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A social capital approach of market orientation in public non-profit organizations: The case of blood transfusion centers in Spain

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Abstract

In order to identify the determinants of market (donor) orientation in blood transfusion centers and services (BTCS), this study seeks to analyze whether connectedness and interpersonal trust represent a fundamental basis for interfunctional coordination that leads to market (donor) orientation. An empirical study was carried out with 147 participants from 14 Spanish BTCS. The measurement scales were validated through CFA and the proposed relationship model was tested using SEM. Both interpersonal trust and connectedness that exist among BTCS members foster interfunctional coordination and, ultimately, their donor orientation. Thus, BTCS must emphasize their internal relationship networks, rearranging them in favor of their donor orientation. This paper integrates social capital literature with market orientation literature, and it proposes empirical evidence on the role played by internal social links on interfunctional coordination, which leads to market orientation. This research proposes a reliable and valid measure of blood donor orientation, which could be useful for the future testing of theory and research in the non-profit context. BTCS should adopt an organizational design which allows the introduction of a new managerial paradigm. People in charge of different areas at BTCS must pay particular attention to the climate of trust and the level of connectedness in cross-functional relationships. The negative evolution of blood donation and the results of this research suggest that BTCS need to apply a management model focused on the donor, in order to achieve a sustainable donation system.

KEYWORDS
connectedness, coordination, market orientation, trust

Practitioner Points

What is currently known about the subject matter

- The need for blood is increasing every day and it is a very significant health problem.
- The healthcare sector rejects marketing as a management alternative because it is unaware of its principles and philosophy.
- In BCTS management, the blood bag is the key to management, not the donor.
- Blood donation is considered an important research topic in the area of social marketing.

What your paper adds to this, and finally

- The market-oriented culture was transferred to blood donation.
- A valid and reliable scale of donor orientation was designed.
- The antecedent role of organizational climate in donor orientation was demonstrated.
- The employee behavior contributes to enforce an organizational orientation to the donor.

The implications of your study findings for practitioners

- The donor orientation can ensure the cooperation of the donor and guarantee the sustainability of the system of blood donation.
- BTCS must put emphasis on the internal network of relationships in favor of their orientation toward their key stakeholders.
- The existence of skilled public managers will be vital to introduce a market-oriented management in BTCS.
- The scale can be used by BTCS to assess their level of MO and to monitor their evolution and influence on their performance.

1 | INTRODUCTION

"The need for blood is increasing every day as one person each 3 seconds and 1% of people referred to hospitals require blood and blood products" (Behnampour et al., 2022, p. 109). The need for blood is a very significant health problem faced by society since only a small percentage of people responds to the calls for blood donation and most new donors tend not to repeat this behavior (France et al., 2007; Rodrigues & Carlos, 2021; van Dongen, 2015). In this context, the effort of blood transfusion centers and services (BTCS) to create a constant and growing donor pool and, in turn, a high level of unremunerated blood donation is crucial (Agrawal et al., 2013; Reid & Wood, 2008; van Dyke et al., 2020).

BTCS in many countries are public sector institutions (as is the case for Spain); that is, they are public owned, receive public funding and work for the interest of the whole community to provide services to the public (Willem & Buelens, 2007). Moreover, they also are considered non-profit organizations (NPOs) because their main purpose is "to organize and oversee voluntary social action directed at humanitarian problem solving" (Mokwa, 1990, p. 43). This service is made possible through donations from individuals that "are depicted as gifts 'of life' or 'hope' that support others in need" (Bradford & Boyd, 2020, p. 69) without receiving tangible rewards, based on motives like philanthropy (Peloza & Hassay, 2007; Ritz et al., 2020). Therefore, the effective style of management to be adopted by these BTCS with the aim of increasing blood donations should consider both the new public management guidelines and the recommendations about adopting managerial practices at NPOs.

Under the influence of the New Public Management (NPM), public sector reformists suggest shifting public services from a bureaucratic-hierarchical form to customer-oriented services (Ateş, 2004) inspired by a market orientation (MO) (Walker et al., 2011). This MO will be adopted when one or various departments of the organization develop tasks with the aim of generating intelligence about customers' current and future needs, sharing it throughout the whole organization, and taking coordinated action to create a high value for those customers (e.g., Kohli & Jaworski, 1990). Similarly, changes in the environment have challenged NPOs, forcing them to think of service users as customers and try to fulfill their demands, that is, developing a MO (Choi, 2014). This constitutes an important challenge to NPOs given that they have remained skeptical about adopting marketing practices (Modi & Mishra, 2010), perhaps partly due to misunderstandings on the meaning, relevance, and influence on effectiveness, of marketing (Pinheiro et al., 2021; Rey García et al., 2013). Specifically, in health services, where medical, nursing and laboratory staff are prevalent, the importance of these capabilities is not recognized or sufficiently valued. Health professionals and clinical front service providers resent the terminology and philosophy of marketing and fail to realize that they are critical factors in the effectiveness of the service they offer. Indeed, health staff may be concerned about the redirection of health funding to inconsequential service features that may negatively impact other service protocols, even undermining their professional status (Previte & Russell-Bennett, 2016). Moreover, there is an erroneous and limited view of marketing as public relations, or a tool aimed only at promotion (Dolnicar & Lazarevski, 2009). While promotion to attract donors is certainly important, it is likely insufficient to persuade individuals to donate (Bradford & Boyd, 2020). M'Sallem (2022, p. 154) endorses this change when he states that "additional research is urgently needed to provide the in-depth knowledge required to design suitable marketing strategies to attract new donors and retain existing blood donors".

In the non-profit context, the customer has been renamed "stakeholder" (Liao et al., 2001; Rupp et al., 2014) to broad the definition of MO that leads to non-profits effectiveness (Padanyi & Gainer, 2004; Rey García et al., 2013). It implies that the customer is split into various subsets: beneficiary, donor, employee, volunteer… (i.e., Duque-Zuluaga & Schneider, 2008; Hersberger-Langloh, 2022). Two of the most critical stakeholders affecting NPOs effectiveness are beneficiaries receiving the organization's services, and donors who provide resources (Rupp et al., 2014). To the extent that serving the needs and interests of donors is viewed as a mean to better serve beneficiaries (Morris et al., 2007), the objective of this study will be to analyze the blood donor orientation (DO) of BTCS given its relevance as a potential guarantee of the sustainability of the national blood supply.

Blood donation is one of the purest cases of prosocial behavior (Awan et al., 2020). Indeed, regular donation of blood to anonymous recipients characterize typical prosocial acts based on motives like altruism and personal values (Ferguson & Lawrence, 2016; Ritz et al., 2020; Steele et al., 2008). It is worth noting that this contribution is substantively distinct from contributions made to obtain some benefit for the self because the contributions to nonprofit organizations are most often provided to deliver a benefit to others (Bradford & Boyd, 2020). In the context of our research this prosocial behavior also refers to employee behavior that contributes to enforce an organizational orientation to the donor (intelligence generation and dissemination, and responsiveness), as an organization's employees are an important factor in delivering the entirety of the process and serve as a guide for donors throughout the process (Bradford & Boyd, 2020). This prosocial motivation of employees has been increasingly studied in Public and nonprofit management literature given that it represents a disposition of employees toward empathy, helpfulness and concern for others, expending efforts to benefit them (De Dreu, 2006; Grant, 2008; Penner et al., 2005; Ritz et al., 2020; Wright et al., 2013). It is likely that if donors receive a suitable service-experience then, in turn, develop a pro-social behavior of donor loyalty and recommend the process to new donors, benefitting society with a more sustainable blood supply. Recent research suggests that the influence of active blood donors is one of the most effective strategies for the recruitment of new donors, because current donors can influence friends, family, co-workers and other acquaintances to donate (Sojka & Sojka, 2008; Solomon, 2012). Therefore, the BTCS are vital to this research due to their function as facilitators involved in creating behavioral changes (Russell-Bennett et al., 2013), both in employees and donors, that contribute to a positive progression of blood donation. That is why blood donation is considered an important research topic in the area of social marketing, as social marketing strategies can contribute to attract and retain donors (Rodrigues & Carlos, 2021; Romero-Domínguez et al., 2019). Service-focused social marketing would be applied in this case, advocating for transformative service that seeks to improve social and individual welfare (Ostrom et al., 2010) by facilitating voluntary behavior change (Russell-Bennett et al., 2013). Attracting and maintaining volunteer donors is the only way to meet the need of society for blood. Consequently, the BTCS should be increasingly aware of the importance of social marketing in changing people's attitudes toward voluntary blood donation and preventing their exit from the blood donation cycle (Behnampour et al., 2022; Lefebvre, 2013). Therefore, "more comprehensive consideration of marketing issues should form part of a national blood service's strategy" (Grant, 2010, p. 126).

With that aim of empirically analyzing such an orientation to donors, a reliable and valid measure of DO will be developed in this study based on that of Kohli and Jaworski (1990) and keeping their dimensionality. Therefore, we consider that DO in the blood donation context will consist of intelligence generation related to donors and non-donors; intelligence dissemination throughout the organization; and actions taken to implement programs that address this key stakeholder group (Balabanis et al., 1997). Thus, this paper is in line with the stream in marketing literature focused on adapting key marketing constructs to different environments and contexts (e.g., Tran et al., 2015). On these lines, researchers such as Hersberger-Langloh (2022), Korunka et al. (2007) and Parker et al. (2007) state that the concept of MO should be adapted to fit non-profit organizations that offer products and/or services to satisfy social needs or non-profit goals. Therefore, MO scales need also to be adapted to the specific needs of each non-profit organization(s) (Alnawas & Phillips, 2015; Duque-Zuluaga & Schneider, 2008; Gainer & Padanyi, 2005; Hersberger-Langloh, 2022; Valero-Amaro et al., 2019). A particular case of this kind of organizations is that of BTCS, the main unit of analysis of this study, and previous adaptations of the MO construct and scale to non-profits have had very few applications for blood donation.

Based on the ideas above, since market (donor) orientation seems to be core in BTCS management aimed to get current donors' retention and, in turn, new donors' engagement, the following question arises: What organizational climate in terms of relationship dynamics inside the BTCS would strength their employees' donor orientation? The research on MO state that a hallmark of a strong MO is the inter-functional collaboration (Morris et al., 2007; Tran et al., 2015), that is, the coordinated use of organizational resources in creating superior value for target customers (Narver & Slater, 1990). In this paper we will adopt the concept of coordination offered by Zafonte and Sabatier (1998), who define it as "the spectrum of activity in which one party alters its own […] strategies to accommodate the activity of others in pursuit of similar goals." This concept of coordination includes different actions such as "information exchange, monitoring and aligning behavior, as well as developing, communicating, and implementing a common plan of action" (Calanni et al., 2015, p. 902). Thus, the analysis of the relationship between inter-functional coordination and donor orientation at BTCS would add to the existing marketing research that usually has focused on studying antecedents of inter- (and not intra-) organizational relationships.

