, they finance the project in exchange for an equity stake; and in the royalty-based model, they receive a share of the project's future revenue in the form of royalties (Belleflamme & Lambert, 2016).

Donation-based crowdfunding is an effective alternative to traditional financing for social entrepreneurship. The perceived importance of the social or environmental mission significantly influences the likelihood of receiving funding through this model (Bento et al., 2019). To successfully organize donation-based crowdfunding projects, it is essential to manage the quality of the website strategically, the convenience of transactions, the reputation of the initiator, the popularity of the project, and the quality of the content, thus increasing empathy and perceived credibility, and increasing the potential for donations (Liu et al., 2018).

Crowdfunding contributes to developing ventures that drive social change in three dimensions: social, environmental, and economic. Crowdfunding platforms also promote more socially oriented project profiles, rewarding campaigns that donate part of the profits with higher success rates. Crowdfunding, therefore, unlocks the realization of businesses with social and environmental merits that would otherwise not be viable (Bento et al., 2019).

In this sense, crowdfunding platforms facilitate the interaction between entrepreneurs and contributors, acting as multifaceted platforms where contributors invest capital in obtaining both monetary compensation and non-monetary benefits, such as "community benefits." In addition to raising funds, entrepreneurs seek attention, feedback, and market validation, using crowdfunding as a promotional tool. Platforms mitigate information asymmetry problems by acting as trusted intermediaries, selecting high-quality projects, and ensuring that commitments are fulfilled (Belleflamme & Lambert, 2016).

To this end, information plays an important role in crowdfunding. Signals and endorsements from multiple sources of information, such as project actions and characteristics, mitigate concerns about information asymmetry about the quality of the project and the credibility of the founder, increasing the likelihood of successful fundraising. Third-party endorsements, especially from prominent entities, signal the underlying quality of an entity, highlighting that both internal venture signals and external endorsements are essential to reducing information asymmetry and increasing the credibility of crowdfunding projects (Courtney et al., 2017; Plummer et al., 2015).

2.3 Signaling Theory

Signaling theory addresses the information asymmetry between two parties in a social exchange relationship (Spence, 1973, 2002). According to this theory, the party with more information can send observable signals to the less informed party, facilitating the exchange. These signals help to disseminate information about unobservable characteristics, improving communication between the parties involved (Spence, 1973).

Signaling theory distinguishes two behaviors: signaling and screening. Signaling involves sending information through observable actions by the signaler, while screening refers to the receiver's ability to discern true from false information. Both behaviors are effective in reducing information asymmetry (Spence, 1973).

Signaling theory has three key concepts: signaler, signal, and receiver. Signalers have internal information about an individual, product, or organization unavailable to external parties. The signal can be an action, word, gesture, or any communication that conveys a specific message. The receiver is the one who receives and interprets this message (Connelly et al., 2010).

In crowdfunding, signaling theory helps understand how project creators can convey information about project quality to funders (Huang et al., 2022). Effective signals, such as detailed business plans and customer feedback, reduce perceived uncertainty and positively influence investment decisions (Ahlers et al., 2015). Third-party endorsements and external guarantees also increase funders' trust (Courtney et al., 2017).

Research shows that signals can reduce information asymmetry and influence decision-making in crowdfunding (Connelly et al., 2010). Transparent and credible signals help funders make more confident and informed decisions (Ahlers et al., 2015). In crowdfunding, positive signals and external endorsements are essential to increase project credibility and attract investment (Mollick, 2014).

However, in contexts where one party has superior information, such as certified companies, there is the potential for these companies to selectively disseminate positive signals while concealing negative aspects that may influence recipients' decision-making (Desai, 2016). This selective signaling can lead to trust and credibility challenges, as stakeholders may have difficulty discerning the actual quality or reliability of the information (Todaro et al., 2019).

To mitigate the risks associated with information asymmetry, third-party certifications play a crucial role. These certifications serve as external validations that increase the credibility of the signals companies send. By relying on independent verification, stakeholders can have greater confidence in the claims made by organizations, thereby reducing the likelihood of being misled by potentially biased self-reported information (Djupdal & Westhead, 2013). The literature suggests that the effectiveness of these certifications depends on their perceived legitimacy and the ability of stakeholders to interpret the information correctly (Todaro et al., 2019).

2.4 Hypothesis Development

In social entrepreneurship projects, uncertainty can be common in these initiatives, requiring signs of quality and credibility to increase stakeholder confidence (Becker, 2018; Dos Santos Rodrigues et al., 2022). In this sense, crowdfunding contributes to developing ventures that drive social change in different dimensions (Bento et al., 2019). In addition, crowdfunding allows innovative ideas to be transformed into products or services with market value, playing an important role in the financial viability of innovations (Silva & Hassem, 2019). However, crowdfunding also faces challenges, such as the lack of regulation and control exercised by a single person or group responsible for fundraising operations (Martins & Forte, 2022), sometimes increased by emergencies such as pandemics (Otero et al. 2024; Severo et al., 2023).

Therefore, external certifications and quality seals can function as reliable signals of credibility, contributing to the construction of reputation and increasing donors' trust (Becker, 2018). In summary, trust, reputation, perceived credibility, and project quality are fundamental factors that influence the intention to donate to social entrepreneurship crowdfunding projects, constituting the basis of this study to maximize the success of fundraising campaigns.

