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Comparison and positioning of NGOs aimed at children from the perspective of social marketing on Twitter

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The role of Non-Governmental Organizations (NGOs) in disseminating and protecting children's rights is fundamental by increasing society's knowledge about the reality that children face, thus mobilizing citizen attention. In this paper, we present an original study on social media data, specifically Twitter, to analyze childhood NGOs, evaluating the success of their content (through the likes obtained by publications) from the perspective of social marketing and prospective theory. In addition, it examines the positioning of organizations concerning the types of messages identified. The methodological approach is based on data mining, content analysis, and simple correspondence analysis through which the typology of the messages and positioning map are determined. The results suggest that these organizations generate predictable communication by publishing on specific topics and only increasing the number of tweets in emergencies when they are requiring urgent help. Some tweets show an immediate risk to which children are exposed if they do not receive help, which aligns with one of the premises of the Prospect Theory. Furthermore, a more significant number of posts does not necessarily imply a greater number of likes. Three types of messages have been determined: informative tweets that point out risks (type 1), impartial dialogue tweets (type 2), and action tweets that highlight benefits (type 3), confirmed through the Kruskal-Wallis test to have a relationship with impact. The positioning map shows that type 3 messages, which World Vision Spain opts for, are the most popular, followed by type 1, which Educo leans towards. Finally, there are those of type 2, with which UNICEF Spain is associated. The main implication is that our analysis validates the use of social media such as Twitter to analyze NGOs and proposes these social media platforms to be an important tool in mobilizing the community. In addition, this study offers parameters when constructing the messages for use in social marketing campaigns according to decisions that involve risk or certainty.

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Introduction

The role of Non-Governmental Organizations (NGOs) in the dissemination and protection of children's rights is crucial as they enable society to increase its awareness of the reality faced by children who do not have the same opportunities. This, in turn, helps mobilize public attention and this type of socially-responsible behavior has been gaining strength since the 1960s (Gutiérrez-Rodríguez et al. 2017). Children have been and continue to be one of the most vulnerable groups worldwide. This concern for the situation of children is reflected in various proposals, including the Sustainable Development Goals (SDGs) which specifically promote children's rights, recognizing that sustainable development is essential for future generations and that the improvements and changes achieved will have positive effects on children and their families (Palacián 2021). The SDGs have a universal scope and prioritize the most vulnerable and marginalized people worldwide. Another proof of this commitment is the existence of international treaties like the Convention on the Rights of the Child (CRC), consisting of 54 articles that outline the economic, social, cultural, civil, and political rights of children, obligating governments to uphold them. However, public policies alone are not sufficient to address the large number of children in need of assistance (Dávila and Naya 2012). Hence, the importance of NGOs in the fight to defend and enforce their fundamental rights. Their work is twofold: on one hand, it is informative, as they disseminate data about the reality of thousands of children and highlight the frequent violation of their rights. On the other hand, it involves raising awareness among society as a whole and among decision-makers specifically (Del Molino 2003).

In this context, it is essential to use the appropriate means to achieve effective communication, with social media being one of the most suitable tools for NGOs (Conde et al. 2017). In the last decade, the evolution of digital technologies has significantly transformed user behavior (Cuesta-Valiño et al. 2023b). Specifically, social media has become one of the most widely-used communication channels for third-sector organizations. The strategic use of social media makes communication more participatory and direct, increasing citizen engagement and facilitating relationships between individuals, groups, and organizations (Peña et al. 2010; Arroyo et al. 2020). In this regard, Twitter is particularly well-suited, as it allows for interactions with users and the attraction of new audiences while enhancing the organization's credibility by providing real-time information (Golbeck et al. 2010; Carrasco 2014). While various studies have thoroughly investigated the communication structures of third-sector organizations, the instability of such institutions necessitates an examination of the potential offered by new social media for strengthening their ties with their social base. Furthermore, little is known about the impact of social networks on NGOs based in Spain (Soria 2015). Despite the existence of publications regarding the use of Twitter by these types of organizations, there is insufficient evidence about how those focused on child protection employ it from the perspective of social marketing.

It has been shown that the concentration and communication of social activities is linked to generating a positive image of brands (Cuesta-Valiño et al. 2022a), and it has been investigated how variables such as informativeness, entertainment and credibility affect content on social media platforms (Cuesta-Valiño et al. 2020). However, there is not enough evidence on what type of content generates more interaction from social media users. Therefore, this research aimed to analyze the profiles of the leading NGOs dedicated to child protection in Spain on the social media platform Twitter from the perspective of social marketing. Additionally, the main goal was to establish a typology for the messages based on their purpose and alignment with prospective theory and to examine the positioning of organizations concerning the identified message types. Given that it can be stated that the media in general and advertising can be the factors responsible for promoting socially-responsible actions, Twitter has been selected as the main social media platform to understand the behavior of users towards the content of the NGOs (Elías-Zambrano et al. 2021). Research on happiness is common in the fields of psychology, education, organizational behavior, religion, tourism, and hospitality (Núñez-Barriopedro et al. 2021), and one of the novelties of this study is the consideration of happiness and social marketing to understand the NGOs' content. The methodological approach was based on data mining, utilizing content analysis techniques to study the format, purpose, topic, sentiment, and alignment of tweets with prospective theory, as well as to establish communication profiles. Simple correspondence analysis was employed to determine the message typology and positioning map. Regarding data collection, the Fanpage Karma tool was used, retrieving tweets published from November 2022 to March 2023. The objectives of this research were as follows:

- To study the communication profiles of the leading NGOs dedicated to child protection in Spain on the social network Twitter from the perspective of social marketing, analyzing their posts in terms of format, purpose, topic, sentiment, and alignment with prospective theory.
- To establish a message typology from the perspective of social marketing and its alignment with prospective theory.
- To compare the impact of the identified message types and determine whether there is a relationship or not.
- To examine the positioning of NGOs regarding the identified message typology.

To date, there is no known study that focuses on analyzing how international NGOs, with a national presence in Spain, use social marketing to become more viral and reach their target audience. This study has explored online social marketing content on Twitter, focusing on tweets related to international NGOs. Twitter was chosen as the social media platform for the information analysis because it is the most popular micro-blogging site where people exchange information and opinions about specific topics, in this case, the social marketing of NGOs. Additionally, it allows for the creation of follower communities, reaching target audiences more easily through direct content (Featherstone et al. 2020). Understanding the information that users disseminate about social marketing can aid NGOs in their communication campaigns. The results obtained have led to the conclusion that these organizations generate predictable communication by posting about specific topics and only increasing the number of tweets during emergencies when urgent assistance is required. Furthermore, a higher number of posts does not necessarily translate to more likes. On one hand, three types of message were identified: informative tweets that highlight risks (Type 1), impartial dialogue tweets (Type 2), and action-oriented tweets emphasizing benefits (Type 3). The Kruskal-Wallis test confirmed their relationship with impact. The positioning map shows that Type 3 messages - the ones favored by World Vision Spain - are the most popular, followed by Type 1 messages - the preference of Educo - and finally, Type 2 messages - associated with UNICEF Spain. These findings provide valuable insights into the effectiveness of different message types and the communication strategies employed by the sampled NGOs in the context of social marketing. Such knowledge can inform future campaigns and help NGOs engage their target audiences more effectively in

terms of the type of content they should share concerning social marketing and the types of conversations that should be generated on social media platforms such as Twitter to achieve the greatest impact.

Literature review

NGOs for childhood problems. Childhood is the period of human life that spans from birth to puberty (UN 2023). According to the Convention on the Rights of the Child, a child is defined as a person who has not yet reached the age of 18, unless they have reached the legal age of majority as stipulated in the Convention on the Rights of the Child of November 20, 1989. In recent decades, there has been a global increase in the child population (UN 2023). An NGO, or Non-Governmental Organization, is typically a voluntary association of individuals, businesses, or institutions operating with a common goal related to a social mission and is usually independent of governments (UNICEF 2023a). For example, UNICEF is an NGO that works to save children's lives, defend their rights, and help them fulfil their potential from early childhood through adolescence (UNICEF 2023b). The fight against childhood issues is carried out through assistance and promotion policies for the under-aged (Bifarello 1996). While the state is responsible for social policy development, there is a constant interaction among the three institutions that form a complex network: the private sector, the state, and the third or non-profit sector (Thompson and Campetella 1995). According to Marcuello (2007), this third agent, the non-profit sector, presents as having great complexity and heterogeneity due to various factors, primarily related to its size, legal form, types of activities, and stakeholder groups (Fuentes 2007). Regarding the reasons for the existence of these organizations, economic theories consider the non-profit sector as a residual whose function is to alleviate the inefficiencies of the public sector and market failures (Marcuello 2007). Within the third sector, we find NGOs whose purpose is not the generation of distributable economic benefits but rather social benefits, ultimately aiming to improve the wellbeing of society as a whole. Even if they generate economic benefits, these cannot be distributed and are dedicated to achieving their objectives (Fuentes 2007).