In this study we will consider inter-functional coordination from a social capital approach. Specifically, it proposes that certain social capital resources within the organizations are crucial determinants of inter-functional coordination. In this sense, Calanni et al. (2015) found that one of the most important factors for participants in organizations with governmental character to coordinate among themselves is trust (competence and promises keeping). Similarly, a high connectedness among functional areas favors a continuous exchange of information and a fruitful communication that would increase the cooperation (Kalafatis, 2002). Therefore, connectedness and interpersonal trust will be proposed as the internal or bonding social capital (Adler & Kwon, 2002) at BTCS that might represent a fundamental basis for inter-functional coordination leading to DO.

2 | LITERATURE REVIEW

2.1 | Connectedness and inter-functional coordination

Connectedness between the members of a network refers to personal bonds (formal or informal) that allow them to get access to the different knowledge or experience of each member in the network (Andrews, 2010; Jaworski & Kohli, 1993; Li, 2013). Thus, intra-organizational social ties may promote inter-functional coordination inside organizations by fostering the processes of knowledge sharing and organizational learning, by providing a supportive ground for creativity and innovation, and by promoting the commitment with shared goals.

The higher the level of social interactions, the greater the intensity, frequency and breadth of knowledge exchange (Chang & Chuang, 2011) and the lower the time and investment needed to gather information (Nahapiet & Ghoshal, 1998). This high connectivity in networks will also favor the coordination and the negotiation dynamics among their members and the capability to implement different actions (Esmark, 2017). Moreover, the exchange of intimate, accurate and emotional information will be also favored, enabling social support and collaboration among individuals (Donati et al., 2016).

With a growing amount of ties inside the organization, experts from different areas can easily interact, and members of the organization can offer information to their colleagues about where in the organization some relevant knowledge exists. Thus, the existence of opportunities for sustained interaction, conversations and sociability enhances the coming together of ideas that may lead to the development of collective knowledge and therefore organizational learning and advantage (Andrews, 2010; Nahapiet & Ghoshal, 1998).

Connectedness allows members or subgroups to strengthen their familiarity with each other, encourages the consideration of different ideas, and helps develop a common identity (Uzzi, 1996). There is a greater motivation to explain or listen to novel or complex ideas, and therefore there would be a higher support and encouragement of innovative ventures (Moran, 2005). In other words, social ties can help individuals establish legitimacy for their innovative ideas (Subramaniam & Youndt, 2005). The coordination, adjustment and feedback processes for the implementation of new ideas would likely be better when rich communication exists (Donati et al., 2016). If groups communicate frequently with different people in other groups, they are more likely to have access to critical social resources in terms of instrumental, political and emotional support. It helps them to come up with creative and innovative decisions (Oh et al., 2006) that may be of great importance when trying to attend customers' needs (Merlo et al., 2006) and, for the particular case of non-profit organizations, also to attend donors' needs (Morris et al., 2007).

Connectedness may also help in the development of shared language, meanings and narratives, which sustain the collective knowledge base of the network and are of great value to accomplish shared goals (Nahapiet & Ghoshal, 1998). As a consequence, frequent interactions between groups enable faster dispute resolution with people, who become less absorbed by parochial conflicts and therefore more attentive to the organization's superordinate goals (Adler & Kwon, 2002), as is the goal to attend and satisfy customers (Merlo et al., 2006). Informal socializing ties may be a mechanism through which inter-functional conflict is managed, and they can facilitate the obtaining of varied resources that could improve performance and contribute to the coordination across groups in an organization (Oh et al., 2004). Hence, we can state that:

Hypothesis 1. The higher the level of connectedness between the employees, the stronger the inter-functional coordination inside the BTCS.

2.2 | Interpersonal trust and inter-functional coordination

Interpersonal trust constitutes a resource of relational social capital that refers to "the extent to which a person is confident in, and willing to act on the basis of, the words, actions, and decisions of another" (McAllister, 1995, p. 25). It has cognitive and affective foundations (Lewis & Weigert, 1985). Therefore, it emerges from the combination of elements such as competence, reliability or emotional bonds in terms of concern between individuals (McAllister, 1995).

Trust constitutes one of the most relevant relational variables that "provide a shared expectation for parties to reach an agreement and rely on cross-functional coordination" (Eng, 2006, p. 765). Particularly, trust has shown to be a significant determining factor of coordination when considering micro-level relations (Cook et al., 2005). Trust among interdependent actors is necessary to achieve a working atmosphere with open communication, information sharing, team mind, and efficient cooperation (Wöhrle et al., 2015) that may result in relational spillover (Yuan et al., 2014). Trust among members of different areas may facilitate coordination by mitigating uncertainties (Krishnan et al., 2006). They are more likely to seek others' cooperation because they feel positively toward the source (Yuan et al., 2014).

Moreover, and building on Bunger (2012), trust between two units in organizations would likely reduce the destructive effect that competition may has on coordination (Le Grand, 2010). Perceived trust may also have a direct effect on how narrowly functional areas coordinate their actions, even when they compete (Hosmer, 1995). Relational social capital among top decision-makers of the organization will probably reduce the difficulties that would arise because of their heterogeneity whereas it allows to take advantage of their diversity. The relationship between diverse members within a working group at the organization makes it possible for them to benefit from open communication, and high coordination and cooperation to improve performance. When trust exists inside a diverse group, frictions derived from disagreements that may be an obstacle to effective communication, coordination, and collaboration can be reduced (Li, 2013). Therefore,

> **Hypothesis 2.** The higher the level of interpersonal trust between the employees, the stronger the inter-functional coordination inside the BTCS.

2.3 | Inter-functional coordination and donor orientation

Inter-functional coordination alludes to an organization's coordinated efforts in integrating its internal resources, processes and knowledge to serve the customer better and improve value (Mohiuddin Babu, 2018). Inter-functional coordination is a simple recognition that the whole organization understands and accepts the responsibility of serving the market. This involves a need to share information around all functions of the organization through interdepartmental integration (Narver & Slater, 1990).

As stated at the introduction section, donor orientation will consist of intelligence generation related to donors and non-donors; intelligence dissemination throughout the organization; and actions taken to implement programs that address this key stakeholder group (Balabanis et al., 1997). There is broad consensus that the organization needs inter-functional coordination to implement MO (Modi & Mishra, 2010). It is a significant determinant of MO. Therefore, managers should understand the importance of inter-functional coordination by coordinating the resources which can be beneficial to respond to the needs and demands of their customers. In the context of non-profit organizations, Liao et al. (2001: 260) define inter-functional coordination as "the extent to which the organization shares a common goal and works together synergistically, for its attainment". Coordination systems have shown to contribute to the development of a better focus on stakeholders because they support the dissemination and control of operational marketing aspects and contribute to generate stakeholder-oriented behaviors among employees (Harris, 2000).

This coordination from multiple departments in the organization enables the interaction and the exchange of information, as well as the real use of the information, because each area has a specific market perspective (Jaworski & Kohli, 2017; Narver & Slater, 1990). The capability to identify and rapidly act upon changing stakeholder requests is improved when less departmentalization, formalization, and centralization exist at the organizations (Balabanis et al., 1997). It is the inter-functional collaboration the hallmark of a strong market (donor) orientation (Duque-Zuluaga & Schneider, 2008; Morris et al., 2007). Moreover, the acquisition and dissemination of new information is also favored by inter-functional integration, which includes an important component of inter-functional coordination (García et al., 2008). Lateral and network-like coordination might result in flexible and timely intelligence generation and sharing, thus offering opportunities to implement coordinated actions (Willem & Buelens, 2007). Álvarez González et al. (2002) suggest that MO as a management philosophy requires an integration and internal coordination, which must be a faithful image of the participants' predisposition to develop actions that seeks the satisfaction of their stakeholders. In sum, superior performance from orientation toward stakeholders can only occur when there is appropriate inter-functional coordination inside NPOs (Kara et al., 2004) Thus,

> **Hypothesis 3.** The higher the level of inter-functional coordination at the BTCS, the stronger their donor orientation.

3 | MATERIAL AND METHODS

3.1 | Sampling

BTCS in Spain are "health centers where activities are carried out to collect and analyze human blood or their components, regardless of the purpose that they are used for, and to treat, store and distribute them when they are used for transfusion" (Ministerio de Sanidad y Consumo, 2005, p. 31292). When conducting the survey, there were 471 BTCS which were distributed throughout the national territory and grouped into 17 large regional centers. The study population was comprised of BTCS' senior and middle management staff, as well as blood collection staff (physicians, nurses and promoters) who worked directly and personally with donors at fixed or mobile venues belonging to the BTCS. This choose was due to the fact that to successfully implement a MO in this kind of organizations, the commitment of both the senior and middle management staff and the employees who directly interact with donors are absolutely necessary (Lam et al., 2010).

The information gathering was carried out through an online survey. Fourteen of the 17 regional centers in Spain participated, sending the questionnaire to their employees, since the Data Protection Law prevented access to their corporate email. Field work started on the 2nd March, 2018, and finished on the 25th September, 2018. During this period, a weekly message was sent to each of the collaborators reminding them of the importance of obtaining a high sample. Twenty-eight reminders were sent, the first one on the 19th March, 2018 and the last one on the 24th September, 2018. The sample size was 147 BTCS members. It was noteworthy that of the total population (786), 35.24% initiated the survey (277) and 147 completed it in full (18.70% response rate). Since the sample deals with a finite population, and according to the simple random sampling criteria, for a confidence level of 95.5 (two sigmas) and in the least favorable hypothesis ($p = q = 50$), the sampling error was ±7.44%. The research team did not know the characteristics of the study population, only that its size amounted to a total of 786. That was why it was not possible to verify the coincidence of the profile of the sample with that of the population in terms of quotas of distribution.

Table 1 shows the characteristics of those who filled the questionnaire (147 BTCS staff members of the total number of those who initiated the questionnaire, which was 277). Most of the participants were women, between 36 and 55 years of age, with university degrees, more than 10 years of seniority and job stability.

