COMMUNICATION & SOCIETY

Miscellaneous

”I don’t donate blood”. (Mis)beliefs, false information and prejudices about altruistic blood donation

Raquel Martínez-Sanz
https://orcid.org/0000-0002-4753-0282
raquel.martinez.sanz@uva.es
Universidad de Valladolid

Patricia Durántez-Stolle
https://orcid.org/0000-0002-6898-6350
patricia.durantez@uva.es
Universidad de Valladolid

Submitted
June 30th, 2024
Approved
April 1st, 2025

Communication & Society
ISSN 0214-0039
E ISSN 2386-7876
www.communication-society.com

2025 – Vol. 38 (2)
pp. 252-266

How to cite this article:
Martínez-Sanz, R., & Durántez-Stolle, P. (2025). “I don’t donate blood”. (Mis)beliefs, false information and prejudices about altruistic blood donation *Communication & Society*, *38*(2), 252-266. https://doi.org/10.15581/003.38.2.018

Abstract

Altruistic blood donation is a safe and painless gesture that saves millions of lives around the world every year. Recruiting and maintaining new donors requires health centers to develop communication strategies that are adapted to the attitudes and beliefs of the target public. This paper uses the Theory of Planned Behavior to analyze the main limitations for university students to donate blood. It also identifies the information they handle and the common myths and misconceptions about this practice. A mixed research methodology with a sequential design was used that included several focus groups and a survey answered by 656 Spanish university students, stratified by branch of knowledge according to their current studies. The results revealed a high level of self-efficacy, which was most apparent in critical situations. They also showed that university education does not result in people being more predisposed to give blood, which seems particularly striking among future healthcare professionals; and that the obstacles that prevent young people from giving blood differ according to gender: the slackness prevails in men (43.2%) and the fear in women (30.6%). Finally, the importance of behavioral referents in the personal context (social learning) was observed, as well as the effectiveness of the empathic persuasive narrative adapted to the target group for communication and awareness raising campaigns.

Keywords

Health communication, blood donor, behavior, social learning, university students, blood centers.

Funding

This research has been funded by the Research Group GIR NUTECO (“New Trends in Communication”) and the Teaching Innovation Project “Organizational Communication for Social Change”, both supported by the University of Valladolid.

1. Introduction

While blood donations save millions of lives around the world every year (World Health Organization, 2017), only 5% of the eligible population become blood donors (Bagot, Murray & Masser, 2016). Young people are called upon to take over from the previous generations and address the supply shortages brought on by the health crisis caused by Covid-19 (Bermúdez, 2020; Chiem et al., 2022). Although this population group frequently express their views in favor of a wide range of causes (Desrues, 2015; González-Lizárraga, Becerra-Traver & Yanez-Díaz, 2016), we wonder what dissuades them from donating blood; in other words, what keeps them away from engaging in this practice, which is as innocuous on an individual level as it is vital on a collective level?

This research examines the current relationship that young Spanish university students have with altruistic blood donation, paying special attention to those aspects that determine mobilization from the point of view of social psychology (Asún & Zúñiga, 2013; Lemmens et al., 2005), i.e., the attitude, the presence of referents and the self-efficacy. When applied to the intention to give blood, the Theory of Planned Behavior (TPB) assumes that individual beliefs, the approval of others, and the belief that one is prepared for the action all influence the decision to donate (Giles et al., 2004; Torrent-Sellens et al., 2021).

The ultimate goal of this study is to improve the communication strategies that Spanish health institutions employ for recruitment and awareness-raising of young blood donors. This is important because a key element in ensuring a sustainable system of altruistic provision of blood products is not only attracting new and healthy donors, but also improving the return rates of those already recruited (Mugion et al., 2021).

The reasons given by people for not donating blood are multifactorial (Bednall et al., 2013). This means that greater effort is required to identify both the motivations and drives of those who do so voluntarily, as well as the obstacles and limitations of those who, either consciously or unconsciously, do not respond to calls from blood donation centers (Boenigk, Leipnitz & Scherhag, 2011; Masser, Hyde & Ferguson, 2020). Lack of knowledge about the process, its effects on community health, or the uses of blood is a determining factor in discouraging donation (Hossain Parash et al., 2020). Combating reality-distorting misbeliefs therefore becomes a part of health communication management (Ballesteros-Aguayo & Chaparro Escudero, 2022).