NGOs actively collaborate with the state on numerous occasions, engaging in exchanges and joint or simultaneous practices on common areas of action (Bifarello 1996). According to Sánchez and Villarroel (2017), new social scenarios and the diversity of phenomena addressed from a social dimension have prompted NGOs and other actors to develop social intervention processes that suggest new societal approaches. The interventions of these organizations are linked to a wide range of needs and serve as references for solving various social problems. The interventions carried out by NGOs focused on child protection may differ from one organization to another. In some cases, the actions appear to be driven by intentions of control and normalization aimed at maintaining a certain social order. At the same time, other actions seem to facilitate the pursuit of emancipation or social agency for these individuals (Sánchez and Villarroel 2017). Initiatives by NGOs in the field of child policies stand out in terms of quantity and quality. Fundamentally, they can be divided into three categories: assistance, advocacy and action, and development (Bifarello 1996).

In conclusion, as highlighted several times by the Committee on the Rights of the Child, the role of NGOs in the dissemination and protection of children's rights is fundamental in increasing society's awareness of the principles and provisions. To ensure that the competent authorities in matters of childhood design policies that defend their rights and increase their wellbeing, there must be seamless communication that fosters the exchange of information and allows for awareness-raising and influencing the positions of decision-makers. Furthermore, it is important to avoid competitiveness among NGOs, isolated work, and task duplication. Acting in collaboration, in a coordinated manner, and without forgetting their reason for existence - the effective fulfillment of children's rights – has been proven to be much more efficient (Del Molino 2003).

Social marketing: a prospective theory and happiness approach. Social marketing is a discipline that goes beyond the commercial sphere as it focuses on researching and satisfying social, human, and spiritual needs. This implies that its scope extends to all types of associations, both public and private, with or without a profit motive. Its goal is to bring about voluntary changes in behavior through an understanding of the needs, desires, and perceived barriers of the target audience. Throughout history, we can find several examples of campaigns in favor of social change related to childhood, such as abolishing child labor during the Industrial Revolution. In modern times, other causes like healthcare, environmental, educational, and economic reforms have been pursued (Kotler and Roberto 1991). The origins of social marketing can be traced back to the mid-1950s when Wiebe (1951) suggested that a social cause could be sold like any other product demanded by consumers. However, the first academic definition emerged in 1971, explaining social marketing as the design, implementation, and control of programs aimed at increasing the acceptance of a social idea or cause among specific target groups. It uses the same tools as traditional marketing but with objectives that go beyond the sale of a product or service (Kotler and Zaltman 1971). Later, Kotler and Roberto (1991) emphasized that it is essentially a strategy used to change behavior, therefore social marketing has been academically explored based on the trinomial of consumption, economic profitability and organizational efficiency (Jiménez-Marín et al. 2021). To achieve this, it combines the best elements of traditional approaches with an integrated system of planning and action, utilizing the latest advances in Information and Communication Technology and marketing.

Social marketing encompasses a set of strategic activities aimed at changing and promoting people's behavior to improve social wellbeing based on marketing strategies (Dibb and Carrigan 2013; Cuesta-Valiño et al. 2023b). Furthermore, several factors can hinder the development of social marketing campaigns in practice. As mentioned earlier, the objective of social marketing is different from that of commercial marketing; it does not aim to sell a product or service but to influence individuals to change their behavior. This constitutes the first difficulty, as it is not easy and requires significant effort. As early as 1991, Kotler and Roberto pointed out that the success of a social change campaign depends on society's readiness to adopt a specific change or goal. This readiness varies over time, making it even more challenging to achieve. The second difficulty is identifying the target audience. As stated by Páramo (2016), this is challenging due to the heterogeneity of individuals, inclusive of their differences in habit, desire, and behavior. A lack of consensus, understood as disagreement when designing the social marketing campaign to ensure its effectiveness, poses the next obstacle. Due to a lack of consensus, the development of social marketing campaigns is not as effective as it should be in many cases (Wood 2012). As general impediments, we can mention the complexity in the application of certain variables, such as price, as it is difficult to determine the cost of abandoning one behavior and starting another. On the other hand, budget is also a determining and limiting factor, as well as the lack of social marketing knowledge in many organizations (Perfeito et al. 2007). For all of these reasons, to

develop effective social marketing campaigns, it is important to rely on classic theories that explain user behavior, such as prospective theory.

Prospective theory was developed based on the works of Kahneman and Tversky (Tversky and Kahneman 1974; Tversky and Kahneman 1981; McNeil et al. 1982; Kahneman and Tversky 1984; Kahneman and Tversky 1987). These authors argue that individuals make decisions from among different options based on the perceived risk associated with each choice, where risk becomes a central factor in this process. How individuals make decisions varies depending on whether they perceive there to be a high or low risk in the available alternatives. However, accurately and adequately assessing this risk is challenging. Prospective theory posits that consumers react differently to the same information depending on whether the message is framed positively or negatively (Balaji et al. 2021). Therefore, a message on social media can elicit both positive and negative behaviors, more specifically on a social media platform such as Twitter in which the number of characters per message is limited, and it is necessary to express many things through the content. In economic terms, this theory helps understand how the human mind utilizes its cognitive capacity to analyze a situation and relatively evaluate potential losses and gains. As a result, people tend to make decisions based on relative improvement in a specific situation, weighing the potential gains and losses (Shareef et al. 2021). Valence or polarity alone does not predict the engagement of a publication but its intensity does (Leppert et al. 2022). Prospect theory explains how people will respond to positive effects with positive actions and to negative effects with negative actions, that is, there is reciprocity. Specifically on Twitter, it has been shown that when people feel a feeling intensely, they tend to interact with it, resulting in the greater viralization of that content (Leppert et al. 2022). Steward et al. (2003) noted that many studies investigating the effectiveness of messages related to behavior change, especially in the field of health, draw inspiration from prospective theory.

Concerning the risk factor, if individuals focus on the losses that may result from a decision, they are more likely to seek options involving risk. Conversely, if they concentrate on potential gains or benefits, they are more likely to opt for options that provide certainty. Given these premises, prospective theory is useful when it comes to providing guidelines for crafting messages in social marketing campaigns, depending on whether the decisions entail risk or certainty (Monroy 2017). In the online context, several authors have analyzed Twitter using the prospect theory approach. In this sense, loss aversion has been detected as one of the characteristics that most influences the impact of messages (Yoon et al. 2017; Zhao et al. 2021). Yousef et al. (2022), in the field of NGOs, has confirmed these organizations publish messages that focus on losses or feelings of guilt to achieve greater participation and trigger behavioral change. However, individuals do not only act based on the risk they perceive. Their behavior can also be driven by the happiness they generate through certain actions (Cuesta-Valiño et al. 2023a), yet there is a scarcity of scientific studies in the recent literature that reflect the philosophy of happiness and happiness management (Ravina-Ripoll et al. 2023a). Happiness, as a synonym of subjective wellbeing or satisfaction with life (Ravina-Ripoll et al. 2019), is a personal and social concept that we all, as individuals, aspire to at some point, therefore the study of happiness as a growth strategy for organizations, both governmental and non-governmental, must be incorporated into the strategies (Ravina-Ripoll et al. 2022). Furthermore, it has been shown that the consumer happiness variable is an antecedent of loyalty, which is a very important aspect in NGOs to maintain donations (Cuesta-Valiño et al. 2022b). In the online environment, there are different evidences

about the success of positive messages. Cody et al. (2015) affirmed that, concerning climate, a book release and green ideas contest can contribute to an increase in happiness. In the context of this NGO, positive messages have a more significant impact when they talk about volunteering issues (Galiano-Coronil and Ravina Ripoll 2021). Communication impacts the happiness of individuals (Ravina-Ripoll et al. 2023b). Furthermore, positive emotions such as joy and happiness shown in social media content, from the perspective of social marketing, generate a substantial impact regarding the communication campaigns carried out on social media (Galiano-Coronil et al. 2023).