TABLE 1 Sample profile

	Global	
Characteristics	***N***	**%**
Sex		
Male	56	38.1
Female	91	61.9
Age (years)		
18–25	5	3.4
26–35	23	15.7
36–45	44	29.9
46–55	45	30.6
>55	30	20.4
Education*		
Primary	7	4.8
Secondary	35	24.0
University (hematologist physician)	21	14.4
University (other degrees)	83	56.8
Seniority at the center (years)*		
0–5	39	27.3
6–10	29	20.3
11–15	25	17.5
16–20	19	13.3
>20	31	21.7
Work relationship*		
Officer	11	7.7
Permanent statutory staff	19	13.3
Temporary statutory staff	28	19.6
Permanent employment contract	56	39.2
Temporary employment contract	29	20.3

*Percentages have been calculated without considering missing cases.

3.2 | Measures

The independent variables at this study were measured as follow:

3.2.1 | Interpersonal trust

A five-item scale was built on McAllister (1995) to measure interpersonal trust. Participants were asked about those items in relation to the team that they usually worked with. All items were rated on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree).

3.2.2 | Connectedness

This scale was based on Jaworski and Kohli (1993), who suggested that connectedness, regarded as interdepartmental dynamics, is a MO antecedent and it is conceptualized as the level of direct contact -formal and informal- among employees of different departments. The scale had four items whose values extended from 1 (strongly disagree) to 7 (strongly agree). Participants answered to those items in relation to the degree of connectedness existing between the different areas or departments of their BTCS.

The intermediate and final dependent variables were measured as follows:

3.2.3 | Inter-functional coordination

This scale was designed according to Narver and Slater (1990), which indicates that this construct implies the coordinated utilization of organization resources in creating superior value for target customers. The scale was comprised of three items, which were evaluated from 1 to 7 points, being 1 "strongly disagree," and 7 "strongly agree." Each participant assessed their conformity with each item referring to the BTCS where they worked.

3.2.4 | Market (Donor) orientation

According to different authors (e.g., Korunka et al., 2007; Parker et al., 2007), the concept of MO should be adapted to fit non-profit organizations that offer products and/or services to satisfy social needs or non-profit goals. Similarly, a scale of MO for non-profit organizations was also needed. In the design of the MO scale used in this work, the seminal work of Kohli and Jaworski (1990), considered as such by the academics in the field (Crick, 2019), was taken as initial reference. This work is of obligatory consultation and reference for both defining and measuring MO. Many subsequent works in the non-profit sector have done so (e.g., Balabanis et al., 1997; Gainer & Padanyi, 2005; Kara et al., 2004; Levine & Zahradnik, 2012;

TABLE 2 Confirmatory factor analysis for the measurement scales

Relationships		Individual reliability			Internal consistency		
		Standardized estimators	*t*	*p*	Cronbach's alpha	CR	AVE
INTERPERSONAL TRUST (TRUST)							
Fit measures: $\chi^2 = 0.473$, $p = 0.993$, CFI = 1.000, NFI = 0.999, RMSEA = 0.000							
TRUST1	←TRUST	0.858			0.920	0.922	0.702
TRUST2	←TRUST	0.843	12.819	0.000			
TRUST3	←TRUST	0.782	11.327	0.000			
TRUST4	←TRUST	0.864	13.372	0.000			
TRUST5	←TRUST	0.839	12.724	0.000			
CONNECTEDNESS (CONNEC)							
Fit measures: $\chi^2 = 4.456$, $p = 0.108$, CFI = 0.993, NFI = 0.988, RMSEA = 0.092							
CONNEC1	←CONNEC	0.837			0.910	0.913	0.726
CONNEC2	←CONNEC	0.797	11.015	0.000			
CONNEC3	←CONNEC	0.835	11.608	0.000			
CONNEC4	←CONNEC	0.933	13.700	0.000			
INTER-FUNCTIONAL COORDINATION (COORD)							
Fit measures: $\chi^2 = 1.326$, $p = 0.249$, CFI = 0.999, NFI = 0.995, RMSEA = 0.047							
COORD1	←COORD	0.879			0.919	0.909	0.768
COORD2	←COORD	0.885	13.650	0.000			
COORD3	←COORD	0.865	12.509	0.000			
Intelligence generation (IG)							
Fit measures: $\chi^2 = 44.304$, $p = 0.007$, CFI = 0.971, NFI = 0.941, RMSEA = 0.076							
D1_IG	←**IG**	0.780			0.930	0.871	0.692
D2_IG	←**IG**	0.887	6.354	0.000			
D3_IG	←**IG**	0.826	6.170	0.000			
IG1	←D1_IG	0.797			0.869	0.873	0.698
IG2	←D1_IG	0.943	9.889	0.000			
IG3	←D1_IG	0.754	8.398	0.000			
IG4	←D2_IG	0.964			0.930	0.929	0.868
IG5	←D2_IG	0.898	12.269	0.000			
IG6	←D3_IG	0.893			0.942	0.947	0.818
IG7	←D3_IG	0.918	14.582	0.000			
IG8	←D3_IG	0.908	13.056	0.000			
IG9	←D3_IG	0.898	12.777	0.000			
Intelligence dissemination (ID)							
Fit measures: $\chi^2 = 2.036$, $p = 0.844$, CFI = 1.000, NFI = 0.994, RMSEA = 0.000							
ID1	←**ID**	0.850			0.899	0.889	0.623
ID2	←**ID**	0.525	5.975	0.000			
ID3	←**ID**	0.831	10.756	0.000			
ID4	←**ID**	0.768	9.732	0.000			
ID5	←**ID**	0.915	12.065	0.000			
Responsiveness (R)							
Fit measures: $\chi^2 = 51.003$, $p = 0.003$, CFI = 0.960, NFI = 0.921, RMSEA = 0.078							
R1	←**R**	0.884	10.546	0.000	0.929	0.973	0.589
R2	←**R**	0.575	6.345	0.000			
R3	←**R**	0.549	6.427	0.000			
R4	←**R**	0.810					
R5	←**R**	0.859	10.237	0.000			
R6	←**R**	0.767	9.040	0.000			

(Continues)

TABLE 2 (Continued)

Relationships		Individual reliability: Standardized estimators	t	p	Internal consistency: Cronbach's alpha	CR	AVE
R7	←**R**	0.813	9.150	0.000			
R8	←**R**	0.741	8.342	0.000			
R9	←**R**	0.701	7.635	0.000			
DONOR ORIENTATION (BDO) **Fit measures: χ^2 = 0.997, p = 0.318, CFI = 1.000, NFI = 0.995, RMSEA = 0.000**							
Intelligence generation (IG)	←BDO	0.971			0.951	0.977	0.907
Intelligence dissemination (ID)	←BDO	0.923	15.612	0.000			
Responsiveness (R)	←BDO	0.933	15.695	0.000			

Macedo & Pinho, 2006; Modi, 2012; Mulyanegara et al., 2010; Voss & Voss, 2000). The scale was built on considering the three dimensions of MO that Kohli and Jaworski (1990) established: intelligence generation, intelligence dissemination and responsiveness. Again, a 7-point Likert scale was used ranging from "totally disagree" to "totally agree".

All scales were pretested by 10 Spanish BTCS managers directly linked to BTCS to ensure their content validity and suitability for the blood donation field. The definitive items of the scales are showed in Appendix A.

TABLE 3 Evaluation of the discriminant validity

Constructs	Mean (SD)	1	2	3	4
TRUST (1)	5.45 (1.38)	*0.838*	0.703	0.676	0.658
CONNEC (2)	5.47 (1.48)	0.647	*0.852*	0.648	0.638
COORD (3)	4.33 (1.94)	0.629	0.619	*0.876*	0.851
DO (4)	4.32 (1.60)	0.650	0.697	0.832	*0.952*

Note: The square root of the AVE of each construct (on the diagonal), HTMT ratios (upper the diagonal) and correlations between constructs (below the diagonal).

4 | RESULTS

4.1 | Analysis of the validity of the measurement scales

The validation of the scales allows to know their psychometric properties. A confirmatory factor analysis (CFA) was conducted to determine the goodness of fit of each scale. The purpose of this analysis was to test the hypothesis that all items on each scale were measuring a common construct. The data analysis used AMOS 26.0 software.

Table 2 shows the results of the CFA, which indicate that all the scales used can be considered reliable and valid, since the indexes used are very close to or exceed the thresholds established. The results of the models showed a suitable fit, since the values of CFI and NFI were higher than 0.95 and the values of RMSEA did not exceed the recommended maximum of 0.08, with the exception of the Connectedness. The models demonstrated acceptable individual reliability, since the relationship between each item and its respective dimension/construct was statistically significant, with standardized regression weights higher than or very close to 0.7, and with t statistic values also being significant. Some items have been kept on the scales due to content validity, despite their loadings. Also, the internal consistency was estimated by means of the construct reliability (CR). The results showed this internal consistency in all cases since the values were higher than 0.70 (see values of composite reliability and Cronbach's alpha). Moreover, the convergent validity was estimated by calculating the AVE, whose results indicated that all the critical values were above 0.5.

The scale of DO was validated by stages. In a first step, a CFA has been applied to each dimension of DO, which showed suitable a good fit. In a second step and considering the dimensions of the DO as observed variables, we validated the scale of DO. We created three new variables, one for each dimension of DO (IG, ID and R). Specifically, we took the weighted average of the scores assigned by the participants in the study to the items that constituted each dimension, weighted by the regression weights of each of them in the three previous CFA. Each new variable has been named the same that the dimension it represented (IG, ID or R). Results in Table 2 indicate that the scale is valid.

Finally, we tested for the discriminant validity of these constructs applying the Fornell-Larcker criterion. Table 3 reveals that the scales had discriminant validity because the square roots of all the AVEs were higher than the elements not on the diagonal. Furthermore, the HTMT (i.e., the ratio between the heterotrait–monotrait correlations) values fell below 0.9, which indicated discriminant validity (Henseler et al., 2015). This data provided evidence that the proposed model had discriminant validity (i.e., constructs differed from one another).