As Abril (2016) highlights, it is in order to promote blood donation in countries whose system depends on altruistic volunteers why communication is essential, mainly by means of two main paths: interpersonal (based on the impact of behavioral examples within each individual's contact network), while the second path is the one performed via social media (which must raise awareness about its relevance, as much as foster trust in health institutions, and provide information and testimonies that help dispel myths and fears associated with the process). According to White et al. (2020), the language of blood donation campaigns must be aligned with the factors that motivate donors, this way evoking and eliciting those positive emotions and moral rewards for performing an action with such social impact.

It should also be borne in mind that not all population groups are the same. Each group's interests, motivations and concerns can be very different, and influence the way they conceive of altruistic blood donation (Gazibara et al., 2015). As a result, it is advisable to study the phenomena that hinder blood donation according to different population groups taking into account their life stages (Piersma et al., 2019) and make use of that feedback to carry out effective communication campaigns tailored to each target audience.

ISSN 2386-7876 – © 2025 Communication & Society, 38(2), 252-266

1.1 *Constraints for altruistic blood donation*

The World Health Organization points out Voluntary non-remunerated donations (VNRD) as the most favorable proposal to guarantee the quality of the blood assets received and the health safety of recipients and donors, especially when compared to other modalities, such as directed donation, replacement or paid, still present in a large number of developing countries (WHO, 2022).

The approach to any health communication campaign aimed at establishing a habit requires understanding what prevents it from occurring. Studies such as that of Ramondt et al. (2020) have identified up to a dozen barriers, including both involuntary and voluntary, to the act of donating, such as lifestyle, temporary restrictions, physical reactions, health conditions, location of donation points, or lack of remuneration. Among them, it is remarkable the fact that adverse reactions experienced to blood donation, as well as the difficulty traveling to blood collection centers, reduce the likelihood of future donation (Bednall et al., 2013; Miah, 2020; Piersma et al., 2021). However, positive experiences, such as friendly and professional treatment by healthcare workers, cleanliness or waiting time (Boenigk, Leipnitz & Scherhag, 2011; Mugion et al., 2021), not only facilitate repeat donations but also increase the chances that donors would encourage that their family and friends to give blood (Martín-Santana et al., 2021).

Among the factors deterring potential donors, fear of pain and needles were most prevalent (Stock & Möckel, 2021), followed by lack of time and non-compliance with some of the requirements. In contrast, personal satisfaction or "warm-glow", the belief that one is helping someone else, or receiving free and almost immediate medical evaluation are the most important reasons for the decision to donate blood for the first time (Suemnig et al., 2017).

The Theory of Planned Behavior (TPB) applied to the intention to donate blood assumes that attitude, beliefs about the approval of others and the conviction of being prepared for action (perceived behavioral control), interfere in the decision to donate (Torrent-Sellens et al., 2021). Furthermore, the expansion of this theory works to show the influence capacity of variables such as the personal feeling of responsibility or the awareness of the need for blood units (Martínez-Sanz & Arribas-Urrutia, 2023). In the latter, the information disseminated both by health institutions in their ordinary communication (Weidmann et al., 2022) and by the media (Masser, Hyde & Ferguson, 2020) comes into play, demonstrating that both the level of knowledge acquired about donation and that perceived as true affect the intention (Hossain Parash et al., 2020).

Any communication initiative can be helpful for encouraging blood donation, whether it is an information campaign, a commercial or an edutainment story, the message should be adapted to the particular characteristics of the specific target group (Durántez-Stolle, Martínez-Sanz & Rodríguez-de-Dios, 2022; Martín-García, Buitrago & Martínez-Sanz, 2024; Martínez-Sanz & Durántez-Stolle, 2024). This research aims to improve the effectiveness of awareness campaigns promoted by health institutions by investigating the relationship that young university students have with altruistic blood donation and the myths surrounding it. In addition, the role of knowledge about the issue and contact with positive role models in the decision to donate is explored in the study.