NGOs' communication instruments. The existence of new technologies and the increasing popularity of social media have led institutions to reconsider the numerous possibilities that they offer and how they could introduce these communication channels to promote themselves while enhancing their original purposes (Carrasco-Polaino et al. 2019). In other words, social media represents an opportunity for communication management in all types of organization. They are especially useful for disseminating messages in cases where the entity has limited resources, whether economic or professional (Caerols-Mateo et al. 2017). As a result, one of the advantages of using social media is that it reduces the dependence on mass media as a strategic ally in information dissemination. However, NGOs face several obstacles when using social media. One initial problem may be the lack of communication specialists among the staff. Professionals working in these types of entities often have unspecified roles, making it difficult to establish long-term teams. In some cases, the decision to use social media arises as an intuitive initiative rather than as a planned action. When this happens, the limited knowledge of using the tools, combined with a lack of institutional support, hinders proper account management. Other limitations in the use of social media are primarily related to issues of information quality, reliability, confidentiality, and privacy (Carrasco 2014). Sometimes the presence and communication of NGOs on social media platforms is not planned, so instead of following an implementation strategy, improvisation is relied upon. Conde et al. (2017) emphasizes that strategic planning for organizations on social media is fundamental and should be adapted to the target audience and adjusted to the circumstances of each moment.

Considering the most used social platforms, Twitter stands out as an ideal tool for organizations because its attributes are the most suitable for providing continuous information about the organization's activities and responding to reactions from its stakeholders in real time (Golbeck et al. 2010). Its use by NGOs has been expanding in recent years, including pursuing objectives such as fundraising, attracting volunteers, disseminating their projects, raising awareness, and educating the public (Conde et al. 2017). Numerous factors have driven the use of Twitter as a communication strategy in NGOs such as the ability to obtain contributions from donors, which are a fundamental source of funding for the survival of NGOs (Froelich 1999) and reducing dependence on external funding (Macedo and Pinho 2006). In this context, the use of social media is configured as being a cost-effective alternative to attract new audiences, provided that it is used properly (Saxton and Wang 2014).

Twitter is particularly interesting for NGOs as it allows them to convey credibility to their current audience and attract new audiences, all in a more efficient manner (Carrasco 2014). However, it is crucial to act responsibly when generating conversations and responding to or tweeting the public messages received from stakeholders (Guo and Saxton 2014), with content quality being a determining factor (Fussell and McCorkindale

2013). Adopting the use of this tool or any other social media without a prior understanding of how to use it effectively would be a serious mistake that could result in a waste of time and resources (Guo and Saxton 2014). Kim et al. (2014) determined that to ensure the proper dissemination of information and to create appropriate interaction and dialogue between NGOs and their stakeholders, both unidirectional and bidirectional communication strategies are necessary on Twitter. In terms of unidirectional communication, Rybalko and Seltzer (2010) made two recommendations. The first is explaining the NGO's mission in its Twitter profile, and the second is to include a link to its website so then interested parties can access more information. In the case of a bidirectional communication strategy, including the administrator's name and Twitter handle in the organization's profile can help create a more personal relationship with stakeholders, encouraging their participation.

Methodology

This paper analyzed the communications of child protection NGOs from a social marketing perspective, focusing on the Twitter profiles of some of the most relevant NGOs in Spain. The research was based on a descriptive and correlational approach combining data mining based on the Knowledge Discovery in Databases model (KDD), content analysis, with both a quantitative and qualitative approach. Finally, simple correspondence analysis was employed.

Data Mining and KDD. Data mining is a set of techniques and technologies that allows for the exploration of large databases, automatically or semi-automatically, to find repetitive patterns that explain the behavior of the data (Yu et al. 2013; Hernández-Leal et al. 2017). Its purpose or objective is to help make sense of large amounts of data. In line with the above, Moro et al. (2016) agrees that it enables the discovery of new and potentially useful information from large volumes of raw data. The data from social media platforms contains valuable information that can be used to understand user behaviors, trends, or tastes, so the application of data mining allows marketers to determine, based on the resulting patterns, different types of segmentations that can help them target their campaigns (Olarte et al. 2018). Some researchers have defined data mining as a crucial part of a term encompassing the broader Knowledge Discovery Database (KDD) concept. This concept consists of a process used to carry out automated knowledge extraction from large volumes of data of an iterative nature. In short, an organized process of valid, novel, proper, and understandable identification of patterns from large and complex datasets (Maimon and Rokach 2010). The design of this research has been elaborated following the KDD process according to the steps specified in Fig. 1.

In this regard, the information to be examined was gathered using Fanpage Karma (Graf and Eyl, 2012), which has been employed in several research studies and offers an advantage over traditional methods as it allows for the measurement of both qualitative and performance data found on social media (Gutierrez et al. 2018). The research design has enabled us to gain valuable insights from the collected information. The primary organizations dedicated to childhood, as per the rankings provided by 'Ayuda en Acción' (2018) and 'Oxfam Intermon' (2023), were selected for this study. Additionally, these organizations were required to be registered with the 'Coordinadora para el desarrollo de ONG en España' (CONGDE). Finally, it was verified that they had Twitter profiles, with preference given to those with the highest number of posts during the specified period, spanning from November 19th, 2022, to March 31st, 2023. This time frame was selected based on International Children's Day, celebrated on November 20th. Furthermore, optimistic post-pandemic expectations have been associated with a greater likelihood of adopting social behaviors to obtain higher levels of life satisfaction (Contreras-Contreras et al. 2023; Cuesta-Valiño et al. 2023c). Based on these criteria, the selected organizations were as follows: 'Ayuda en Acción', 'Educo', 'Fundación Tierra de Hombres', 'Plan International España', 'Save the Children España', 'UNICEF España', and 'World Vision España'. The tool used to retrieve the information initially yielded a total of 4,213 tweets. From the total number of messages, a preliminary filtering process was conducted to exclude retweets, resulting in a total of 3,152 messages. Subsequently, the sample size to be analyzed was calculated as having a 95% confidence level and a 2.5% margin of error, yielding a result of 1,034 tweets. Proportionally distributing this sample among the seven organizations, the final sample size was set at 1,035 messages (Table 1).

Content analysis. Content analysis is a set of communication analysis techniques aimed at obtaining indicators (quantitative or not) through systematic and objective procedures for the purpose of describing the content of messages, allowing for the inference of knowledge related to the production/reception conditions (social context) of said messages (Bardin and Suarez 1996). It is a suitable technique for the analysis of social media data because it allows for the handling of a large volume of information at a
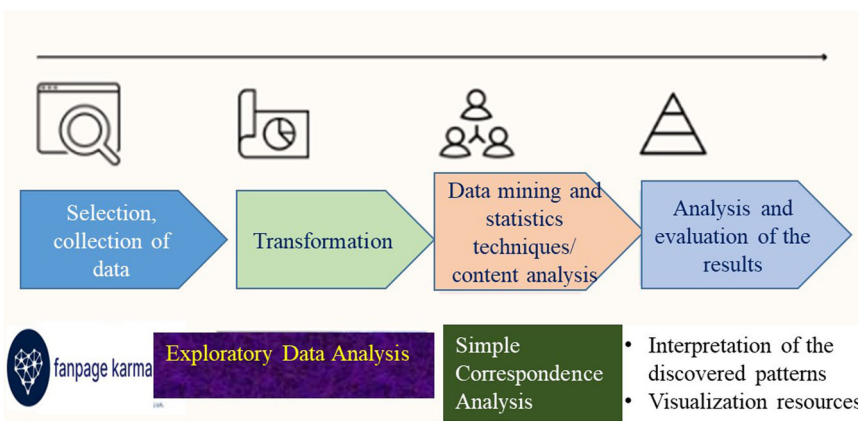

Fig. 1 Methodology process based on the Knowledge Discovery Database. Source: Maimon and Rokach (2010).