The means shown in Table 4 indicate that the staff of the BTCS had adequate TRUST and CONNEC levels, which was not the case for

TABLE 4 Descriptive statistics and correlations

Constructs	Variables	Mean (SD)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
TRUST	1 TRUST1	5.48 (1.49)	---														
	2 TRUST2	5.19 (1.70)	0.729***	---													
	3 TRUST3	5.99 (1.33)	0.670***	0.651***	---												
	4 TRUST4	5.33 (1.78)	0.744***	0.730***	0.682***	---											
	5 TRUST5	5.31 (1.53)	0.717***	0.711***	0.670***	0.722***	---										
CONNEC	6 CONNEC1	5.51 (1.74)	0.509***	0.471***	0.378***	0.487***	0.551***	---									
	7 CONNEC2	5.69 (1.43)	0.526***	0.511***	0.408***	0.435***	0.531***	0.671***	---								
	8 CONNEC3	5.34 (1.76)	0.555***	0.596***	0.450***	0.576***	0.638***	0.671***	0.707***	---							
	9 CONNEC4	5.49 (1.58)	0.506***	0.465***	0.375***	0.485***	0.590***	0.793***	0.729***	0.785***	---						
COORD	10 COORD1	3.85 (2.12)	0.505***	0.553***	0.397***	0.546**	0.562***	0.509***	0.425***	0.556***	0.477***	---					
	11 COORD2	4.54 (2.02)	0.486***	0.498***	0.418***	0.497***	0.615***	0.519***	0.409***	0.539***	0.546***	0.796***	---				
	12 COORD3	4.60 (2.13)	0.477***	0.501***	0.404***	0.521***	0.532***	0.452***	0.391***	0.542***	0.491***	0.753***	0.794***	---			
DO	13 Intelligence generation (IG)	3.82 (1.65)	0.485***	0.485***	0.414***	0.576***	0.557***	0.604***	0.455***	0.627***	0.500***	0.808***	0.795***	0.737***	---		
	14 Intelligence dissemination (ID)	4.32 (1.79)	0.432***	0.441***	0.434***	0.487***	0.387***	0.440***	0.363***	0.487***	0.368***	0.738***	0.629***	0.572***	0.873***	---	
	15 Responsiveness (R)	4.84 (1.63)	0.661***	0.594***	0.572***	0.642***	0.587***	0.643***	0.434***	0.604***	0.591***	0.780***	0.805***	0.776***	0.887***	0.873***	---

Note: *** $p \leq 0.01$ ** $p \leq 0.05$ * $p \leq 0.1$.

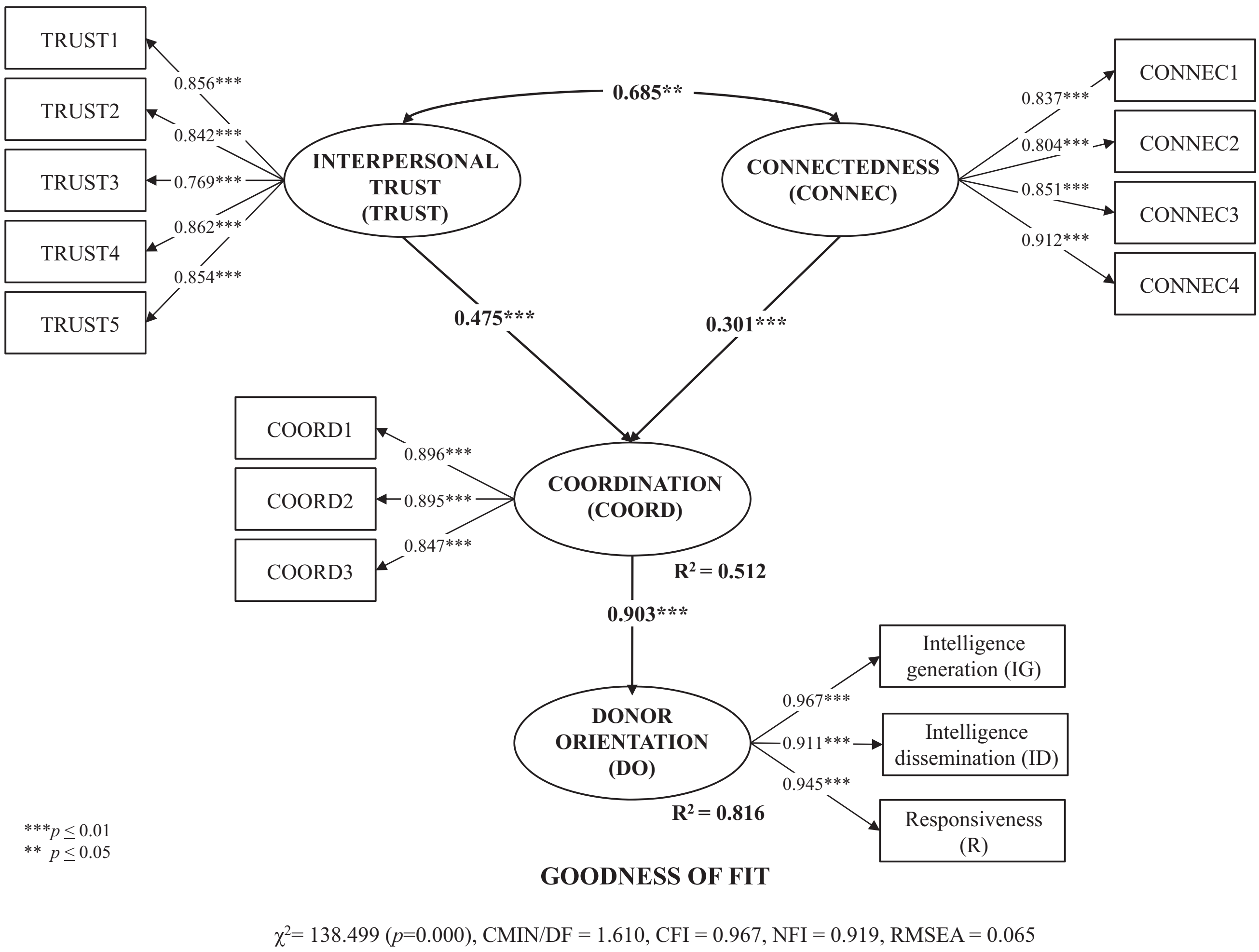

FIGURE 1 Results of the model.

COORD, which had a mean of 4.33 and a dispersion close to 2 points (SD = 1.94). DO, however, showed an unsatisfactory mean (M = 4.32).

In order to offer a deeper descriptive analysis, the means, standard deviations as well as correlations between the items measuring the different constructs (TRUST, CONNEC, COORD and DO) were included in Table 4. In the case of the DO, it has been decided to include its three dimensions (IG, DI and R). In accordance with previous results, means of TRUST and CONNEC were high, unlike the values related to the three COORD items, with means ranging from 3.85 to 4.60. In the case of the DO, the mean of each dimension was smaller than 5, being the lowest value that of intelligence generation, followed by dissemination and finally responsiveness. The correlation between the three dimensions was very high, which suggested that they converge to a common construct (DO) and supported the convergent validity of the scale.

4.2 | Hypothesis-testing

The model was tested using structural equation models (SEM) and included those antecedents of DO that have been analyzed by previous research on MO, although in contexts other than public and/or non-profit organizations. Thus, we fulfill the condition that hypotheses must be strongly supported when using SEM. As Hair et al. (2014) state, SEM is a confirmatory method, guided more by theory than by empirical results. Therefore, SEM models was a valid analysis technique for this empirical research given that allowed us to test the relationships between multiple variables together, where more than one dependent variable may exist, and multiple indicators can be necessary for their measurement (Aldás Manzano & Uriel Jiménez, 2017). It would be not possible to consider all of these aspects with regression models.

Before testing SEM, the existence of common method variance (CMV) was previously analyzed using IBM SPSS Statistics 25.0 software. For this testing, the 35 items of the different scales were jointly included to find out the existence of a single or various factors, one of which would explain most of the total variance. As a result, five factors emerged that explain 79.53% of the variance. The first one only explained 26.80% of the variance and the remaining explained 52.73%. Therefore, CMV is not a problem.

TABLE 5 Results of hypothesis testing

Hypotheses	Relationships	Path	*t*	*p*	Supported
H1	Connectedness --> Coordination	0.301	2.894	0.004	Yes
H2	Interpersonal trust --> Coordination	0.475	4.502	0.000	Yes
H3	Coordination --> Donor orientation.	0.903	11.564	0.000	Yes

In this research, the variance–covariance matrix was used as input data in SEM and was used AMOS 26.0 software. The tested model showed a good adjustment [$\chi^2 = 138.499$, $p = 0.000$; CFI $= 0.967$; NFI $= 0.919$, RMSEA $= 0.065$] – being CFI values higher than 0.95 and RMSEA values lower than 0.08, as recommended by the literature (Mathieu & Taylor, 2006) – Results in Figure 1 demonstrates that: (1) CONNEC and TRUST were direct antecedents of COORD ($\beta = 0.475$, $p = 0.000$ and $\beta = 0.301$, $p = 0.004$), thus accepting H1 and H2; (2) COORD was a direct antecedent of DO, thus giving empirical support to hypothesis H3; and (3) the proposed model explained 51.2% of COORD and 81.6% of DO.

To summarize, major findings of this work are presented in the following table (see Table 5).

5 | DISCUSSION AND CONCLUSION

Blood donation can be considered as one of the purest cases of pro-social behavior (Awan et al., 2020) where donors' contribution is most often provided to deliver a benefit to others and where the BTCS's employees are an important factor in delivering the entirety of the process and serve as a guide for donors throughout the process (Bradford & Boyd, 2020). That is why blood donation is an important research topic in the area of social marketing, as social marketing strategies can contribute to attract and retain donors (Rodrigues & Carlos, 2021).

Therefore, this study supposes an extension of the existing research on MO by contextualizing to the specific case of public NPOs, concretely BTCS. Organizations (public NPOs among them) are expected to show diligence in attending their stakeholders' concern in order to ensure their continued cooperation (Maignan & Ferrell, 2004). Marketing, and specifically the MO, will allow to manage the exchange relationships that tie public NPOs with their stakeholders, increasing the probability of implementing true dialog with them. In the specific context of BTCS the donor orientation seeks to ensure the cooperation of the donor to guarantee the sustainability of the national system of blood donation. This research allows to verify that, analogous to MO in for-profit organizations, for the public non-profit context MO consists of intelligence generation about each of their stakeholders; intelligence dissemination throughout the organization; and actions taken to put programs into action that attend to these key stakeholders. However, specific instruments must be used to assess that MO, as the one we have developed for this research focused on blood donation. Therefore, our work advances and contributes by verifying the application of a MO in the blood donation sector, and by proposing an ad hoc scale adapted to blood donation, as suggested by the authors in the field of non-profit marketing. Thus, we have contributed to the stream in marketing literature focused on adapting key marketing constructs to different environments and contexts (e.g., Tran et al., 2015). Particularly we try to respond to recent calls in the literature to adapt the concept and measuring of MO to fit non-profit organizations (e.g., Hersberger-Langloh, 2022; Valero-Amaro et al., 2019). This measure of blood donor orientation is reliable and valid and could be useful for the future testing of theory and further research in NPOs. Furthermore, this scale could be of great practical utility because it can be used by these organizations to initially assess their level of MO, as well as to monitor their evolution and influence on their performance.