2. Methodology

An empirical study was carried out among the Spanish university community in order to further understand the motivations and inhibitors of this group when called upon to become

ISSN 2386-7876 – © 2025 Communication & Society, 38(2), 252-266

a blood donor and the role played by the lack of information and persistent misbeliefs. As a distinctive feature of this study, the data were analyzed taking into account the studies they were enrolled in, to determine whether students in Health Sciences syllabuses showed better outcomes. Specifically, the following research questions were formulated:

- Q1. What level of knowledge do young Spanish university students have about blood donation?
- Q2. What factors influence their decision whether or not to become donors?
- Q3. Are there differences between their actual knowledge and their attitudes about donation depending on their field of study?
- Q4. How can communication or awareness campaigns be improved to attract young donors in Spain?

To answer these questions, a mixed-methods study with a sequential design (Johnson & Onwuegbuzie, 2004; Morgan, 1998) was proposed. This allowed for an extensive and multifaceted analysis of the phenomenon by exploring the starting situation of a small group (focus groups) and then testing the prevalence of the perceived behaviors and beliefs in a representative sample (survey) to be able to make generalizations.

2.1 *Procedure*

The first phase of the research analyzed university students' perceptions of altruism and its referents, their knowledge about blood donation and the false myths associated with it. For this purpose, 7 focus groups were organized with students under 30 years of age. Two weeks before attending the debate, participants completed a self-administered questionnaire with two objectives: first, to obtain data and statements that could be used in the group discussion and, second, to encourage subjects to reflect on blood donation. The resulting 5 hours and 50 minutes of conversation were transcribed and subjected to content analysis in 4 phases: coding, categorization, identification of themes and integration (Mayan, 2016).

The results obtained were used to carry out a survey with a representative sample of the university campus of origin. This was inspired by the studies of Suemnig et al. (2017) and Zucoloto and Martinez (2018) and was designed to identify (a) motivations for and obstacles to the action in question (donating blood); (b) possible coping mechanisms; and (c) the moderating role of education. The role of specialized education is where the originality of this study lies. While there is a vast literature on altruistic blood donation (Stock & Möckel, 2021), no research has been identified that addresses the problem according to the university course being undertaken by potentially future donors[1].

The data collected in the survey were transferred to R software, which was used to carry out both a descriptive analysis (using frequency tables and descriptive statistics) and a bivariate analysis, using a chi-square test (significance level $p < 0.05$). This led us to establish whether or not there was a dependence relationship between variables. In cases where the chi-square test indicated dependence, the magnitude of the association was calculated using Cramer's V coefficient and the contingency coefficient.

2.2 *Participants*

University students are the focus of this study because they are a valuable target audience bearing in mind the implications of their youth in terms of health (WHO, 2022). Convenience sampling was used for the focus groups due to the accessibility of participants. Forty-four students from the University of Valladolid (Spain) completed the self-administered

[1] Survey and dataset available at https://uvadoc.uva.es/handle/10324/75351

ISSN 2386-7876 – © 2025 Communication & Society, 38(2), 252-266

questionnaire and attended the focus groups that were held in the last quarter of 2021 on their own initiative (45.5% male and 54.5% female; 25% were blood donors). All participants were provided with an informed consent form detailing the nature and purpose of the research and given assurances of data anonymity and confidentiality.

The survey, on the other hand, was formulated on a random and representative sample of the entire university community under 30 years of age from the Valladolid Campus (Spain). The intention was to collect at least 634 surveys, which would mean questioning 4.9% of the total population, with a confidence level of 99%, and a 5% margin of error in sample design. In addition, given the importance of the type of education engaged in by the respondents, the surveys were compiled proportionally based on the subject area of their university courses, which is broken down below (Table 1). A total of 656 valid surveys were collected.

Table 1. Percentage of respondents by overall subject area

Subject area	Faculty	Enrolled	Respondents	Percentage of total enrolled
Social and Human Sciences	- Arts and Humanities - Business - Business and Economics - Law - Education and Social Work	6,601	316	4.8%
Science and Health Sciences	- Medicine - Nursing - Sciences	3,171	145	4.6%
Engineering	- Industrial Engineering - Computer Engineering - Telecommunication Engineering - Architecture	3,179	195	6.1%

Source: Developed by the authors based on data provided by the transparency portal of the NN University.