According to Signaling Theory, certification by an international organization signals the quality and credibility of the project, which can increase donors' trust in the effectiveness and legitimacy of the project (Becker, 2018; Courtney et al., 2017). Therefore, certification by an international organization can influence the intention to donate by increasing trust in the project. Certification by an international organization can improve the project's reputation, as it acts as a globally recognized signal of quality and credibility (Becker, 2018). That said, certification by an international organization can influence donation intentions by increasing the project's reputation.

Crowdfunding platforms strive to increase transparency in the fundraising process, which can increase donors' trust in the legitimacy and effectiveness of projects (Martins & Forte, 2022). In this sense, transparency is central to the relationship between organizations and sponsors (Tondolo et al., 2023a). Registering on a crowdfunding platform can positively impact donation intentions. This is because the presence of the project on a reputable platform increases trust and reputation among donors. Registration indicates that the platform has evaluated and approved the project, which reinforces credibility and transparency, essential factors for attracting supporters (Martins & Forte, 2022). Therefore, registering on a crowdfunding platform can influence donation intentions by increasing the project's reputation. Thus, the following hypotheses are postulated:

H1: The intention to donate to a project certified by an international organization is mediated by trust.

H2: The intention to donate to a project registered on a crowdfunding platform is mediated by trust.

H3: The intention to donate to a project certified by an international organization is mediated by reputation.

H4: The intention to donate to a project registered on a crowdfunding platform is mediated by reputation.

These hypotheses were based on the Signaling Theory and demonstrate the importance of trust and reputation in the intention to donate. They also highlight the relevance of external certification and registration on crowdfunding

platforms for the success of fundraising campaigns in social entrepreneurship projects. This study developed the theoretical model (Figure 1) to present the relationship between the proposed variables.

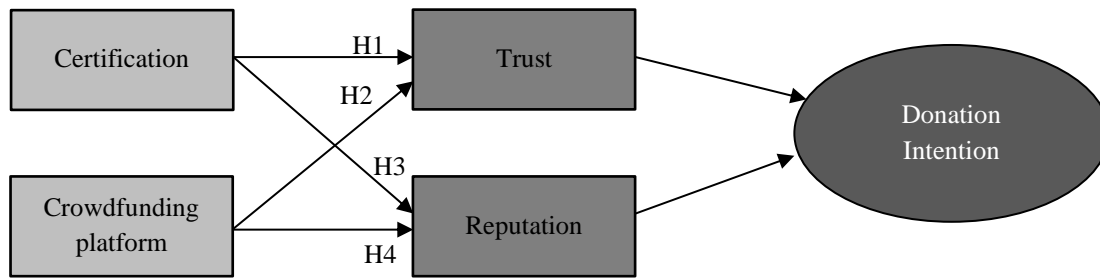


Figure 1: Theoretical model of the study

Source: Study Authors (2024).

3 METHODOLOGY

The methodology of this study was developed to analyze the effect of external certification and registration on crowdfunding platforms on the intention to donate to social entrepreneurship projects, mediated by trust and reputation in this context. The objective was to understand how these factors affect donors' decisions.

To this end, a survey was conducted with potential donors of social entrepreneurship projects and initiatives, using the Prolific platform (www.prolific.co). Studies that use vignette-based experiments have used this platform to access the target audience appropriate to the context of each research (e.g. Tondolo et al., 2023b).

In this experiment, the independent variables manipulated were the use of Crowdfunding Platforms and External Certification, varying between these two conditions, which could be combined or not. The dependent variable was the intention to donate, while trust and reputation were considered mediating variables.

The study employed a scenario-based experiment, using vignettes and questionnaires to manipulate the independent variables. The instrument was adapted from (Becker, 2018; Dos Santos Rodrigues et al., 2022) for the context of social entrepreneurship, crowdfunding, and external certification, where the role of the mediating variables trust and reputation was verified. Participants were randomly assigned to one of the four versions of the vignette, ensuring that the experiment was conducted using a between-subjects approach, reducing the chance of any demand effect occurring. The vignette and questionnaire are available in the appendix.

The sequence of the experiment's application was organized as follows: reading the invitation and acknowledgment, reading the common module, reading the stimuli, and filling out the questionnaire with questions of interest and general questions. To get closer to reality, participants assumed the role of potential donors to a hypothetical social entrepreneurship project.

The multiple linear regression analysis technique was used to investigate the proposed hypotheses, ensuring the robustness of the results obtained. The analysis involved testing the hypotheses using multiple linear regression analysis to understand the effects of independent and mediating variables on donation intention. The results provided an in-depth understanding of the dynamics of trust and reputation on donation intention.

4 RESULTS

Data collection was completed on November 10, 2023, through the Prolific research website. A total of 151 participants completed the questionnaire and answered the attention test correctly. Data were analyzed using SPSS version 24.0 software and the Process macro for multiple regression analysis.