For the improvement of that MO all the employees have to behave in a market-oriented way to recognize market information and disseminate it to key decision-makers across the organization, therefore, interfunctional collaboration is required. In this sense, this study provides evidence on the key role that bonding social capital in terms of connectedness and interpersonal trust can play to improve coordination and collaboration behavior within the BTCS. Although non-profits scholars have been interested in social capital, theoretical understanding of the role played by social capital in non-profits as organizations has remained in its infancy. Few scholars have examined social capital as a resource not only for members and supporters, but also for organizations themselves (e.g., Passey & Lyons, 2006; Schneider, 2007). Much of the social capital research in non-profit studies focuses either on the role of non-profits in fostering civic engagement or on the ways that non-profits build social capital for individuals associated with the organization (Schneider, 2009).

Moreover, we add to the existing marketing research that usually has focused on studying antecedents of inter- (and not intra-) organizational relationships. In this research, results show that 51.2% of the interfunctional coordination is explained through the internal social bonds at BTCS. And, as a result of these antecedents (social capital and interfunctional coordination), 81.6% of the donor orientation is also explained. This is a very important finding if we consider that the donor orientation of the BTCS seeks to build bridging social capital that would strengthen a continued cooperation of the donor.

5.1 | Managerial implications

The existence of skilled public managers will be vital to introduce a market-oriented management of public organizations. Particularly, the health sector and BTCS should adopt strategies such as involving medical staff in managing by creating hybrid managers with medical backgrounds and managerial characteristics and skills (Ateş, 2004).

With that aim, management skills could be extended among the medical staff through education and training. In addition, the cooperation of managers and medical staff could be encouraged, inviting them to participate in joint committees that advise top management and get involved in management matters. These decisions on organizational design in the public health sector would introduce a new managerial paradigm that demanded health managers able to learn and adopt new management techniques.

Public organizations in general, and BTCS in particular, must put emphasis on the internal network of relationships, rearranging them in favor of their orientation toward their key stakeholders (Józsa, 2017) given that social capital is vital for knowledge management, which in turn is key for NPOs and has important implications in terms of internal marketing (Hume & Hume, 2015). Most NPOs are service ones, and they depend on their employees' abilities, attitudes, and motivation to offer an adequate attention to their key stakeholders (Álvarez-González et al., 2017). Thus, people in charge of different areas at BTCS must pay particular attention to the climate of trust and the level of connectedness in cross-functional relationships in order to enhance behaviors aimed at reaching donor satisfaction and loyalty, thus triggering more efficiency in the blood donation system. This can be achieved through practices such as ensuring stability of the members of working groups, using programs that develop better understanding (e.g., training and seminar sessions), or inviting employees to move among groups, which makes it possible to consider different perspectives (García et al., 2008; García Rodríguez et al., 2007). This can even have implications in terms of the arrange of physical space because when people personally interact and locate close together, they are more likely to cooperate, be supportive with each other, and form ties (Kwon & Adler, 2014). Social capital in terms of trust and connectedness (both of them linked to personnel stability) will constitute a source of high organizational capabilities in the human capital intensive public sector context (Andrews et al., 2016). This would contribute to the sustained pursuit of the complex cross-cutting goals in public management (O'Toole & Meier, 2003). Therefore, managerial efforts should be displayed to strengthen these social capital resources.

Since MO is now part of the practices of many public organizations, managers of BTCS should collect evidence about that market by making donor satisfaction surveys or even holding meetings with them to know their needs (Walker et al., 2011). This information, adequately shared, will be the basis of the transfusion centers' responsiveness. In this regard, Grant (2010) extends this exchange of information on blood transfusion issues not only among internal stakeholders with the implementation of an internal marketing strategy, but also among external stakeholders. Grant (2010) states that a national blood service can achieve better stock management and resource optimisation and achieve better communication with its “input” and “output” stakeholders through implementing better information flows. Also, this information would improve blood donor recruitment and retention because BTCS would know what motivates people to donate blood, as well as what discourages them from donating (Grant, 2010).

Moreover, in addition to cost savings in recruitment and retention campaigns, a strong donor orientation of BTCS results in a stable and committed donor pool, because “when individuals continue to donate to an organization, it is likely that they experience less psychic (e.g., contemplation), physical (e.g., blood draw, testing), and pecuniary (e.g., transport, time) sacrifice” (Bradford & Boyd, 2020, p. 82). Thus, a social marketing strategy with a donor-driven approach is key because traditional methods – such as reminders and incentives – have only a small effect on retention (Grant, 2010).

One important factor that BTCS have to take into account is the change in donor's attitudes and behaviors derived from COVID-19 pandemic. In this sense, some works have analyzed the effects of the pandemic situation on blood donation behavior and on the blood donation system due to the large-scale restrictions imposed by governments, the specific health risks related to the donation environment and procedures, the perceived contagion risk, as well as the time length of the crisis (e.g., Haw et al., 2021; Veseli et al., 2022). The results of these studies show, for example, that German donors, although they expressed to feel less responsible and less morally obliged to donate, increased short-term blood donation intentions at the beginning of the pandemic compared to the pre-pandemic phase (Veseli et al., 2022). On their part, Syrian donors declared that they did not donate blood simply because they did not need to and not because of COVID-19 distress or restrictions (Kakaje et al., 2023). In addition, in South India, donors related to a blood center of a tertiary care hospital expressed satisfaction with the blood donation experience during COVID-19 pandemic (Tripathi et al., 2022).

Moreover, despite an initial drop in blood donations experienced in the first weeks after the COVID outbreak, aggregate data on European countries showed a subsequent quick recovery of blood donations (ECDPC, 2020). In fact, Bilancini et al. (2022) observed an increase both in new donors and in their frequency of subsequent donations in Italy in 2020 with respect to previous years. In the specific case of Spain, where the present study was carried out, the data clearly indicate that in 2021 the donation levels previous to the coronavirus pandemic have been reached again (Federación Española de Donantes de Sangre, 2022). These results suggest that the pandemic situation stimulated prosocial behaviors in reaction to health emergencies characterized by growing anxiety and limited chances for social interactions. As a result of an altruistic behavior donors have demonstrated a moral concern for the well-being of others, instead of theirs's own, which in turn has translated into a positive attitude toward helping others (Graça & Zwick, 2021). Additionally, it may be also possible that this return to normality could be a consequence of the greater emphasis on donor orientation of BTCS during the pandemic using information strategies, retention and recruitment strategies, spreading awareness on volunteer blood donation, as well as analyzing the motivations and barriers to donating blood (Bilancini et al., 2022; Kakaje et al., 2023; Tripathi et al., 2022; Veseli et al., 2022; Wang et al., 2021). Particularly, Quee et al. (2022) research about blood donor's motivators during the COVID pandemic in Netherlands state that whole blood donors (90.8%) were motivated by the calls for donation, which shows the importance of explicitly expressing need in times of crisis by blood banks and philanthropic organizations. The future of BTCS depends on understanding what contributes to attract and retain donors in order to create marketing strategies that address their values and promote sustainable involvement, with an especial attention to philanthropy as an intrinsic motivation in young people attitudes and intent to donate (Gorczyca & Hartman, 2017; Graça & Zwick, 2021). Therefore, the importance of reinforcing donor orientation of BTCS (and the internal social capital mechanisms that support this orientation) seems evident in a world where blood donation need is increasingly higher.

5.2 | Limitations and future research

In this work we have focused on the benefits of social capital, however, social capital may also have undesirable effects. Thus strong ties and the resulting strong norms and identification among the members of a network may limit openness to both new information and diverse views. Thus, collaborative efforts with the same others may be at the same time vital and limiting in the creation of knowledge processes (McFadyen & Cannella, 2004; Willem & Buelens, 2007). Future research is necessary to comprehensively analyze these risks which can occur in the public sector, together with the fact that networks are especially vulnerable due to the involvement of politics that can distort them for non-optimal resource distribution (O'Toole Jr. & Meier, 2004).

Since this research focuses on intra-organizational aspects, another limitation concerns the analysis of inter-organizational aspects. Therefore, for the non-profit sector in particular and for public organizations in general, future research combining intra-organizational and inter-organization social capital could be very interesting to the understanding of how these organizations may develop durable external networks to fulfill their needs and get key organizational resources (Eng et al., 2012; Schneider, 2009), or the role that inter-organizational ties could play as moderators of intra-organization ties (Wang & Chung, 2013). Moreover, it would be interesting to study if social capital between employees (internal/bonding social capital) can be translated to external/bridging social capital in terms of high quality trusting relationship with key stakeholders (donors in our case).

Focusing on trust, the analysis of contextual factors may be interesting. In this sense, future research could also analyze whether the procedures followed when decisions are taken (rules, decisions, leadership) are considered as fair by those vulnerable to them (procedural justice). The quality of interpersonal attention (interactional justice) received from decision-takers (respect, adequate clarification and reasoning of procedures, honesty, fairness) might also condition the trust emerging between members of BTCS (García et al., 2008).

Finally, and since cross-sectional data constitute a limitation of this research that prevents definitive inferences about causes of both coordination and market (donor) orientation, and about how they change over time, new research examining interfunctional relationships longitudinally will allow us to control for relationship duration and test sustainable market (donor) orientation. Replicating this study would make it possible to contrast whether after COVID-19 pandemic the relationships between the three constructs analyzed have been strengthened to better respond to donor demands through a donor orientation on the part of the BTCS.

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CONFLICT OF INTEREST STATEMENT

No conflict of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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REFERENCES

Adler, P. S., & Kwon, S.-W. (2002). Social capital: Prospects for a new concept. *The Academy of Management Review*, *27*(1), 17–40. https://doi.org/10.2307/4134367

Agrawal, A., Tiwari, A. K., Ahuja, A., & Kalra, R. (2013). Knowledge, attitude and practices of people towards voluntary blood donation in Uttarakhand. *Asian Journal of Transfusion Science*, *7*(1), 59–62. https://doi.org/10.4103/0973-6247.106740

Aldás Manzano, J., & Uriel Jiménez, E. (2017). *Análisis multivariante aplicado con R [applied multivariate analysis with R]* (2nd ed.). Ediciones Paraninfo, SA.