The surveys were conducted at the faculty gates of the campus, after collecting the required informed consent. The questionnaire was devised by trained volunteers, as this research is part of a collaborative project between the authors and the Asociación de Donantes de Sangre (Blood Donor Association) of Valladolid (Spain).

3. Analysis of results

3.1 *Preliminary study: referents, commonly held misbeliefs and predisposition to engage in altruistic helping behavior*

When the focus groups were held, "fear" was the most repeated word used by young participants to justify the reasons for not donating blood. Nevertheless, they believed that Spanish society is generally an altruistic society. Respondents associated this term with the time and/or effort spent doing something that someone else does not have available and noted that this help may not necessarily have financial implications. They perceived themselves as being altruistic, giving themselves a score of 8 or higher on a scale of 10.

When asked how voluntary blood donation could be encouraged, they mentioned education from an early age and the implementation of communication campaigns. They noted that these campaigns were especially interesting because they provided information

ISSN 2386-7876 – © 2025 Communication & Society, 38(2), 252-266

about who would receive the help given (blood donation). Participants recalled specific high-profile media cases in Spain such as that of Pablo Ráez (bone marrow donation), the railway accident in Santiago de Compostela (with the ensuing large appeal due to the urgent demand for blood) and the request for funds to conduct research on Spinal Muscular Atrophy (SMA), a disease suffered by Julia, a young girl from a nearby town whose parents tirelessly work to raise awareness about SMA on Facebook. Therefore, those being more recognized were specific call-to-action campaigns, rather than institutional, except for the one carried out twice a year at the faculty through the roving bus before the entrance gate. Respondents proudly stated that, when faced with extreme circumstances or a specific request for help, they did not hesitate to take action, thus proving a high level of self-efficacy.

Local institutional blood donation campaigns go largely unnoticed by these groups of students; in fact, few even identify the name or location of the city's main association dedicated to this purpose. At the same time, they were also uncomfortable with images that show blood and rejected outright those that explicitly depicted blood being drawn.

The participants therefore recognized that when messages in awareness-raising campaigns are personalized and plausible, they were moved and prepared to act; however, the self-administered questionnaire revealed that only 31.8% had had some kind of involvement with non-paid community-supportive causes. Lack of time or the fact that they had not found an activity that inspired them to provide their support were the most frequently mentioned determinants.

Concerning the knowledge that university students had about blood donation, they had internalized the most basic issues, such as the need to be of legal age, not to have had their body pierced recently, or not to be anemic. However, they held some misbeliefs which, far from being challenged or questioned during the debate, were assumed to be true when they were verbalized by a peer.

The most common myths were the possibility of being infected when donating blood; the existence of financial remuneration in private health centers in Spain; the ability to donate blood in any public hospital; and the requirement to donate blood without eating. They were not able to identify where this information came from or by what means it had reached them; they only recognized that they were aware of it and had not considered it necessary to verify it because they did not consider it relevant.

The main ideas drawn from the first stage of the study are summarized below. This stage encompasses the focus group session held and the questionnaire that was administered beforehand to the same sample of university students. These results were divided into 5 categories: what happened (facts), what they knew (knowledge), communicational referents (sources), what they believed (beliefs) and how they reacted to stimuli (reactions). These categories played a key role in the design of the mass survey to be conducted at a later stage (Table 2).

ISSN 2386-7876 – © 2025 Communication & Society, 38(2), 252-266

Table 2. Results of the first stage

Young university students and altruistic blood donation in Spain		
What happened	Less than a third were blood donors	Low commitment to blood donation
	They were altruistic (they respond when called upon to help) but they had not found a cause that motivated them enough to provide their support on a regular basis	
	They were not aware of what it means for a third party to receive blood	
	They did not seek recognition or financial incentives for donating blood	
What they knew	Incompatibility with tattoos or use of drugs or medicines	Ingrained basic knowledge
	From the age of 18	
	Recognized the roving blood donation buses that go to faculties	
	They were unaware of the existence of a local organization engaged in liaising with blood donors (known as HDS)	
Communicational referents	Institutional campaigns go unnoticed, except for those that are impactful (e.g. DGT campaign on television) or those that are broadcast in their Faculty on a recurring basis.	Recall of emotional campaigns
	They believe that donor recruitment depends on a good communication.	
	Aware of which close relatives are donors	
What they believed	Widespread myths (risk of contagion, remuneration)	Persistent myths
	Participants believed that one may donate blood at any hospital	
	They were committed to education and awareness-raising campaigns	
	Respondents associated blood donation with the Red Cross	
How they reacted	They are paralyzed by fear of and apprehension toward needles	Empathetic. Reaction to direct requests
	Lack of time or laziness were the most common reasons for not giving blood	
	Interest in knowing who receives help (blood)	
	High esteem for family values and friendship	