4.1 Sample

The sample was characterized by demographic variables such as gender, age, location, and volunteering history. Most participants were male (55.6%), while 44.4% identified as female. The mean age was 32.56 years, with a standard deviation of 8.095. Regarding volunteering history, 58.9% of participants had previously volunteered in non-profit

organizations. Geographically, most participants were from Europe (95.4%), with small proportions from North America (2.6%) and South America and the Caribbean (2.0%). All participants had previous experience as donors in social projects and were fluent in Portuguese.

4.2 Experimental Checks

To ensure that participants considered the experimental scenarios realistic, two questions were used, operationalized on a seven-point Likert scale. The mean responses were 4.87 (s.d. 1.504) for the question about the realism of the case presented and 4.72 (s.d. 1.650) for the question about interest in the case. These results indicate that the participants perceived the scenarios as realistic and engaging.

A question was used to check participants' attention. The question asked whether the participant's role in the scenario was that of a project creator or potential donor. All respondents indicated the correct answer, confirming the participants' attention during the experiment.

Two questions on a seven-point Likert scale were used to verify the experiment's manipulation. The questions asked whether the project was internationally certified and whether it aimed to obtain donations via crowdfunding. For the variable "certification," the means were 2.95 (not certified) and 6.03 (certified), with ANOVA indicating a significant difference ($F = 165.113$, $p = 0.000$).

For the variable "platform," the means were 2.61 (not present) and 6.36 (present), with ANOVA confirming a significant difference ($F = 252.739$, $p = 0.000$). The between-subjects approach was adopted to minimize the demand effect, and an alternative variable - transparency - was analyzed. Two questions about attitudes toward transparency were included, but the ANOVA did not indicate significant values.

The confounding test compared the groups' responses to the "certification" and "platform" stimuli. The "non-certified/certified" averages were 2.95 and 6.03, and the "non-platform/platform" were 2.62 and 6.36. The results did not indicate significance for confounding, ruling out spurious relationships.

The reliability of the constructs was verified using Cronbach's Alpha. The coefficient for donation intention was 0.876, indicating high reliability. The reliability of propensity to trust was 0.613, below the acceptable level, but maintained for theoretical reasons. The reliability of the reputation construct was 0.865, and for transparency, it was 0.732. Values above 0.70 are considered satisfactory. Therefore, the constructs were considered consistent in their measurements, which were adapted from (Becker, 2018; Dos Santos Rodrigues et al., 2022).

4.3 Model Results

As shown in Table 1, the control variables, such as age, gender, volunteering history, and location, did not present statistical significance; only the manipulations and mediating variables presented significance.

When analyzing the results of the trust variable, we sought to verify whether certification and/or registration on a crowdfunding platform increases the donor's trust in the social entrepreneurship project, resulting in a possible increase in the intention to donate. In the overall result, the model demonstrated statistical significance ($p = 0.000$) and an R^2 of 0.3098, indicating that the variables analyzed can explain approximately 30% of the variation in trust.

The results also showed that the Certification variable has a positive and non-significant effect on Trust ($b = 0.2370$; $p = 0.2418$), not supporting the presented hypothesis H1. The data indicate that the subjects, as potential donors to a social entrepreneurship project, do not attribute greater trust when the project is internationally certified. On the other hand, the effect of the Platform variable was positive and significant on Trust ($b = 1.4033$; $p = 0.000$), supporting the tested hypothesis H2. Thus, the results indicate that the subjects, as potential donors of a social entrepreneurship project, attribute greater trust when the project is registered on a crowdfunding platform, thus suggesting an increase in the intention to donate. Regarding the interaction between the two variables (Certification x platform) on Trust, no statistical significance was found ($b = 0.1207$, $p > 0.05$).

When analyzing the variable "reputation," we investigated whether certification and/or registration on a crowdfunding platform increases the project's reputation. The model produced results that showed a statistically significant proximity of 0.0558 and an R^2 of 0.0902. However, it was decided to include it in subsequent analyses to observe its behavior.

We also identified that the Certification variable positively and significantly affects Reputation ($b = 0.4626$; $p = 0.0290$), supporting hypothesis H3. The data indicate that the subjects, as potential donors to a social entrepreneurship project, attribute a greater reputation to the project when it is internationally certified. On the other hand, the effect of the Platform variable was positive and insignificant on Reputation ($b = 0.1779$; $p = 0.4030$), not supporting the hypothesis

tested H4. Thus, the results indicate that the subjects, as potential donors of a social entrepreneurship project, do not attribute a greater reputation when the project is registered on a crowdfunding platform. Regarding the interaction between the two variables (Certification x platform) on reputation, no statistical significance was found ($b = 0.3694$, $p > 0.05$).