Alnawas, I., & Phillips, C. (2015). Alumni orientation: Development of the construct. *Journal of Nonprofit and Public Sector Marketing*, *27*(2), 183–215. https://doi.org/10.1080/10495142.2014.965075

Álvarez González, L. I., Santos Vijande, M. L., & Vázquez Casielles, R. (2002). The market orientation concept in the private nonprofit organisation domain. *International Journal of Nonprofit and Voluntary Sector Marketing*, *7*(1), 55–67. https://doi.org/10.1002/nvsm.167

Álvarez-González, L. I., García-Rodríguez, N., Rey-García, M., & Sanzo-Pérez, M. J. (2017). Business-nonprofit partnerships as a driver of internal marketing in nonprofit organizations. Consequences for nonprofit performance and moderators. *BRQ Business Research Quarterly*, *20*(2), 112–123. https://doi.org/10.1016/j.brq.2017.01.001

Andrews, R. (2010). Organizational social capital, structure and performance. *Human Relations*, *63*(5), 583–608. https://doi.org/10.1177/0018726709342931

Andrews, R., Beynon, M. J., & McDermott, A. M. (2016). Organizational capability in the public sector: A configurational approach. *Journal of Public Administration Research and Theory*, *26*(2), 239–258. https://doi.org/10.1093/jopart/muv005

Ateş, H. (2004). Management as an agent of cultural change in the Turkish public sector. *Journal of Public Administration Research and Theory*, *14*(1), 33–58. https://doi.org/10.1093/jopart/muh003

Awan, S., Esteve, M., & van Witteloostuijn, A. (2020). Talking the talk, but not walking the walk: A comparison of self-reported and observed prosocial behaviour. *Public Administration*, *98*, 995–1010. https://doi.org/10.1111/padm.12664

Balabanis, G., Stables, R. E., & Phillips, H. C. (1997). Market orientation in the top 200 British charity organizations and its impact on their performance. *European Journal of Marketing*, *31*(8), 583–603. https://doi.org/10.1108/03090569710176592

Behnampour, M., Shams, M., Hassanzadeh, R., Ghaffarian Shirazi, H., Naderi, H., & Kariminejad, Z. (2022). Using social marketing to persuade Iranians to donate blood. *Health Marketing Quarterly*, *39*(2), 109–118. https://doi.org/10.1080/07359683.2021.1940786

Bilancini, E., Boncinelli, L., di Paolo, R., Menicagli, D., Pizziol, V., Ricciardi, E., & Serti, F. (2022). Prosocial behavior in emergencies: Evidence from blood donors recruitment and retention during the COVID-19 pandemic. *Social Science and Medicine*, *314*, 115438. https://doi.org/10.1016/j.socscimed.2022.115438

Bradford, T. W., & Boyd, N. W. (2020). Help me help you! Employing the marketing mix to alleviate experiences of donor sacrifice. *Journal of Marketing*, *84*(3), 68–85. https://doi.org/10.1177/0022242920912272

Bunger, A. C. (2012). Administrative coordination in nonprofit human service delivery networks: The role of competition and trust. *Nonprofit and Voluntary Sector Quarterly*, *42*(6), 1155–1175. https://doi.org/10.1177/0899764012451369

Calanni, J. C., Siddiki, S. N., Weible, C. M., & Leach, W. D. (2015). Explaining coordination in collaborative partnerships and clarifying the scope of the belief homophily hypothesis. *Journal of Public Administration Research and Theory*, *25*, 901–927. https://doi.org/10.1093/jopart/mut080

Chang, H. H., & Chuang, S.-S. (2011). Social capital and individual motivations on knowledge sharing: Participant involvement as a moderator. *Information & Management*, *48*(1), 9–18. https://doi.org/10.1016/j.im.2010.11.001

Choi, S. (2014). Learning orientation and market orientation as catalysts for innovation in nonprofit organizations. *Nonprofit and Voluntary Sector Quarterly*, *43*(2), 393–413. https://doi.org/10.1177/0899764012465491

Cook, K. S., Hardin, R., & Levi, M. (2005). *Cooperation without trust?* Russell Sage Foundation.

Crick, J. M. (2019). The dimensionality of the market orientation construct. *Journal of Strategic Marketing*, *29*(4), 281–300. https://doi.org/10.1080/0965254X.2019.1677747

de Dreu, C. K. W. (2006). Rational self-interest and other orientation in organizational behavior: A critical appraisal and extension of Meglino and Korsgaard (2004). *Journal of Applied Psychology*, *91*(6), 1245–1252. https://doi.org/10.1037/0021-9010.91.6.1245

Dolnicar, S., & Lazarevski, K. (2009). Marketing in non-profit organizations: An international perspective. *International Marketing Review*, *26*(3), 275–291. https://doi.org/10.1108/02651330910960780

Donati, S., Zappalà, S., & González-Romá, V. (2016). The influence of friendship and communication network density on individual innovative behaviours: A multilevel study. *European Journal of Work and Organizational Psychology*, *25*(4), 583–596. https://doi.org/10.1080/1359432X.2016.1179285

Duque-Zuluaga, L. C., & Schneider, U. (2008). Market orientation and organizational performance in the nonprofit context: Exploring both concepts and the relationship between them. *Journal of Nonprofit & Public Sector Marketing*, *19*(2), 25–47. https://doi.org/10.1300/j054v19n02_02

ECDPC. (2020). Coronavirus disease 2019 (Covid-19) and supply of substances of human origin in the Eu/eea (2nd update).

Eng, T.-Y. (2006). An investigation into the mediating role of cross-functional coordination on the linkage between organizational norms and SCM performance. *Industrial Marketing Management*, *35*, 762–773. https://doi.org/10.1016/j.indmarman.2005.05.014

Eng, T.-Y., Liu, C.-Y. G., & Sekhon, Y. K. (2012). The role of relationally embedded network ties in resource acquisition of British nonprofit organizations. *Nonprofit and Voluntary Sector Quarterly*, *41*(6), 1092–1115. https://doi.org/10.1177/0899764011427596

Esmark, A. (2017). Maybe it is time to rediscover technocracy? An old framework for a new analysis of administrative reforms in the governance era. *Journal of Public Administration Research and Theory*, *27*(3), 501–516. https://doi.org/10.1093/jopart/muw059

Federación Española de Donantes de Sangre. (2022). Datos estadísticos de donación de sangre en España en 2021. *Estadística*, *2022* https://fedsang.org/2022/06/22/estadisticas-2021/

Ferguson, E., & Lawrence, C. (2016). Blood donation and altruism: The mechanisms of altruism approach. *ISBT Science Series*, *11*(S1), 148–157. https://doi.org/10.1111/voxs.12209

France, J. L., France, C. R., & Himawan, L. K. (2007). A path analysis of intention to redonate among experienced blood donors: An extension of the theory of planned behavior. *Transfusion*, *47*(6), 1006–1013. https://doi.org/10.1111/j.1537-2995.2007.01236.x

Gainer, B., & Padanyi, P. (2005). The relationship between market-oriented activities and market-oriented culture: Implications for the development of market orientation in nonprofit service organizations. *Journal of Business Research*, *58*, 854–862. https://doi.org/10.1016/j.jbusres.2003.10.005

García, N., Sanzo, M. J., & Trespalacios, J. A. (2008). New product internal performance and market performance: Evidence from Spanish firms regarding the role of trust, interfunctional integration, and innovation type. *Technovation*, *28*, 713–725. https://doi.org/10.1016/j.technovation.2008.01.001

García Rodríguez, N., Sanzo Pérez, M. J., & Trespalacios Gutiérrez, J. A. (2007). Interfunctional climate and a new product performance: Dependence as a moderator. *Journal of Business & Industrial Marketing*, *22*(7), 459–473. https://doi.org/10.1108/08858620710828845

Gorczyca, M., & Hartman, R. L. (2017). The new face of philanthropy: The role of intrinsic motivation in Millennials' attitudes and intent to donate to charitable organizations. *Journal of Nonprofit & Public Sector Marketing*, *29*(4), 415–433. https://doi.org/10.1080/10495142.2017.1326349

Graça, S. S., & Zwick, H. C. (2021). Perceived value of charitable involvement: The millennial donor perspective. *Journal of Philanthropy and Marketing*, *26*, e1705. https://doi.org/10.1002/nvsm.1705

Grant, A. M. (2008). Does intrinsic motivation fuel the prosocial fire? Motivational synergy in predicting persistence, performance, and productivity. *Journal of Applied Psychology*, *93*(1), 48–58. https://doi.org/10.1037/0021-9010.93.1.48

Grant, D. B. (2010). Integration of supply and marketing for a blood service. *Management Research Review*, *33*(2), 123–133. https://doi.org/10.1108/01409171011015810

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Multivariate data analysis*. Pearson.

Harris, L. C. (2000). The organizational barriers to developing market orientation. *European Journal of Marketing*, *34*(5/6), 598–624. https://doi.org/10.1108/03090560010321956

Haw, J., Holloway, K., Masser, B. M., Merz, E. M., & Thorpe, R. (2021). Blood donation and the global COVID-19 pandemic: Areas for social science research. *Vox Sanguinis*, *116*(4), 363. https://doi.org/10.1111/VOX.12974

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, *43*(1), 115–135. https://doi.org/10.1007/S11747-014-0403-8/FIGURES/8

Hersberger-Langloh, S. (2022). A stakeholder perspective on the market orientation of swiss nonprofit organizations. *Journal of Nonprofit and Public Sector Marketing*, *34*(4), 395–420. https://doi.org/10.1080/10495142.2020.1865239

Hosmer, L. T. (1995). Trust: The connecting link between organizational theory and philosophical ethics. *The Academy of Management Review*, *20*(2), 379–403. https://doi.org/10.2307/258851

Hume, C., & Hume, M. (2015). The critical role of internal marketing in knowledge management in not-for-profit organizations. *Journal of Nonprofit & Public Sector Marketing*, *27*(1), 23–47. https://doi.org/10.1080/10495142.2014.934567

Jaworski, B. J., & Kohli, A. K. (1993). Market orientation: Antecedents and consequences. *Journal of Marketing*, *57*(3), 53–70. https://doi.org/10.2307/1251854

Jaworski, B. J., & Kohli, A. K. (2017). Conducting field-based, discovery-oriented research: Lessons from our market orientation research experience. *AMS Review*, *7*, 4–12. https://doi.org/10.1007/s13162-017-0088-5

Józsa, T. (2017). The antecedents of market orientation and its effect on customer satisfaction and service quality: The case of Hungarian municipal public service provisions. *International Review on Public and Nonprofit Marketing*, *14*, 391–407. https://doi.org/10.1007/s12208-017-0179-x

Kakaje, A., Mansour, S., Ghareeb, A., & Aldeen, O. H. (2023). Blood donation during COVID-19 lockdown and its association with anger and stress: A cross-sectional study from Syria. *Frontiers in Sociology*, *7*.