Source: own elaboration

3.2 *Motivations, fears, and self-efficacy of the university student community toward altruistic blood donation*

A total of 656 university students under 30 years of age were surveyed, 72.3% of whom stated that they had never donated blood. Of these, 45.5% (216) were men and 54.4% (258) were women. The chi-square test (p-value=0.421), the contingency coefficient (0.025) and Cramér's V (0.025) indicated that there was no statistically significant relationship between gender and blood donor status, although there was a statistically significant relationship with having a close family member who was a donor (p-value=0.0263, contingency coefficient=0.086 and Cramér's V=0.087).

We checked whether pursuing a higher education program in science was an indicator of greater predisposition to donate blood compared to being enrolled in degrees from other areas of knowledge, as it was assumed that this group would be more aware of the uses of blood and of its vital role. The data showed that Engineering was the branch of knowledge with the highest percentage of blood donors, 33.3% compared to 29.9% in Science, and 22.9% in Social Sciences and Humanities. The chi-square test showed that there was a dependency relationship between being a donor and the area of knowledge studied at university (p-

ISSN 2386-7876 – © 2025 Communication & Society, 38(2), 252-266

value=0.0223, contingency coefficient=0.11 and Cramér's V=0.11). A more detailed analysis of the data obtained in each of the faculties showed that the students of the Faculty of Medicine and Nursing were slightly below the average for their area of knowledge (29.5%).

The most commonly used arguments for being reluctant to give blood were, in general terms, slackness (28.5%) and fear (28.5%) (Table 3). In the case of men, these two reasons were adduced by almost 70% of the sample, while in the case of women, reluctance was caused by fear (30.6%), followed by failure to meet a basic requirement (21.7%): low weight and having had a tattoo recently, the most frequently mentioned by the women surveyed. The data confirmed that there is a dependency relationship between reasons for not giving blood and gender (p-value<0.01, contingency coefficient=0.32 and Cramér's V=0.34). Regarding the subject area studied, the reasons for not donating blood were very similar among all participants. There were no significant differences between the three groups except for one reason: basic requirements to be able to donate, which had a markedly lower value among Engineering students (Table 3).

Table 3. Reasons for not donating blood by gender and by subject area

	Slackness	Lack of info.	Fear	Medical	Requirements	Others
Men	93 (43.2%)	21 (9.8%)	56 (26.0%)	15 (7.0%)	14 (6.5%)	16 (7.4%)
Women	42 (16.3%)	24 (9.3%)	79 (30.6%)	35 (13.6%)	56 (21.7%)	22 (8.5%)
Total	**135 (28.5%)**	**45 (9.5%)**	**13 (28.5%)**	**50 (10.5%)**	**70 (14.8%)**	**38 (8.0%)**
Social Sciences & Hummanities	67 (27.7%)	18 (7.4%)	79 (32.6%)	25 (10.3%)	39 (16.1%)	14 (5.8%)
Science	23 (22.3%)	11 (10.7%)	23 (22.3%)	11 (10.7%)	23 (22.3%)	12 (11.6%)
Engineering	45 (34.9%)	16 (12.4%)	33 (25.6%)	14 (10.8%)	9 (7.0%)	12 (9.3%)

Source: own elaboration

The university students surveyed mainly gave blood out of a sense of conviction (69.8%) and because someone suggested it to them (23.6%). No distorting frequencies were found either in the gender variable or in the subject area being studied.