Table 01: Results of the Multiple Regression Model with the mediating variables

Dependable Variables	Trust		Reputation		Donation Intention	
	b	SE	b	SE	b	SE
(constant)	5.9621***	0.9925	6.0030***	0.0002	-1.4215	0.9129
<i>Experimental variables</i>						
Certification	0.2370	0.2016	0.4626*	0.0324	0.1385	0.1650
Plataform	1.4033***	0.2040	0.1779	0.0232	0.0369	0.1972
<i>Interaction</i>						
Cert x Platafor	0.1207	0.4053	0.3694	0.7660	-0.1470	0.3270
<i>Mediating variables</i>						
Trust	–	–	–	–	0.3258***	0.0836
Reputation	–	–	–	–	0.7460***	0.0804
<i>Control Vaviables</i>						
Age	-0.0094	0.0120	0.0133	0.8069	-0.0031	0.0098
Gender	-0.1292	0.1944	-0.2957	0.2898	-0.0081	0.1576
Volunteering	0.0295	0.1994	-0.1900	0.2555	-0.2305	0.1613
Location	-0.2683	0.2793	-0.3645	0.9648	0.3431	0.2260
R	0.5566		0.3003		0.8090	
R ²	0.3098		0.0902		0.6545	
R ² change	0.0004		0.0049		0.0005	
F-statistic	9.1695		2.0251		29.6815	
p (statistical significance)	0.0000		0.0558		0.0000	

Legenda:

* $p < 0.05$.

** $p < 0.01$.

*** $p < 0.001$.

Bootstrapping 10,000 subsamples

b: Estimated coefficient for the independent variable.

SE: Standard error of the estimated coefficient.

t: T-statistic, which is the coefficient divided by its standard error.

p: P-value, which indicates the statistical significance of the coefficient.

Source: Study data (2024).

Examining the results of the certification and platform variables, together with the mediator's trust and reputation, on the individual's intention to donate, it was observed that the model presented statistical significance ($p = 0.000$) and an R^2 of 0.6545, indicating that approximately 65% of the variation in the intention to donate can be explained by the variables analyzed.

Certification and platform variables showed a positive, but not significant, effect on the intention to donate, with beta coefficients and significances, respectively, of ($b = 0.1385$, $p = 0.4025$) and ($b = 0.0369$, $p = 0.8520$). These results indicate that having an international certificate and/or being registered on a crowdfunding platform does not

significantly affect the intention to donate. In this sense, the results suggest the mediating role of trust and reputation. When assuming the role of a potential donor to a social entrepreneurship project, participants demonstrated greater intention to donate when the variables of trust and reputation mediate the project.

5. DISCUSSION

This study sought to elucidate the role of crowdfunding and external certification for social entrepreneurship projects. We investigated whether the presence on a crowdfunding platform and international certification, mediated by the variables of trust and reputation, influence fundraising. We also sought to understand how these factors affect the project's image to potential donors. Table 1 summarizes the hypotheses and their results.

Table 1: Summary of hypotheses and study results

Hypotheses	Results
H1: The intention to donate to a project certified by an international organization is mediated by trust.	Not supported
H2: The intention to donate to a project registered on a crowdfunding platform is mediated by trust.	Supported
H3: The intention to donate to a project certified by an international organization is mediated by reputation.	Supported
H4: The intention to donate to a project registered on a crowdfunding platform is mediated by reputation.	Not supported

Source: Study data (2024).

The model analysis showed that certification has no significant effect on trust. However, trust mediates donation intention for projects on crowdfunding platforms. Platforms' transparency and direct interaction increase donors' trust (Belleflamme & Lambert, 2016). Concerns about trust reduce the number of funders, making crowdfunding ineffective without trust (Kang et al., 2016).

Signaling theory helps to understand how extrinsic signals can be used to convey information about project quality. Creators need to signal the value of their projects, reducing information asymmetry. These signals influence fundraising success (Ahlers et al., 2015; Ho et al., 2021). Reputation has been shown to have a positive effect on certification. Potential donors attribute a higher reputation to internationally certified projects. This increases the willingness to contribute financially (Agrawal et al., 2014; Bento et al., 2019).

Reputation is central to reducing problems of information asymmetry and moral hazard. Quality signals, feedback systems, and trusted intermediaries are effective strategies (Agrawal et al., 2014). These practices help develop the initiators' reputation (Liu et al., 2018). Externally certified nonprofits demonstrate higher reputation and perceived quality (Becker, 2018). External certifications indicate greater trustworthiness compared to internal standards. This study suggests that registration on a crowdfunding platform does not significantly impact reputation.

Trust and reputation are key in the relationship between certification, platform registration, and donation intention. Trust positively influences donation intention when a project is on a crowdfunding platform (Bagheri et al., 2019; Mollick, 2014). Reputation mediated by external certification plays a significant role in donation intention. These findings align with signaling theory, which suggests that credibility signals positively influence donor behavior. The study reveals that intermediaries provide quality signals and facilitate trust among participants. Agrawal et al. (2014) highlighted the importance of third-party quality certification in the online marketplace. Mollick (2014) showed that projects that signal high quality are more likely to be funded.

Crowdfunding platforms are an effective marketing strategy that allows for the creation of publicity and community. For social entrepreneurs, these platforms enhance the perception of their projects and promote direct interaction and mutual benefits between donors and entrepreneurs (Belleflamme et al., 2015). They efficiently mitigate problems of information asymmetry (Belleflamme & Lambert, 2016).

The findings have important practical implications for social entrepreneurship. Investing in recognized international certifications can increase the perceived reputation of the project. This generates greater trust and intention to donate on the part of potential donors (Agrawal et al., 2014; Belleflamme & Lambert, 2016; Mollick, 2014).