Kalafatis, S. P. (2002). Buyer–seller relationships along channels of distribution. *Industrial Marketing Management*, *31*(3), 215–228. https://doi.org/10.1016/S0019-8501(00)00118-8

Kara, A., Spillan, J. E., & DeShields, O. W. (2004). An empirical investigation of the link between market orientation and business performance in nonprofit service providers. *Journal of Marketing Theory and Practice*, *12*(2), 59–72. https://doi.org/10.1080/10696679.2004.11658519

Kohli, A. K., & Jaworski, B. J. (1990). The market orientation: The construct, research propositions, and managerial implications. *Journal of Marketing*, *54*, 1–18. https://doi.org/10.2307/1251866

Korunka, C., Scharitzer, D., Carayon, P., Hoonakker, P., Sonnek, A., & Sainfort, F. (2007). Customer orientation among employees in public administration: A transnational, longitudinal study. *Applied Ergonomics*, *38*, 307–315. https://doi.org/10.1016/J.APERGO.2006.04.019

Krishnan, R., Martin, X., & Noorderhaven, N. G. (2006). When does trust matter to alliance performance? *The Academy of Management Journal*, *49*(5), 894–917. https://doi.org/10.2307/20159808

Kwon, S.-W., & Adler, P. S. (2014). Social capital: Maturation of a field of research. *Academy of Management Review*, *39*(4), 412–422. https://doi.org/10.5465/amr.2014.0210

Lam, S. K., Kraus, F., & Ahearne, M. (2010). The diffusion of market orientation throughout the organization: A social learning theory perspective. *Journal of Marketing*, *74*, 61–79. https://doi.org/10.2139/ssrn.1584646

Lefebvre, R. C. (2013). *Social marketing and social change: Strategies and tools for health, well-being, and the environment*. Jossey-Bass.

le Grand, J. (2010). Knights and knaves return: Public service motivation and the delivery of public services. *International Public Management Journal*, *13*(1), 56–71. https://doi.org/10.1080/10967490903547290

Levine, H., & Zahradnik, A. G. (2012). Online media, market orientation, and financial performance in nonprofits. *Journal of Nonprofit and Public Sector Marketing*, *24*(1), 26–42. https://doi.org/10.1080/10495142.2012.652908

Lewis, J. D., & Weigert, A. (1985). Trust as a social reality. *Social Forces*, *63*(4), 967–985. https://doi.org/10.2307/2578601

Li, C.-R. (2013). How top management team diversity fosters organizational ambidexterity: The role of social capital among top executives. *Journal of Organizational Change Management*, *26*(5), 874–896. https://doi.org/10.1108/JOCM-06-2012-0075

Liao, M.-N., Foreman, S., & Sargeant, A. (2001). Market versus societal orientation in the nonprofit context. *International Journal of Nonprofit and Voluntary Sector Marketing*, *6*(3), 254–268. https://doi.org/10.1002/nvsm.151

Macedo, I. M., & Pinho, J. C. (2006). The relationship between resource dependence and market orientation: The specific case of non-profit organisations. *European Journal of Marketing*, *40*(5/6), 533–553. https://doi.org/10.1108/03090560610657822

Maignan, I., & Ferrell, O. C. (2004). Corporate social responsibility and marketing: An integrative framework. *Journal of the Academy of Marketing Science*, *32*(1), 3–19. https://doi.org/10.1177/0092070303258971/METRICS

Mathieu, J. E., & Taylor, S. R. (2006). Clarifying conditions and decision points for mediational type inferences in organizational behavior. *Journal of Organizational Behavior*, *27*, 1031–1056. https://doi.org/10.1002/job.406

McAllister, D. J. (1995). Affect- and cognition-based trust as foundations for interpersonal cooperation in organizations. *The Academy of Management Journal*, *38*(1), 24–59. https://doi.org/10.2307/256727

McFadyen, M. A., & Cannella, A. A. (2004). Social capital and knowledge creation: Diminishing returns of the number and strength of exchange. *The Academy of Management Journal*, *47*(5), 735–746. https://doi.org/10.2307/20159615

Merlo, O., Bell, S. J., Mengüç, B., & Whitwell, G. J. (2006). Social capital, customer service orientation and creativity in retail stores. *Journal of Business Research*, *59*, 1214–1221. https://doi.org/10.1016/j.jbusres.2006.09.021

Ministerio de Sanidad y Consumo. (2005). Real Decreto 1088/2005, de 16 de septiembre, por el que se establecen los requisitos técnicos y condiciones mínimas de la hemodonación y de los centros y servicios de transfusión. https://www.boe.es/boe/dias/2005/09/20/pdfs/A31288-31304.pdf

Modi, P. (2012). Measuring market orientation in nonprofit organizations. *Journal of Strategic Marketing*, *20*(5), 447–460. https://doi.org/10.1080/0965254X.2012.689991

Modi, P., & Mishra, D. (2010). Conceptualising market orientation in nonprofit organisations: Definition, performance, and preliminary construction of a scale. *Journal of Marketing Management*, *26*(5–6), 548–569. https://doi.org/10.1080/02672570903485113

Mohiuddin Babu, M. (2018). Impact of firm's customer orientation on performance: The moderating role of interfunctional coordination and employee commitment. *Journal of Strategic Marketing*, *26*(8), 702–722. https://doi.org/10.1080/0965254X.2017.1384037

Mokwa, M. P. (1990). The policy characteristics and organizational dynamics of social marketing. In S. H. Fine (Ed.), *Social marketing: Promoting the causes of public and nonprofit agencies* (pp. 43–55). Allyn & Ba.

Moran, P. (2005). Structural vs. relational embeddedness: Social capital and managerial performance. *Strategic Management Journal*, *26*, 1129–1151. https://doi.org/10.1002/smj.486

Morris, M. H., Coombes, S., Schindehutte, M., & Allen, J. (2007). Antecedents and outcomes of entrepreneurial and market orientations in a non-profit context: Theoretical and empirical insights. *Journal of Leadership and Organizational Studies*, *13*(4), 12–39. https://doi.org/10.1177/10717919070130040401

M'Sallem, W. (2022). Role of motivation in the return of blood donors: Mediating roles of the socio-cognitive variables of the theory of planned behavior. *International Review on Public and Nonprofit Marketing*, *19*(1), 153–166. https://doi.org/10.1007/s12208-021-00295-2

Mulyanegara, R. C., Tsarenko, Y., & Mavondo, F. T. (2010). An empirical investigation on the role of market orientation in church participation. *International Journal of Nonprofit and Voluntary Sector Marketing*, *15*, 339–351. https://doi.org/10.1002/nvsm.399

Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. *Academy of Management Review*, *23*(2), 242–266. https://doi.org/10.5465/AMR.1998.533225

Narver, J. C., & Slater, S. F. (1990). The effect of a market orientation on business profitability. *Journal of Marketing*, *54*(4), 20–35. https://doi.org/10.2307/1251757

Oh, H., Chung, M.-H., & Labianca, G. (2004). Group social capital and group effectiveness: The role of informal socializing ties. *The Academy of Management Journal*, *47*(6), 860–875. https://doi.org/10.2307/20159627

Oh, H., Labianca, G., & Chung, M.-H. (2006). A multilevel model of group social capital. *The Academy of Management Review*, *31*(3), 569–582. https://doi.org/10.5465/amr.2006.21318918

Ostrom, A. L., Bitner, M. J., Brown, S. W., Burkhard, K. A., Goul, M., Smith-Daniels, V., Demirkan, H., & Rabinovich, E. (2010). Moving forward and making a difference: Research priorities for the science of service. *Journal of Service Research*, *13*(1), 4–36. https://doi.org/10.1177/1094670509357611

O'Toole, L. J., Jr., & Meier, K. J. (2004). Desperately seeking selznick: Cooptation and the dark side of public management in networks. *Public Administration Review*, *64*(6), 681–693. https://doi.org/10.1111/j.1540-6210.2004.00415.x

O'Toole, L. J., & Meier, K. J. (2003). Plus ça change: Public management, personnel stability, and organizational performance. *Journal of Public Administration Research and Theory*, *13*(1), 43–64.

Padanyi, P., & Gainer, B. (2004). Market orientation in the nonprofit sector: Taking multiple constituencies into consideration. *Journal of Marketing Theory and Practice*, *12*(2), 43–58. https://doi.org/10.1080/10696679.2004.11658518

Parker, R., Kaufman-Scarborough, C., & Parker, J. C. (2007). Libraries in transition to a marketing orientation: Are librarians' attitudes a barrier? *International Journal of Nonprofit and Voluntary Sector Marketing*, *12*, 320–337. https://doi.org/10.1002/nvsm.295

Passey, A., & Lyons, M. (2006). Nonprofits and social capital: Measurement through organizational surveys. *Nonprofit Management and Leadership*, *16*(4), 481–495. https://doi.org/10.1002/NML.122

Peloza, J., & Hassay, D. N. (2007). A typology of charity support behaviors: Toward a holistic view of helping. In *Social marketing: Advances in research and theory* (pp. 135–151). Taylor and Francis. https://doi.org/10.1300/J054v17n01_07

Penner, L. A., Dovidio, J. F., Piliavin, J. A., & Schroeder, D. A. (2005). Prosocial behavior: Multilevel perspectives. *Annual Review of Psychology*, *56*, 365–392. https://doi.org/10.1146/ANNUREV.PSYCH.56.091103.070141

Pinheiro, P., Daniel, A., & Moreira, A. (2021). Social enterprise performance: The role of market and social entrepreneurship orientations. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, *32*, 45–60. https://doi.org/10.1007/s11266-020-00266-x

Previte, J., & Russell-Bennett, R. (2016). Scared topless: Why social marketers need to encourage marketing-like activities in avoidance-service workers. In C. Campbell & J. Ma (Eds.), *Looking forward, looking back: Drawing on the past to shape the future of marketing* (pp. 316–318). Developments in Marketing Science: Proceedings of the Academy of Marketing Science. https://doi.org/10.1007/978-3-319-24184-5_83

Quee, F. A., Spekman, M. L. C., Prinsze, F. J., Ramondt, S., Huis in 't Veld, E. M. J., van den Hurk, K., & Merz, E. M. (2022). Blood donor motivators during the COVID-19 pandemic. *Journal of Philanthropy and Marketing*, *27*(3), e1757. https://doi.org/10.1002/nvsm.1757

Reid, M., & Wood, A. (2008). An investigation into blood donation intentions among non-donors. *International Journal of Nonprofit and Voluntary Sector Marketing*, *13*(1), 31–43. https://doi.org/10.1002/nvsm.296

Rey García, M., Álvarez González, L. I., & Bello Acebrón, L. (2013). The untapped potential of marketing for evaluating the effectiveness of nonprofit organizations: A framework proposal. *International Review on Public and Nonprofit Marketing*, *10*(2), 87–102. https://doi.org/10.1007/s12208-012-0085-1