Table 1 Profiles of the selected organizations on Twitter and their number of publications.

Organization	Twitter profile	N° Tweets	Sample
Ayuda en Acción	ayudaenaccion	770	253
Educo	Educo_ONG	444	146
Fundación Tierra de Hombres	Tierradehombres	254	83
Plan Internacional España	PlanInt_ES	223	73
Save the Children España	SaveChildrenEs	186	61
UNICEF España	unicef_es	1,029	338
World Vision España	WorldVisionONG	246	81
	Total	3,152	1,035

Source. Twitter.com

relatively low cost, making it especially useful for use with very large samples. Furthermore, it enables the acquisition of information without the mediation of the researcher, which can influence the information-gathering process of the subject, as is the case with interviews or experiments in which the intervention of the interviewer may distort the true nature of a phenomenon (Krippendorff, 1990). The phases of content analysis are as follows (Bardin and Suarez, 1996): (1) In the first step, the pre-analysis, a working framework is established with the identification of the units to be analyzed, the setting of objectives, and the determination of parameters and indicators to consider. (2) The second step, the exploration of the material, involves data extraction based on the goals set in the first phase. (3) In the third step, the coding rules and system of categories and variables are determined. (4) The reliability of the coding-categorization system is then verified. (5) Finally, in the treatment of the results, the collected information is interpreted and turned into meaningful findings. The units of analysis identified are the messages posted on Twitter by the organizations mentioned earlier from November 19th, 2022, to March 31st, 2023. Once the information to be examined was collected, the coding process was carried out according to the following variables: profile, format, finality or social marketing, topic, sentiment, prospective theory, likes, and type of message.

Simple correspondence analysis. Correspondence analysis (CA) is a statistical technique that is particularly effective at analyzing contingency tables with numerical frequency data as it provides a simple and quickly understandable graphical representation (Lombardo and Beh, 2016). One of its advantages stems from the fact that most tests and techniques that study relationships between variables are very superficial, merely determining the existence or absence of a relationship. Correspondence analysis goes further by indicating the modalities affected by such a relationship and reveals properties that would otherwise have been overlooked. For example, it makes it possible to explain the behavior of one variable influenced by others (Beh 2004). CA allows for the visualization of the results through a perceptual or positioning map where the points represent the categories of variables, while the axes are the dimensions that define the space of representation for these points. The position of each point is the intersection of the numerical coordinates of dimensions 1 and 2 for each category. CA allows us to understand the relationship between categories of the same variable and between categories of different variables. The closer or more proximate the points, the stronger the relationship between the categories, and vice versa (Leeuw and Mair, 2009). Depending on the number of variables, it can be a simple correspondence analysis (SCA) when investigating the relationship between two variables or a multiple

correspondence analysis (MCA) when studying associations among more than two variables. In this research, two SCA were conducted: one to determine the typology of the messages based on their purpose (social marketing perspective) and their alignment with prospective theory. The other was to examine the positioning of NGOs regarding the identified message typologies. Furthermore, it was verified whether the impact is related to the typology of the messages. SCA and the Kruskal-Wallis test were used to confirm whether the impact depended on the message type, both of which were conducted using SPSS software version 29.

Results

Communication profiles. This subsection presents the results corresponding to the communication profiles of the organizations under study. First were the general communication profiles and second, the communication profiles according to the variables analyzed, specifically theme, sentiment, social marketing, and prospective theory (focused on social marketing). Figure 2 shows the general communication profiles. It was observed that most organizations obtained a deficient average number of likes compared to the number of tweets they published, except in the case of 'Save the Children Es'. Despite not being one of the profiles which published the most, they were the ones with the highest average number of likes per message. It also highlights that the percentages of 'Plan International Spain' in the two dimensions are similar.

Three tweets stand out from the rest and have close to 3000 likes. These messages were published in the context of the earthquakes in Turkey and Syria on February 6th, 2023, speaking of the NGOs' work in the area and the need for urgent help through donations. These tweets belong to 'Plan International Spain', 'UNICEF Spain', and 'Save the Children Spain' (Fig. 3).

These data are an indicator as to whether they need to consider changing the approach to publishing since the objective is to achieve a more significant reaction from the public. For this reason, the communication profiles of the organizations will be detailed according to a range of variables in which social marketing takes on a particular role. These variables are theme, sentiment, social marketing, and prospective theory (focused on social marketing).

Table 2 shows that slightly less than half of the publications (43.3%) incorporate some emotional connotation, whether positive (27.45%) or negative (15.85%), highlighting the first over the second. The rest of the tweets are limited to transmitting the information without any feeling (56.7%), with 'Fundación Tierra de Hombres' (69.9%) and 'Plan International España' (68.5%) being the organizations with the most impartial messages.

The entity that most frequently includes a positive connotation in its publications is 'Ayuda en Acción' (39.1%) and, to a lesser extent, 'UNICEF Spain' (32%) (Fig. 4). In contrast, 'Save the Children Spain' (36.1%) was the one that published the highest number of tweets with negative emotional connotations. Regarding the average number of likes based on this sentiment, it was observed that impartial messages have worked best during the period analyzed. For its part, among those that have some emotional connotation, tweets with a negative sentiment are more popular than positive ones. At this point, it was of interest to check the communication profiles from the social marketing perspective. To do this, the purpose of the tweet has been considered, which could have been informative, dialogue, or behavioral.

Table 3 highlights informative messages which represent 72.4% of the total, most of them published by 'UNICEF Spain' and 'Ayuda en Acción', totaling 28.3% and 25.9%, respectively. However, the impact of behavioral tweets is more significant than dialogue messages.
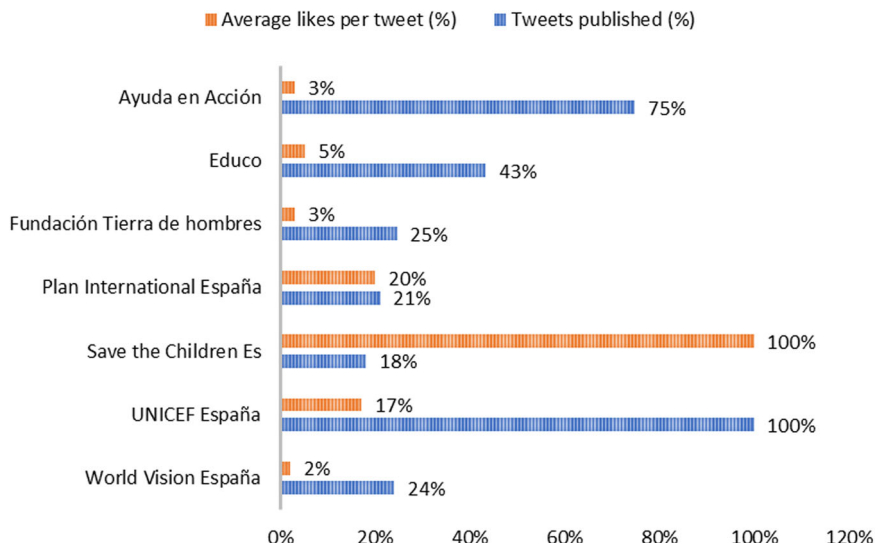
Fig. 2 Percentage of publications and average likes per message. Source. Own elaboration.

Fig. 3 Post with the highest number of likes. Source: Twitter.com.

Table 2 Communication sentiment profiles of the organizations.

Number of published messages

Organization/sentiment	Negative	Positive	Neutral	Total
Ayuda en Acción	27	99	127	253
Educo	24	29	93	146
Fundación Tierra de Hombres	4	21	58	83
Plan International España	16	7	50	73
Save the Children España	22	9	30	61
UNICEF España	54	108	176	338
World Vision España	17	11	53	81
Total	164	284	587	1.035
Average per like by message				
Ayuda en Acción	1.56	3.05	2.89	2.81
Educo	3.04	3.9	5.04	4.49
Fundación Tierra de Hombres	0.25	2.76	2.26	2.29
Plan International España	17.69	2.43	19.88	17.73
Save the Children España	10.77	6.44	164.7	85.84
UNICEF España	22.06	9.28	14.84	14.21
World Vision España	1.35	2.18	1.15	1.33
Total	11.28	5.54	16.31	12.56

Source. Own elaboration.
Number of messages published and average likes per message.