6 CONCLUSIONS

The results of this study highlight the importance of crowdfunding and external certification as essential mechanisms for increasing the trust and reputation of social enterprises. Being present on crowdfunding platforms and obtaining international certifications can positively increase the trust and reputation of a project and, consequently, the intention to donate, highlighting the relevance of signaling theory in the context of fundraising. Signals of credibility and trust play an important role in influencing donor behavior.

Despite the positive results related to trust, the study reveals that simply registering on a crowdfunding platform does not significantly impact the project's reputation, suggesting that other factors are necessary to build a solid reputation. On the other hand, external certification proved to be effective in increasing perceived reputation, indicating that investing in recognized certifications can be a valuable strategy for social entrepreneurs seeking to improve the image of their projects.

The practical implications suggest that social entrepreneurs may consider using crowdfunding platforms and seeking international certifications to improve the perception of their projects among potential donors. Although trust and reputation were not uniformly mediated, crowdfunding was shown to be important in increasing trust, while external certification was shown to be relevant in building a positive reputation, both contributing to increasing donation intention.

Reducing information asymmetry through quality signals, feedback systems, and trusted intermediaries is essential for crowdfunding success. Crowdfunding platforms, acting as trusted intermediaries, can facilitate this reduction and promote greater transparency and direct interaction between donors and projects, increasing funders' trust.

In short, this study reinforces the idea that quality and trust signals are determinants of donor behavior. Crowdfunding platforms, together with international certifications, are useful tools for social entrepreneurs. By investing in such strategies, entrepreneurs can increase the effectiveness of their fundraising campaigns, ensuring greater engagement and success in their initiatives.

6.1 Theoretical Implications

This study extends signaling theory by demonstrating that international certification and presence on crowdfunding platforms increase donation intentions, highlighting the influence of credibility signals on donor behavior. The research also highlights how crowdfunding platforms can be used effectively to support social enterprises, highlighting the importance of external certifications in building reputation.

Including the mediating variables of trust and reputation in the theoretical model provides a broader view of the mechanisms that influence donation intentions, providing a deeper understanding of the factors that motivate donor behavior. In addition, the study addresses how crowdfunding, and certifications can mitigate information asymmetry between donors and social entrepreneurs.

6.2 Managerial Implications

This study provides practical insights for social enterprise managers. By leveraging crowdfunding platforms and investing in recognized international certifications, managers can increase their projects' perceived trust and reputation and, consequently, the intention to donate. Incorporating elements of transparency and certification into marketing campaigns can strengthen projects' reputations, while donor feedback and evaluations can help adjust strategies and continuously improve public trust.

6.3 Limitations

The main limitations of this study include the focus on crowdfunding projects and international certification for social entrepreneurship, the use of cross-sectional data, and the lack of differentiation between different types of crowdfunding platforms and international certifications. The research may not have considered all possible factors that influence donation intention. In addition, cultural factors in the sample composition may also limit the generalization of the results.

6.4 Suggestions for Future Research

Future research could explore regional and cultural differences in the perception of crowdfunding projects and certification, analyze the effectiveness of different crowdfunding platforms and types of certifications, investigate the impact of feedback systems on crowdfunding platforms, and conduct experimental studies to test different signaling strategies.

Addressing these limitations and exploring suggestions for future research can contribute to a more robust understanding of the role of crowdfunding and external certification in financing social enterprises, promoting more effective and sustainable practices in this field.

REFERENCES

- Agrawal, A., Catalini, C., & Goldfarb, A. (2014). Some Simple Economics of Crowdfunding. *Innovation Policy and the Economy*, 14, 63–97. <https://doi.org/10.1086/674021>
- Ahlers, G. K. C., Cumming, D., Günther, C., & Schweizer, D. (2015). Signaling in Equity Crowdfunding. *Entrepreneurship Theory and Practice*, 39(4), 955–980. <https://doi.org/10.1111/etap.12157>
- Bagheri, A., Chitsazan, H., & Ebrahimi, A. (2019). Crowdfunding motivations: A focus on donors' perspectives. *Technological Forecasting and Social Change*, 146, 218–232. <https://doi.org/10.1016/j.techfore.2019.05.002>
- Becker, A. (2018). An Experimental Study of Voluntary Nonprofit Accountability and Effects on Public Trust, Reputation, Perceived Quality, and Donation Behavior. *Nonprofit and Voluntary Sector Quarterly*, 47(3), 562–582. <https://doi.org/10.1177/0899764018756200>
- Belleflamme, P., & Lambert, T. (2016). An Industrial Organization Framework to Understand the Strategies of Crowdfunding Platforms ☆. In J. Méric, I. Maque, & J. Brabet (Eds.), *International Perspectives on Crowdfunding* (pp. 1–19). Emerald Group Publishing Limited. <https://doi.org/10.1108/978-1-78560-315-020151001>
- Belleflamme, P., Omrani, N., & Peitz, M. (2015). The economics of crowdfunding platforms. *Information Economics and Policy*, 33, 11–28. <https://doi.org/10.1016/j.infoecopol.2015.08.003>
- Bento, N., Gianfrate, G., & Thoni, M. H. (2019). Crowdfunding for sustainability ventures. *Journal of Cleaner Production*, 237, 117751. <https://doi.org/10.1016/j.jclepro.2019.117751>
- Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2010). Signaling Theory: A Review and Assessment. *Journal of Management*, 37(1), 39–67. <https://doi.org/10.1177/0149206310388419>
- Courtney, C., Dutta, S., & Li, Y. (2017). Resolving Information Asymmetry: Signaling, Endorsement, and Crowdfunding Success. *Entrepreneurship Theory and Practice*, 41(2), 265–290. <https://doi.org/10.1111/etap.12267>
- Desai, V. (2016). Third-party certifications as an organizational performance liability. *Journal of Management*, 44(8), 3096–3123. <https://doi.org/10.1177/0149206316659112>
- Djupdal, K. and Westhead, P. (2013). Environmental certification as a buffer against the liabilities of newness and smallness: firm performance benefits. *International Small Business Journal Researching Entrepreneurship*, 33(2), 148–168. <https://doi.org/10.1177/0266242613486688>
- Dos Santos Rodrigues, A., Gonçalves Tondolo, V. A., Lerch Lunardi, G., & Régio Brambilla, F. (2022). O efeito da adoção do accountability no contexto das organizações sem fins lucrativos: um experimento no Brasil. *Revista de Gestão e Secretariado*, 13(3), 278–299. <https://doi.org/10.7769/gesec.v13i3.1315>