Ritz, A., Schott, C., Nitzl, C., & Alfes, K. (2020). Public service motivation and prosocial motivation: Two sides of the same coin? *Public Management Review*, *22*(7), 974–998. https://doi.org/10.1080/14719037.2020.1740305

Rodrigues, R. G., & Carlos, V. S. (2021). Attracting potential blood donors: The role of personality and social marketing. *International Journal of Nonprofit and Voluntary Sector Marketing*, *26*(3), e1694. https://doi.org/10.1002/nvsm.1694

Romero-Domínguez, L., Martín-Santana, J. D., Sánchez-Medina, A. J., & Beerli-Palacio, A. (2019). Lines of scientific research in the study of blood donor behavior from a social marketing perspective. *Journal of Nonprofit and Public Sector Marketing*, *33*(3), 307–358. https://doi.org/10.1080/10495142.2019.1707741

Rupp, C., Kern, S., & Helmig, B. (2014). Segmenting nonprofit stakeholders to enable successful relationship marketing: A review. *International Journal of Nonprofit and Voluntary Sector Marketing*, *19*, 76–91. https://doi.org/10.1002/nvsm

Russell-Bennett, R., Wood, M., & Previte, J. (2013). Fresh ideas: Services thinking for social marketing. *Journal of Social Marketing*, *3*(3), 223–238. https://doi.org/10.1108/JSOCM-02-2013-0017

Schneider, J. A. (2007). Connections and disconnections between civic engagement and social Capital in Community-Based Nonprofits. *Nonprofit and Voluntary Sector Quarterly*, *36*(4), 572–597. https://doi.org/10.1177/0899764006297236

Schneider, J. A. (2009). Organizational social capital and nonprofits. *Nonprofit and Voluntary Sector Quarterly*, *38*(4), 643–662. https://doi.org/10.1177/0899764009333956

Sojka, B. N., & Sojka, P. (2008). The blood donation experience: Self-reported motives and obstacles for donating blood. *Vox Sanguinis*, *94*, 56–63. https://doi.org/10.1111/j.1423-0410.2007.00990.x

Solomon, G. D. (2012). Segmentation and communications to solve the blood shortage: An exploration of the problem with recommendations. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, *23*, 415–433. https://doi.org/10.1007/s11266-010-9179-8

Steele, W. R., Schreiber, G. B., Guiltinan, A. M., Nass, C. C., Glynn, S. A., Wright, D. J., Kessler, D. A., Schlumpf, K. S., Tu, Y., Smith, J. W., & Garratty, G. (2008). The role of altruistic behavior, empathetic concern, and social responsibility motivation in blood donation behavior. *Transfusion*, *48*, 43–54. https://doi.org/10.1111/j.1537-2995.2007.01481.x

Subramaniam, M., & Youndt, M. A. (2005). The influence of intellectual capital on the types of innovative capabilities. *The Academy of Management Journal*, *48*(3), 450–463. https://doi.org/10.2307/20159670

Tripathi, P. P., Kumawat, V., & Patidar, G. K. (2022). Donor's perspectives on blood donation during Covid-19 pandemic. *Indian Journal of Hematology and Blood Transfusion*, *38*(3), 536–545. https://doi.org/10.1007/s12288-021-01504-y

Tran, T. P., Blankson, C., & Roswinanto, W. (2015). Market orientation: An option for universities to adopt? *International Journal of Nonprofit and Voluntary Sector Marketing*, *20*(4), 347–365. https://doi.org/10.1002/nvsm.1535

Uzzi, B. (1996). The sources and consequences of embeddedness for the economic performance of organizations: The network effect. *American Sociological Review*, *61*(4), 674–698. https://doi.org/10.2307/2096399

Valero-Amaro, V., Galera-Casquet, C., & Barroso-Méndez, M. J. (2019). Market orientation in NGDOs: Construction of a scale focused on their stakeholders. *Social Sciences*, *8*, 237–267. https://doi.org/10.3390/socsci8080237

van Dongen, A. (2015). Easy come, easy go. *Retention of Blood Donors. Transfusion Medicine*, *25*(4), 227–233. https://doi.org/10.1111/TME.12249

van Dyke, N., Chell, K., Masser, B., Kruse, S. P., Gemelli, C. N., Jensen, K., & Davison, T. E. (2020). Thank you for donating: A survey of Australian donors' and nondonors' orientations toward noncash incentives for blood donation. *Transfusion*, *60*(7), 1454–1462. https://doi.org/10.1111/trf.15806

Veseli, B., Sandner, S., Studte, S., & Clement, M. (2022). The impact of COVID-19 on blood donations. *PLoS ONE*, *17*, e0265171. https://doi.org/10.1371/journal.pone.0265171

Voss, G. B., & Voss, Z. G. (2000). Strategic orientation and firm performance in an artistic environment. *Journal of Marketing*, *64*, 67–83. https://doi.org/10.1509/jmkg.64.1.67.17993

Walker, R. M., Brewer, G. A., Boyne, G. A., & Avellaneda, C. N. (2011). Market orientation and public service performance: New public management gone mad? *Public Administration Review*, *71*(5), 707–717. https://doi.org/10.1111/j.1540-6210.2011.02410.x

Wang, C. L., & Chung, H. F. L. (2013). The moderating role of managerial ties in market orientation and innovation: An Asian perspective. *Journal of Business Research*, *66*, 2431–2437. https://doi.org/10.1016/j.jbusres.2013.05.031

Wang, W., Li, S., Li, J., & Wang, Y. (2021). The COVID-19 pandemic changes the nudging effect of social information on Individuals' blood donation intention. *Frontiers in Psychology*, *12*, 736002. https://doi.org/10.3389/fpsyg.2021.736002

Willem, A., & Buelens, M. (2007). Knowledge sharing in public sector organizations: The effect of organizational characteristics on interdepartmental knowledge sharing. *Journal of Public Administration Research and Theory*, *17*(4), 581–606. https://doi.org/10.1093/jopart/mul021

Wöhrle, J., van Oudenhoven, J. P., Otten, S., & van der Zee, K. I. (2015). Personality characteristics and workplace trust of majority and minority employees in The Netherlands. *European Journal of Work and Organizational Psychology*, *24*(2), 161–177. https://doi.org/10.1080/1359432X.2014.891583

Wright, B. E., Christensen, R. K., & Pandey, S. K. (2013). Measuring public service motivation: Exploring the equivalence of existing global measures. *International Public Management Journal*, *16*(2), 197–223. https://doi.org/10.1080/10967494.2013.817242

Yuan, Y. C., Carboni, I., & Ehrlich, K. (2014). The impact of interpersonal affective relationships and awareness on expertise seeking: A multilevel network investigation. *European Journal of Work and Organizational Psychology*, *23*(4), 554–569. https://doi.org/10.1080/1359432X.2013.766393

Zafonte, M., & Sabatier, P. (1998). Shared beliefs and imposed interdependencies as determinants of ally networks in overlapping subsystems. *Journal of Theoretical Politics*, *10*(4), 473–505. https://doi.org/10.1177/095169289801000400

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APPENDIX A

A.1 | DEFINITIVE ITEMS OF THE SCALES

Construct		Code	Items
Interpersonal trust (TRUST)		**In relation to the team that I usually work with, …**	
		TRUST1	We freely share our ideas, feelings and expectations
		TRUST2	If I talked to them about my problems, they would respond in a constructive, sympathetic manner
		TRUST3	We carry out our jobs professionally and diligently
		TRUST4	I trust that none of them will make my job difficult because they will all perform their jobs appropriately
		TRUST5	Other colleagues whom we interact with trust us
Connectedness (CONNEC)		**At this center/service department…**	
		CONNEC1	It is easy to talk to anyone when necessary, regardless of their seniority or position.
		CONNEC2	Members of different areas or departments communicate with each other informally
		CONNEC3	Members of different areas or departments feel comfortable in asking help from others when necessary
		CONNEC4	Members of different areas or departments are easily accessible for the rest of the staff
Inter-functional coordination (COORD)		COORD1	Members of different areas or departments interact often in order to improve donor recruitment and loyalty
		COORD2	Activities of different areas or departments are effectively coordinated in order to provide donors with a satisfactory service
		COORD3	Every area or department actively participates in devising plans and strategies aimed at increasing blood donation in our organization
Donor orientation (DO)			
Intelligence generation (IG)	Current donors as a source of information (D1_IG)	IG1	Every year we update data on donation evolution, number of donors and donor profiles in detail
		IG2	Every year we regularly analyze donor loyalty indicators (lost donors, recovered donors, new donors, retired donors, etc.)
		IG3	Every year we regularly distribute a survey to current donors to assess the quality of our services and donor satisfaction
	Inactive donors and non-donors as sources of information (D2_IG)	IG4	Every year we regularly distribute a survey to inactive donors to know what factors caused them to stop donating blood
		IG5	From time to time (no more than every 5 years) we regularly distribute a survey to non-donors to know what factors prevent them from donating blood
	Other sources of information (D3_IG)	IG6	Every year regular meetings are held with blood collection staff to gather data about donors
		IG7	Every year regular meetings are held between different areas or departments to analyze data about donors

Construct	Code	Items
	IG8	We have a fluid relationship with blood transfusion centers/services from other Spanish autonomous communities to share information and experiences
	IG9	We often collect and analyze data on actions taken by the blood transfusion centers/services from other Spanish autonomous communities
Intelligence dissemination (ID)	ID1	The staff responsible for marketing (or similar) activities hold regular meetings to share and discuss data collected on donors with other divisions or departments
	ID2	Donor information can be accessed by the staff who needs it in accordance with the Spanish Data Protection Act (Ley Orgánica de Protección de Datos)
	ID3	Donor information (perceived quality, satisfaction, loyalty, complaints, etc.) is released regularly at every level
	ID4	The staff responsible for marketing (or similar) activities is a driver for donation
	ID5	Our staff shares and discusses any new and useful information about blood transfusion centers/services from other Spanish autonomous communities
Responsiveness (R)	R1	We use collected data on donors to take actions aimed at improving our results
	R2	We offer quick answers to queries and suggestions made by donors through telephone calls, social media, the center's website, etc.
	R3	Employees are always willing to help donors
	R4	We will develop a yearly marketing plan based on professional criteria
	R5	When donors demand service improvements, every division or department involved works hard to meet their request
	R6	Our staff receives continuous training to provide donors with a top quality service
	R7	We assess the effectiveness of donor recruitment and retention plans or programmes
	R8	We invest a number of resources in developing software to plan, manage and control blood collection
	R9	We often carry out joint activities with blood transfusion centers/services from other Spanish autonomous communities aimed at improving donor recruitment and loyalty