During the period under review, 'Save the Children Spain' and 'World Vision España' barely published messages of this kind, while 'Tierra de Hombres' and 'Plan International España' did not attempt to generate dialogue in any of their tweets. In contrast, 20% of UNICEF's publications on their aims fall into this category, partly because they often respond and thank users. Concerning the impact of the messages, it is necessary to indicate that action and behavior messages get a higher average of likes when dealing with more impactful causes, such as requests for help in an emergency as they are topics with a more significant impact. Some examples of tweets of this type are shown in Fig. 5. Then there are the informative messages, and the least popular publications are those whose purpose is to generate conversation.

Concerning the analysis from the perspective of social marketing, the prospective theory approach has been considered since it considers both positive and negative reinforcement, which can be analogous to the barriers and motivations of users on issues related to childhood. Table 4 shows that more than half of the messages are unbiased (55.1%), highlighting neither risks nor benefits. Among the publications that conform to the forward-looking theory, there are more that point out risks (27.1%) compared to those that highlight benefits (17.8%). Educo is the organization
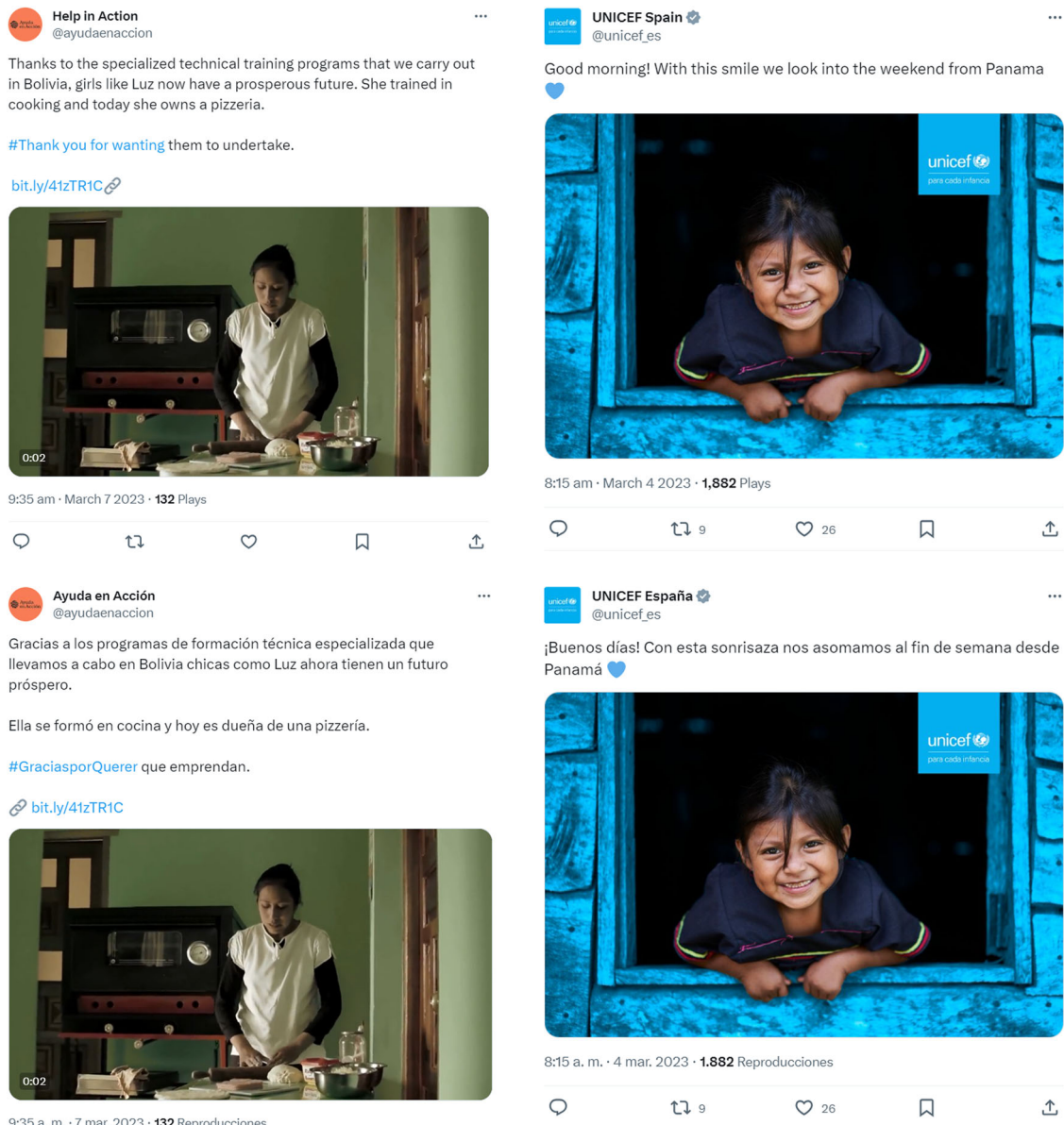
Fig. 4 Examples of messages with a positive sentiment. Source. Twitter.com.

that least applies prospective theory in its messages, with 80.7% being unbiased. 'Save the Children Spain' and 'Plan International Spain' focus on risks, representing 55.7% and 54.8% of their messages. Meanwhile, Educo and 'Ayuda en Acción' are most inclined to highlight positive effects in their tweets, alluding to the benefits in 28.1% and 23.3% of their publications, respectively.

The messages in Fig. 6 encourage collaboration by highlighting the benefits and positive effects derived from said collaboration. The top message indicates that if users collaborate, they will be doing something as crucial as giving young people opportunities for the future, while the bottom message offers excitement and happiness, as well as resources so then they can survive and lead a better life. In contrast, the messages mentioning risks refer to the risks that children will be exposed to if users do not cooperate including malnutrition, disease, humanitarian emergencies, and conflict situations.

From the organizations' point of view, 'Ayuda en Acción' usually publishes about the environment and education, 'Tierra de Hombres' on health issues, 'Plan Internacional España' on gender equality, and Educo, as its name suggests, about

education. 'Save the Children Spain', 'UNICEF Spain', and 'World Vision Spain' are the ones that most often ask for collaboration, especially in war and natural disasters. Approximately half of the messages on collaboration, natural disasters, wars, child protection, health, and solidarity have been published by 'UNICEF Spain', half about education belong to Educo, and half related to economic development are from 'Ayuda en Acción'. Around 70%–80% of the employment, environment, and migration messages also belong to this last organization. Finally, the topics on which the tweets are most distributed among the seven entities are hunger, poverty, gender equality, and laws (Table 5).

Regarding the average number of likes according to the topic of the message, publications about any type of collaboration once again stand out. In second place are tweets that talk about natural disasters, such as floods or storms, and those that deal with gender equality (Table 6). Next, we examined the topics corresponding to behavioral messages which promote a specific action. Table 7 shows that the organizations that issue the most behavioral messages are 'Ayuda en Acción', Educo, and UNICEF.

They address collaboration in 'Ayuda en Acción' and UNICEF, and education in Educo. In this sense, it is necessary to highlight that only Educo, who posts on the recurring topic of education, has been the one that has achieved the highest average of likes per message. In 'Ayuda en Acción' and UNICEF, the most popular topics are the environment and natural disasters, respectively. It is worth highlighting that it was a message from 'Save the Children ES' that achieved the highest number of likes.

In Table 7, the topics that occur most in behavioral messages are those of collaboration that refer to disasters or other traumatic events, such as the war in Ukraine. The messages with the highest average number of likes per message correspond to this topic. The second topic with the most impact relates to natural disasters.

However, it is necessary to comment that two of the organizations that have published the most about collaboration, 'Ayuda en Acción' and 'World Visión', have not achieved as much impact.

Simply correspondence analysis results

The results corresponding to the two ACS carried out to determine the types of message are presented below according to the characteristics they present concerning their purpose and according to their adequacy in relation to prospective theory. These two variables have been considered the most interesting from the point of view of social marketing. The Chi-Square test yielded a p-value < 0.001, confirming the relationship between the abovementioned variables.