- Erdem, T., & Swait, J. (1998). Brand Equity as a Signaling Phenomenon. *Journal of Consumer Psychology*, 7(2), 131–157. https://doi.org/https://doi.org/10.1207/s15327663jcp0702_02
- Gupta, P., Chauhan, S., Paul, J., & Jaiswal, M. P. (2020). Social entrepreneurship research: A review and future research agenda. *Journal of Business Research*, 113, 209–229. <https://doi.org/10.1016/j.jbusres.2020.03.032>
- Ho, H.-C., Chiu, C. L., Mansumittrchai, S., Yuan, Z., Zhao, N., & Zou, J. (2021). The Influence of Signals on Donation Crowdfunding Campaign Success during COVID-19 Crisis. *International Journal of Environmental Research and Public Health*, 18(14), 7715. <https://doi.org/10.3390/ijerph18147715>
- Huang, S., Pickernell, D., Battisti, M., & Nguyen, T. (2022). Signalling entrepreneurs' credibility and project quality for crowdfunding success: cases from the Kickstarter and Indiegogo environments. *Small Business Economics*, 58(4), 1801–1821. <https://doi.org/10.1007/s11187-021-00477-6>
- Kang, M., Gao, Y., Wang, T., & Zheng, H. (2016). Understanding the determinants of funders' investment intentions on crowdfunding platforms. *Industrial Management & Data Systems*, 116(8), 1800–1819. <https://doi.org/10.1108/IMDS-07-2015-0312>
- Liu, L., Suh, A., & Wagner, C. (2018). Empathy or perceived credibility? An empirical study on individual donation behavior in charitable crowdfunding. *Internet Research*, 28(3), 623–651. <https://doi.org/10.1108/IntR-06-2017-0240>
- Mair, J., Battilana, J., & Cardenas, J. (2012). Organizing for Society: A Typology of Social Entrepreneurial Models. *Journal of Business Ethics*, 111(3), 353–373. <https://doi.org/10.1007/s10551-012-1414-3>
- Mair, J., & Martí, I. (2006a). Social entrepreneurship research: A source of explanation, prediction, and delight. *Journal of World Business*, 41(1), 36–44. <https://doi.org/10.1016/j.jwb.2005.09.002>
- Mair, J., & Martí, I. (2006b). Social entrepreneurship research: A source of explanation, prediction, and delight. *Journal of World Business*, 41(1), 36–44. <https://doi.org/10.1016/j.jwb.2005.09.002>
- Mair, J., & Marti, I. (2009). Entrepreneurship in and around institutional voids: A case study from Bangladesh. *Journal of Business Venturing*, 24(5), 419–435. <https://doi.org/10.1016/j.jbusvent.2008.04.006>
- Martins, R. de M., & Forte, S. H. A. C. (2022). Crowdfunding: peritos avaliam plataformas como “regulares” apesar dos bons índices de transparência e alertam para o amadurecimento na governança. *Gestão Executiva*, 1(4), 1–5. <https://doi.org/10.5020/2965-6001.2022.14213>
- Mollick, E. (2014). The dynamics of crowdfunding: An exploratory study. *Journal of Business Venturing*, 29(1), 1–16. <https://doi.org/10.1016/j.jbusvent.2013.06.005>
- Mollick, E., & Robb, A. (2016). Democratizing Innovation and Capital Access: The Role of Crowdfunding. *California Management Review*, 58(2), 72–87. <https://doi.org/10.1525/cm.2016.58.2.72>
- Montiel, I., Husted, B. W., & Christmann, P. (2012). Using private management standard certification to reduce information asymmetries in corrupt environments. *Strategic Management Journal*, 33(9), 1103–1113. <https://doi.org/10.1002/smj.1957>
- Otero, L. O., Tondolo, V. A. G., Santos, J. B. (2024). The effect of social responsibility on supplier continuity after disruptions: An experiment with purchasing professionals. *Journal of Cleaner Production*. 474, 3, e143633. <https://doi.org/10.1016/j.jclepro.2024.143633>

- Pelzer, J. and Hogan, R. (2022). In the short-term, it is never the wrong time to certify: the mitigating impact of certification on firm valuation. *Meditari Accountancy Research*, 31(4), 1109-1132. <https://doi.org/10.1108/medar-06-2021-1324>
- Plummer, L. A., Allison, T. H., & Connelly, B. L. (2015). Better Together? Signaling Interactions in New Venture Pursuit of Initial External Capital. *Academy of Management Journal*, 59(5), 1585–1604. <https://doi.org/10.5465/amj.2013.0100>
- Rey-Martí, A., Mohedano-Suanes, A., & Simón-Moya, V. (2019). Crowdfunding and Social Entrepreneurship: Spotlight on Intermediaries. *Sustainability*, 11(4), 1175. <https://doi.org/10.3390/su11041175>
- Sanders, W. G., Boivie, S. (2004). Sorting things out: valuation of new firms in uncertain markets. *Strategic Management Journal*, 25(2), 167-186. <https://doi.org/10.1002/smj.370>
- Santos, F. M. (2012). A Positive Theory of Social Entrepreneurship. *Journal of Business Ethics*, 111(3), 335–351. <https://doi.org/10.1007/s10551-012-1413-4>
- Severo, E. A., De Guimarães, J. C. F., & Vieira, P. S. (2023). Covid-19 pandemic influences relationships on innovation, environmental practices and social actions in enterprise: the theoretical framework. *Future Studies Research Journal: Trends and Strategies*, 15(1), e0722. <https://doi.org/10.24023/>
- Silva, E. da, & Hassem, A. (2019). O crowdfunding no contexto de políticas públicas de ciência, tecnologia e inovação brasileiras. *TECHNO REVIEW. International Technology, Science and Society Review /Revista Internacional De Tecnología, Ciencia Y Sociedad*, 8(1), 23–31. <https://doi.org/10.37467/gka-revtechno.v8.2050>
- Spence, M. (1973). Job Market Signaling. *The Quarterly Journal of Economics*, 87(3), 355. <https://doi.org/10.2307/1882010>
- Spence, M. (2002). Signaling in Retrospect and the Informational Structure of Markets. *The American Economic Review*, 92(3), 434–459. <http://www.jstor.org/stable/3083350>
- Todaro, N., Daddi, T., Testa, F., & Iraldo, F. (2019). Organization and management theories in environmental management systems research: a systematic literature review. *Business Strategy & Development*, 3(1), 39-54. <https://doi.org/10.1002/bsd2.77>
- Tondolo, R. da R. P., Tondolo, V. A. G., Bitencourt, C. C., & Paiva, E. L. (2023a). Efeito da transparência e do capital social na intenção de mobilizar recursos. *Cadernos EBAPE.BR*, 21(1). <https://doi.org/10.1590/1679-395120220076>
- Tondolo, V., Oliveira de Otero, L., Rodrigues Garcia, D., Régio Brambilla, F., & Lerch Lunardi, G. (2023b). Efeito do Dano Ambiental do Fornecedor Na Preocupação Ambiental e nas Capacidades Dinâmicas de Compras Verdes. *Revista Inteligência Competitiva*, 13, e0425. <https://doi.org/10.24883/IberoamericanIC.v13i.2023.e0425>
- Wu, Z., Yan, S., & Dai, J. (2022). How to capitalize on investors by using information presentation and feedback on crowdfunding projects. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.831333>
- Zahra, S. A., Gedajlovic, E., Neubaum, D. O., & Shulman, J. M. (2009). A typology of social entrepreneurs: Motives, search processes and ethical challenges. *Journal of Business Venturing*, 24(5), 519–532. <https://doi.org/10.1016/j.jbusvent.2008.04.007>
- Zahra, S. A., & Wright, M. (2016). Understanding the Social Role of Entrepreneurship. *Journal of Management Studies*, 53(4), 610–629. <https://doi.org/10.1111/joms.12149>

APPENDIX A – Vignette¹

In this scenario, you are a potential donor to a social entrepreneurship project.

We ask that you answer the questionnaire after reading the entire scenario.

The project "Transforming Realities: Social Entrepreneurship for Young People" is a vital initiative born in response to the COVID-19 pandemic. We are a private non-profit organization driven by compassion, solidarity, and teamwork that grows every day.

We aim to rescue young people from social vulnerability, provide them with education, inclusion, and confidence, and foster the entrepreneurial spirit.

Our vision is to inspire these young people to be agents of change in their communities and the world around them. Together, we are transforming realities and building a more promising future for everyone.

Manipulations

A

The Project "Transforming Realities: Social Entrepreneurship for Young People" has internationally certified quality and transparency standards (e.g.: UNICEF). The International seal of approval confirms that the Project handles the funds received responsibly and transparently. The Project collects resources indirectly via a Crowdfunding platform. The platform complies with pre-defined codes of conduct regarding quality and transparency. Donations are made in a practical, safe, and transparent manner.