Figure 7 presents the spatial scatter diagram which shows the relationship between the two variables. The blue dots correspond to the purpose of the message, while the red dots refer to the categories determined for the adaptation variable to prospective theory. The graph reveals that messages with a behavioral purpose and highlighting benefits have the most robust relationship. As for the publications that limit themselves to informing, they tend to be impartial or point out risks but the relationship is more complex than in the previous case. Finally, tweets that try to generate dialogue appear isolated from the rest. From these results, three types of message have been determined:

Type 1: Behavioral messages with a focus on profit (62 messages)
Type 2: Dialogue message with an unbiased approach (104 messages)
Type 3: Information messages with a focus on risk (240 messages)

This categorization has been made considering that the most evident association is that of action messages with benefits. For their part, informative tweets are related to the category of prospective theory in which risks are pointed out. As for impartial messages, being isolated, they could form a type of message by themselves but it has been decided to link them to the purpose of dialogue so as not to discard the latter. Once the message types were determined, a variable with this exact name was created to check for a relationship between likes and message type. The Kruskal-Wallis test is a non-parametric statistical test based on ranges, which is helpful when comparing more than two independent samples (Ostertagová et al. 2014). It is suitable when the

Table 3 Communication social marketing profiles of organizations.				
Number of published messages				
Organization/social marketing	Information	Dialogue	Behaviour	Total
Ayuda en Acción	194	21	38	253
Educo	94	15	37	146
Fundación Tierra de Hombres	69	0	14	83
Plan International España	68	0	5	73
Save the Children España	49	1	11	61
UNICEF España	212	68	58	338
World Vision España	63	2	16	81
Total	749	107	179	1.035
Average per like by message				
Ayuda en Acción	2.91	2.52	2.47	2.81
Educo	5.06	1.87	4.08	4.49
Fundación Tierra de Hombres	2.57	-	0.93	2.29
Plan International España	17.47	-	21.20	17.73
Save the Children España	11.61	0	424.27	85.84
UNICEF España	18.93	1.07	12.36	14.21
World Vision España	1.41	0.5	1.13	1.33
Total	9.45	1.45	32.21	12.56

Source. Own elaboration.
Number of tweets published and average likes per tweet.

Fig. 5 Example of a behavior message. Source. Twitter.com.

Table 4 Communication prospective theory profiles of organizations.				
Number of published messages				
Organization/Prospective Theory	Risk approach	Benefit approach	Impartiality	Total
Ayuda en Acción	46	59	148	253
Educo	28	41	77	146
Fundación Tierra de Hombres	5	11	67	83
Plan International España	40	10	23	73
Save the Children España	34	6	21	61
UNICEF España	102	42	194	338
World Vision España	25	15	41	81
Total	280	184	571	1.035
Average per like by message				
Ayuda en Acción	1.76	4.24	2.57	2.81
Educo	3.36	5	4.62	4.49
Fundación Tierra de Hombres	1	2.09	2.42	2.29
Plan International España	27.63	3.1	6.87	17.73
Save the Children España	11.03	22.67	2.25	85.84
UNICEF España	17.2	13.21	12.86	14.21
World Vision España	1.2	1.4	1.39	1.33
Total	12.3	6.64	14.59	12.56

Source. Own elaboration.
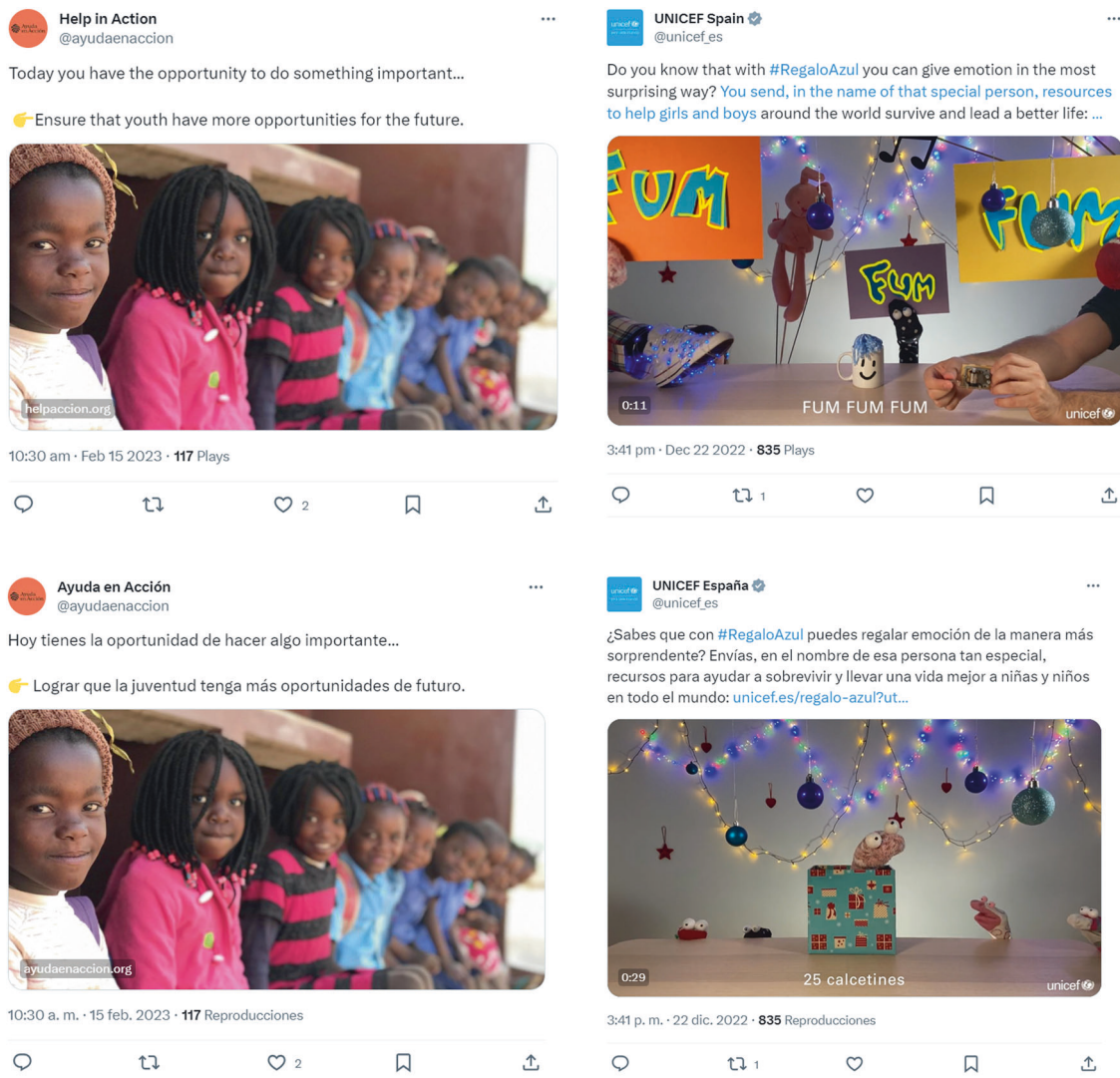Number of messages published and average likes per message.

Fig. 6 Examples of positively reinforcing messages. Source. Twitter.com.

Table 5 Number of publications by the organizations under study according to topic.

Organization/Topic	1	2	3	4	5	6	7	8
Ayuda en Acción	17	27	7	44	28	7	8	14
Educo	8	7	4	72	1	6	2	12
Fundación Tierra de Hombres	15	1	2	2	1	4	0	0
Plan International España	5	5	7	4	4	8	9	16
Save the Children España	13	1	6	1	0	11	1	8
UNICEF España	67	5	32	22	0	36	9	13
World Vision España	19	5	4	7	1	10	6	5
Total	144	51	62	152	35	82	35	68

Organization/Topic	9	10	11	12	13	14	15	Total
Ayuda en Acción	11	48	21	0	4	5	12	253
Educo	6	3	0	4	14	1	6	146
Plan International España	3	3	5	0	4	0	0	73
Save the Children España	5	0	0	7	4	4	0	61
UNICEF España	5	3	3	5	41	35	62	338
World Vision España	0	1	1	2	12	3	5	81
Total	37	58	30	19	95	70	97	1,035

Topics: (1) collaboration, (2) economic development, (3) natural disaster, (4) education, (5) employment, (6) war, (7) hunger, (8) gender equality, (9) lows, (10) environment, (11) migration, (12) poverty, (13) childhood protection, (14) health, (15) solidarity.
Source. Own elaboration.