B

The Project collects resources indirectly via a Crowdfunding platform. The platform complies with pre-defined codes of conduct regarding quality and transparency, and donations are made practically, safely, and transparently.

C

The Project "Transforming Realities: Social Entrepreneurship for Young People" has internationally certified quality and transparency standards (e.g.: UNICEF). The International seal of approval confirms that the Project handles the funds received responsibly and transparently. The Project collects resources directly; donations are made via bank transfer.

D

The project collects resources directly; donations are made via bank transfer.

¹ Translated from the original in Portuguese.

1. Based on the case described, how much would you be willing to donate to the Project "Transforming Realities: Social Entrepreneurship for Young People"?

(1) Not willing	(2)	(3)	(4)	(5)	(6)	(7) Very willing
--------------------	-----	-----	-----	-----	-----	---------------------

2. Would you recommend the Project "Transforming Realities: Social Entrepreneurship for Young People" to someone in your family and/or close to you to donate?

(1) Not likely	(2)	(3)	(4)	(5)	(6)	(7) Very likely
-------------------	-----	-----	-----	-----	-----	--------------------

3. Would you allocate part of your Income Tax to the "Transforming Realities: Social Entrepreneurship for Young People" project?

(1) Not likely	(2)	(3)	(4)	(5)	(6)	(7) Very likely
-------------------	-----	-----	-----	-----	-----	--------------------

4. Was the case presented realistic?

(1) Not at all realistic	(2)	(3)	(4)	(5)	(6)	(7) Very realistic
-----------------------------	-----	-----	-----	-----	-----	-----------------------

5. Was the case presented interesting?

(1) Not at all interesting	(2)	(3)	(4)	(5)	(6)	(7) Very interesting
-------------------------------	-----	-----	-----	-----	-----	-------------------------

6 What was your role in the case?

Project creator

Potential donor

Considering the information presented about the case, how much do you agree with the following statements?

7. The Project is internationally certified.

(1) Strongly disagree	(2)	(3)	(4)	(5)	(6)	(7) Strongly agree
--------------------------	-----	-----	-----	-----	-----	-----------------------

8. The Project aims to obtain donations through the crowdfunding platform.

(1) Strongly disagree	(2)	(3)	(4)	(5)	(6)	(7) Strongly agree
--------------------------	-----	-----	-----	-----	-----	-----------------------

9. I trust that the submitted Project will always act with the best interests of the cause in mind.

(1) Strongly disagree	(2)	(3)	(4)	(5)	(6)	(7) Strongly agree
--------------------------	-----	-----	-----	-----	-----	-----------------------

10. I trust that the submitted Project will conduct its operations ethically.

(1) Strongly disagree	(2)	(3)	(4)	(5)	(6)	(7) Strongly agree
--------------------------	-----	-----	-----	-----	-----	-----------------------

11. I trust the submitted Project will use the funds raised appropriately.

(1) Strongly disagree	(2)	(3)	(4)	(5)	(6)	(7) Strongly agree
--------------------------	-----	-----	-----	-----	-----	-----------------------

12. The Project is something I can relate to.

(1) Strongly disagree	(2)	(3)	(4)	(5)	(6)	(7) Strongly agree
--------------------------	-----	-----	-----	-----	-----	-----------------------

13. The presented Project is something that I would miss if it ceased to exist.

(1) Strongly disagree	(2)	(3)	(4)	(5)	(6)	(7) Strongly agree
--------------------------	-----	-----	-----	-----	-----	-----------------------

14. I believe that the presented Project is necessary.

(1) Strongly disagree	(2)	(3)	(4)	(5)	(6)	(7) Strongly agree
--------------------------	-----	-----	-----	-----	-----	-----------------------

15. The presented case is a non-profit project with important performance.

(1) Strongly disagree	(2)	(3)	(4)	(5)	(6)	(7) Strongly agree
--------------------------	-----	-----	-----	-----	-----	-----------------------

16. I believe that the presented Project performs at an excellent level in the field of humanitarian aid.

(1) Strongly disagree	(2)	(3)	(4)	(5)	(6)	(7) Strongly agree
--------------------------	-----	-----	-----	-----	-----	-----------------------

General questions about you, not the case!

We would like to know a little more about your opinion. Please indicate how much you agree with the following statements:

17. In general, I believe that quality standards and transparency are essential for fundraising organizations.

(1) Strongly disagree	(2)	(3)	(4)	(5)	(6)	(7) Strongly agree
--------------------------	-----	-----	-----	-----	-----	-----------------------

18. In general, I believe that external standards of quality and transparency, such as seals of approval and certification from other organizations, are important for fundraising organizations.

(1) Strongly disagree	(2)	(3)	(4)	(5)	(6)	(7) Strongly agree
--------------------------	-----	-----	-----	-----	-----	-----------------------

General characteristics

19. Please provide your age. Values in numbers, e.g.: 30

20. Which gender do you most identify with?

Female

Male

I prefer not to answer

21. About volunteering for a non-profit organization, you?

Have you ever volunteered

Have you never volunteered

Other

22. Which location best represents your nationality?

North America

South America and the Caribbean

Europe

Asia

Oceania