Table 6 Average number of likes per message according to topic.

Organization/Topic	1	2	3	4	5	6	7	8
Ayuda en Acción	1.5	4.6	1.4	2.4	2.5	2.9	3.4	3.1
Educo	4.8	3.7	3.3	5.3	1	2.5	0.5	3.9
Fundación Tierra de Hombres	2.5	3	7	3	4	0.3	-	-
Plan International España	21.2	13.4	74.3	0.5	3.3	22.9	3	10.3
Save the Children España	360.7	0	13.3	15	-	14.1	10	15.8
UNICEF España	12.2	10.8	16.3	21.3	-	15.1	10.7	57.2
World Vision España	0.9	1.6	3.3	0.4	1	2.5	1.2	1.6
Total	39.8	5.5	18.9	6.4	2.5	11.5	4.8	16.7

Organization/Topic	9	10	11	12	13	14	15	Total
Ayuda en Acción	3.2	2.4	2.4	-	1.5	11.2	1.9	2.8
Educo	4.0	8.3	-	2.5	4.1	2	2.7	4.5
Fundación Tierra de Hombres	4.1	-	-	0	2.5	1.6	1.7	2.3
Plan International España	3.7	2	27	-	14.8	-	-	17.7
Save the Children España	1.6	-	-	16.6	4.3	5	-	85.8
UNICEF España	12.8	6.3	57.3	11.4	13	13.4	4	14.2
World Vision España	-	0	0	0.5	0.9	0.3	2.4	1.3
Total	4.6	2.8	11.9	9.7	7.6	8.3	3.3	12.6

Topics: (1) collaboration, (2) economic development, (3) natural disaster, (4) education, (5) employment, (6) war, (7) hunger, (8) gender equality, (9) lows, (10) environment, (11) migration, (12) poverty, (13) childhood protection, (14) health, (15) solidarity.
Source. Own elaboration.

Table 7 Topic by organization for behavioral messages (number of messages published/average likes per message).

| Topics/Organization	Ayuda en Acción	Educo	Fund. Tierra de Hom.	Plan Intern. ES	Save the Child. ES	UNICEF	World Vision ES
Colaboration	13/1.46	8/4.75	4/0.75	5/21.20	10/466.40	49/12.06	13/0.62
Development	3/0.66	5/1.60					
Natural desaster						2/22.50	
Education	4/3.25	11/5.55				1/3.00	
Employment	3/3.00	1/1.00	1/4.00				
Hunger		2/0.50				1/10.00	2/1.50
Gender equality	1/0.00	2/5.50					
Lows			I/0.00				
Environment	6/5.33						
Migration	4/3.50						
Poverty					1/3.00		
Childhood protection		4/4.25	1/1.00			3/20.33	
Health	1/1.00	1/2.00					
Solidarity	3/1.33	3/4.00	7/0.71			2/3.50	1/7.00

Source. Own elaboration.
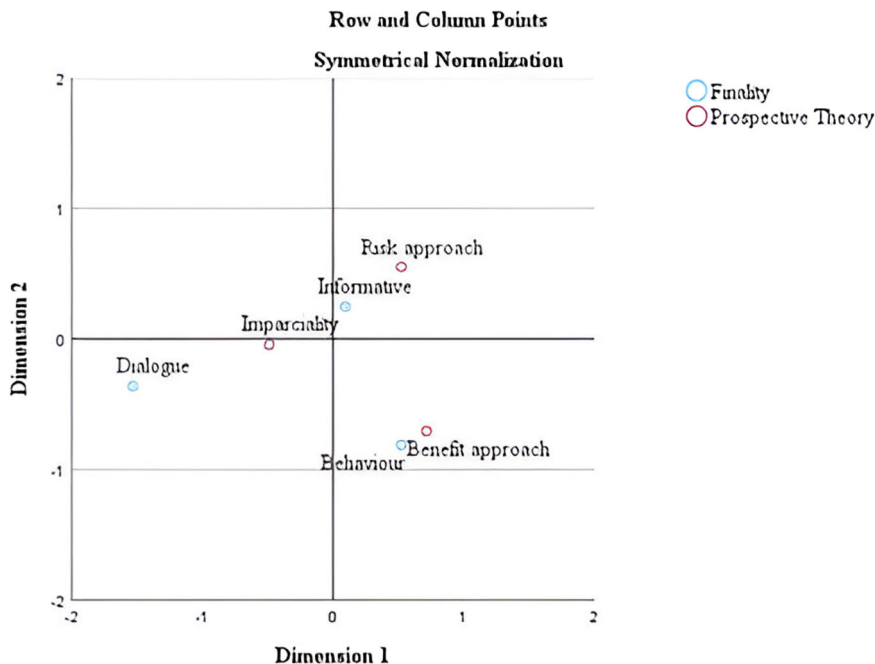
Fig. 7 Bispatial scatter diagram corresponding to the SCA. Source. Own elaboration.

Table 8 Average no. of likes according to message type.		
Type of message	**Characteristics**	**Average likes per tweet**
1	Behavior	6
2	Dialogue	1.4
3	Information	13
Source. Own elaboration		
Positioning of organizations according to the type of message.		

data is not normally distributed, making it a powerful alternative to analysis of variance (ANOVA) (McKight and Najab 2010). In the test, a p-value < 0.01 was obtained, so it can be stated that there is a relationship between the type of message and the number of likes. In this sense, Table 8 indicates that informative tweets that highlight some risks (type 3) are the ones that get the most attention, with an average of 13 likes. Those who appeal to benefits with the purpose of action (type 1) are in second position, with an average of 6 likes. Lastly, posts that do not highlight risks or benefits and that seek dialogue (type 2) are the least popular, achieving only 1.4 likes on average.

Below are the results of the ACS carried out to observe the positioning of the organizations concerning the new variable 'Type of message,' built from the purpose and approaches of prospective theory. Before continuing, it is necessary to comment that the relevance of the model has been verified due to obtaining a p-value < 0.00 in the Chi-square test, confirming the association between the previous variables.

Figure 8 shows the positioning of the organizations regarding the three types of messages identified. Considering the proximity of the points, it is possible to determine which organization is most related to each type of message; no clear association is observed, as the entities appear dispersed on the plane. However, it can be deduced that Educo chooses to publish action messages highlighting benefits (type 1), 'World Vision Spain' prefers to inform by pointing out risks (type 3), while 'UNICEF Spain' is the only one that is relatively close to the tweets that are at the same time impartial and dialogue (type 2).

Conclusions and discussion

This research has highlighted the importance of social marketing, specifically Twitter communication resources, to increase the impact of public NGOs dealing with child-related issues. This impact, measured by the number of likes, is relevant to mobilizing users and becoming vocal promoters of a social cause (Hestres 2014). In this sense, we agree with Watkins and Lewis (2014) that participation goes beyond the direct responses to the users of social networks to include retweets and likes or favorites.

First, UNICEF and 'Ayuda en Acción' are the NGOs that published the most messages, while the least active were 'Plan International Es' and 'Save the Children Es'. In general, the number of tweets broadcast during the analyzed months was similar across the organizations analyzed, except in the case of disasters such as the earthquakes in Syria and Turkey in February 2023. At that time, the number of publications increased considerably. As other studies have shown, Twitter is an essential communication tool in serious events such as natural disasters (Morales et al. 2018; Splendiani and Capriello, 2022; Valenzuela et al. 2013). Regarding the emotional connotation, 'Fundación Tierra de Hombres' and 'Plan International España' are characterized by the fact that most of their tweets are neutral, with this category obtaining the highest average number of likes. On the other hand, coinciding with the results obtained by Arroyo et al. (2020), the positive publications favored by 'Ayuda en Acción' and 'UNICEF Spain' outnumber the negative ones, with the most issued by 'Save the Children Spain', even though the impact of the latter is approximately double. These results coincide with other research, such as that of Song and Wen (2019), who found that disseminating positive messages about causes and problems stimulates collaboration with organizations through dramatic events and prosocial behavior. Concerning the perspective of social marketing in publications, information tweets are the most published, coinciding with the research of Hung and Valencia Cobos (2014). Carrasco (2014) and Rando and De las Heras (2016) observed that the low level of interaction is evidence of a unidirectional view of social networks by organizations; this is manifested in the present work on the scarcity of messages corresponding to the dialogue category. The exception to this is 'UNICEF Spain', as this
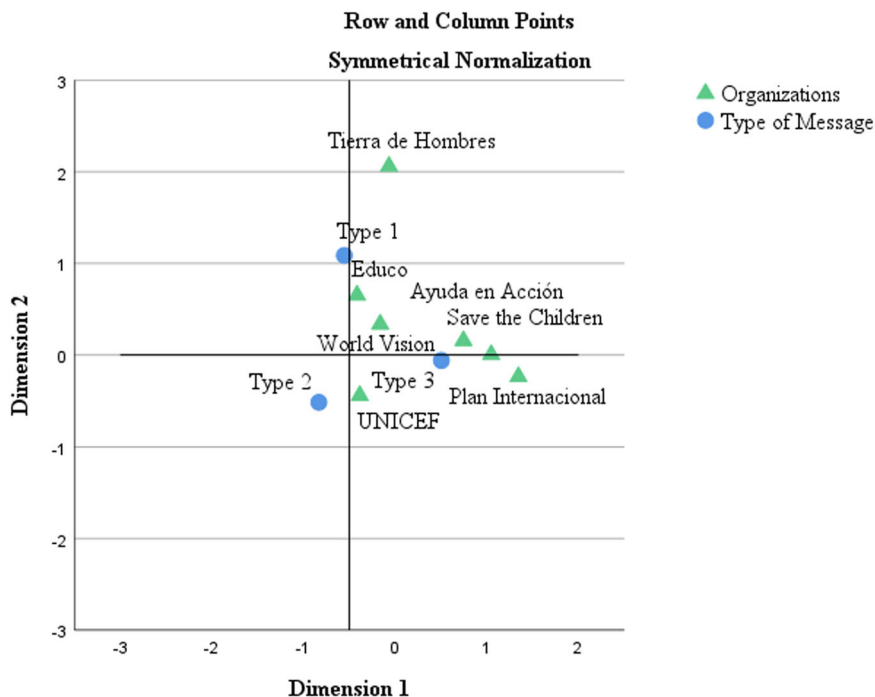
Fig. 8 Bispatial scatter diagram corresponding to the SCA for the positioning of organizations regarding the types of message detected. Source. Own elaboration.

organization's number of dialogue messages is double the average, making this category the one with the most negligible impact. On the other hand, tweets that incite action tend to be the most popular, achieving a higher average number of likes, with Educo being the organization most inclined to this end.

Behavioral tweets achieved a more significant average impact per message. In this regard, the research by Lovejoy and Saxton (2012) identified dialogue messages as one of the functions used to achieve a greater community of users. However, the present study has determined that behavioral messages have contributed to a greater extent to achieving this objective, highlighting the importance of this type of publication in NGOs (Galiano-Coronil and MierTerán-Franco 2019). Considering these behavioral messages, it is interesting to note that the most frequently issued and popular messages are those requesting help or collaboration in the extreme circumstances produced by natural disasters, wars, or similar events. The last point of the content analysis focused on whether the publications aligned with any of the approaches of prospective theory. Even though most messages are unbiased, the rest highlighted risks rather than benefits, with the former having a more significant impact. Therefore, the theory's risk aversion premise is faithful in that the tweets highlighting risks make a more significant impression on users than those highlighting benefits, achieving a higher average number of likes and a higher impact. Proof of this is how the average number of likes of tweets published by 'Save the Children Spain' and 'Plan International Spain' - which tend to focus on risks—are higher than those of Educo and 'Ayuda en Acción'—which are more inclined to highlight benefits. Research on this theory has given rise to implications on human behavior which coincide with many of the conversations in the tweets published by organizations (Brennan et al. 2014). Some examples of these implications are that people will respond to positive effects with positive actions and adverse effects with negative actions; that is, there is reciprocity. People tend to choose an immediate reward rather than waiting to get a bigger reward in the future. For their part, Steward et al. (2003) stated that the effectiveness of messages related to behavioral

change, particularly in the health field, is inspired by prospect theory. In this sense, if individuals focus on the losses derived from a decision, they will tend to look for options that involve risk. On the contrary, if they focus on potential gains or benefits, they will lean towards options that imply certainty.

Next, an SCA was carried out to determine the typology of messages based on social marketing and their adaptation to prospective theory, which allowed us to determine there as being three types of message. The first was behavioral messages with a focus on benefit. The second was a message of dialogue with an impartial approach, and the third was information messages with a focus on risk. Furthermore, it has been proven that the impact depends on belonging to one of these three categories, with the tweets corresponding to the first type being those that achieved a higher average of likes per message. Therefore, behavioral posts with a focus on benefits are the most effective. This corresponds in social marketing to the social product or main benefit that the person would go on to obtain if they adopted the proposed behavior, which highlights two aspects. On the one hand, the importance of designing a good social product to achieve the behavioral objective is raised (Kotler and Roberto, 1991) and on the other hand, how this issue is reflected in digital communication on Twitter is emphasized (Guidry et al. 2014; Guijarro et al. 2021; Huang et al. 2019).

Limitations, managerial implications, and future research

One initial limitation is that the research has been confined to analyzing messages posted on Twitter by Spanish organizations or, in the case of international entities, Spanish accounts. On one hand, it would be interesting to study a greater number of organizations from different countries, as well as to retrieve posts from other social media platforms. Additionally, a longer time horizon of at least one year would allow for more accurate conclusions. All of this is aimed at establishing more comprehensive communication profiles. Regarding the application of prospective theory from the perspective of social marketing, there are several aspects to delve into in future research. The first is based on the

premise that an individual's preferences and activities change over time. Based on this, one could study, for example, whether age influences the willingness to collaborate with NGOs. Another hypothesis raised by the theory is that if the costs of change are too high, people's reactions will be negative. In the context of NGOs, it would be advisable to study aspects such as the maximum cost that people would be willing to donate per month, as well as non-monetary terms, such as the opportunity cost of volunteering. These premises, along with others posed by prospective theory, could be of interest as future research directions.

Finally, several practical implications are presented for organizations, derived from the results obtained regarding the impact of message typology. For example, if organizations aim to achieve a greater impact, they should consider emphasizing risk when informing because this is the type of publication that receives the highest average number of likes. Furthermore, this behavior is aligned with prospective theory, which maintains that individuals decide and differ between the different options shown to them based on their perceived risk, which here is the risk associated with each choice. Thanks to these premises, prospect theory is helpful because it offers parameters when constructing the messages for social marketing campaigns according to decisions that involve risk or certainty. Focusing on dialogue tweets, when they are impartial, they hardly achieve any impact, so other approaches should be sought. Incorporating risks into dialogue messages can be counterproductive but attempts could be made to allude to benefits to see if this encourages conversation. Lastly, organizations seeking action by highlighting benefits also work quite well considering the average number of likes, although not as much as the first category. Experimenting with action messages that highlight risks to compare which ones yield better results could be worth exploring. Finally, given the boom that new social media platforms such as Instagram and TikTok are experiencing, it would be convenient to replicate this study on other platforms more focused on visual content, as well as to analyze how new generations of young people, such as millennials and centennials, react to the content generated by NGOs (Cuesta-Valiño et al. 2022).

Data availability
The online version contains supplementary material available from author of correspondence.

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Author contributions

G-C contributed to the introduction, methodology, literature review, results, conclusions and discussion, limitations, managerial implications, and future research. Y-A contributed to the introduction, methodology, literature review, results, conclusions and discussion, limitations, managerial implications, and future research. B-M contributed to the introduction, methodology, literature review, results, conclusions and discussion, limitations, managerial implications, and future research. T-P contributed to the introduction, methodology, literature review, results, conclusions and discussion, limitations, managerial implications, and future research.

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The authors declare no competing interests.

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