With regard some common and persistent misbeliefs related to blood donation, statements were made in connection with four issues: financial remuneration for giving blood, blood expiry date, transmission of diseases, and minimum age requirement, consistent with the points identified in the first part of the study. Respondents were asked to indicate whether they considered these statements to be true or false. In total, there were 1,362 hits and 1,262 misses; among the latter, 35.9% corresponded to the option don't know/no answer. A general reading suggested that there was a lot of indecision among university students and that the fact of having a blood donor in the family (p-value=0.7987) or studying at the Faculty of Medicine and Nursing (p-value=0.1268) did not predispose them toward giving more accurate answers. No dependency relationship was found between gender and awareness of these false beliefs (p-value=0.506). Table 4 shows the results disaggregated by false belief. Those circumstances that were more likely to meet accurate responses are shaded lightly, whereas dark shading indicates those that were more likely to have wrong answers. It is striking that students with a science background answered more frequently than the rest that donating blood could lead to the transmission of a disease (statement 3). Our interpretation of this result was that for this type of student there was no such thing as zero risk.

ISSN 2386-7876 – © 2025 Communication & Society, 38(2), 252-266

Table 4. Probability that respondents provided the correct and incorrect answer, disaggregated by hoax by circumstance

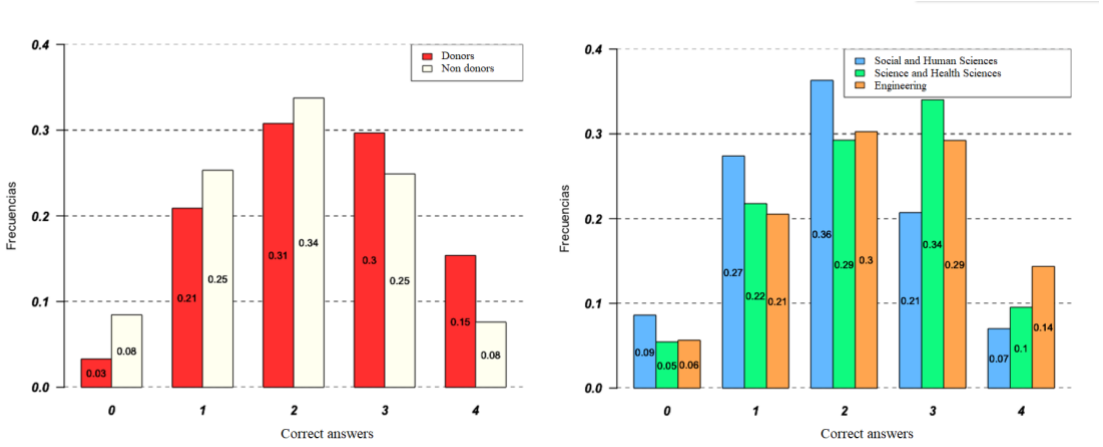
	Statement 1 **Remuneration**	Statement 2 **Expiry date**	Statement 3 **Infection**	Statement 4 **Age**
Respondent is a blood donor	0.0087***	0.1773	0.9408	0.1379
Respondent has a relative who donates blood	0.2337	0.1015	0.6983	0.6137
Respondent studying at the Faculty of Medicine	0.0056**	0.0001***	0.0056**	0.6801
Respondent's course being in the science subject area	0.0023**	0.0000***	0.0065**	0.7582

Note. *p < .05; **p < .01; ***p < .001 with the Chi-square statistic.

Source: own elaboration

Only 36% of the total sample cumulatively successfully identified at least three of the four common misbeliefs, the statement related to remuneration being the most widely overlooked. Furthermore, as shown in Figure 1, the participants who were blood donors had proportionally the highest cumulative rate of correct answers, which was almost twice as high as those who had no experience of giving blood. The opposite was also true: students unable to recognize at least one common misbelief were in the category of non-donors (8% compared to 3% of donors), while the accumulations of 1, 2 and 3 correct answers were barely different. When considering the area of knowledge, students in Social Sciences and Humanities provided fewer cumulative correct answers than the rest; it can therefore be said that this was the subject area in which false beliefs about blood giving were most deeply rooted.

Figure 1. Cumulative percentage of correct answers given, by donor/non-donor status and subject area studied



Source: own elaboration

Virtually all scholarly production exploring the limitations of blood donation cite fear as one of the main paralyzing factors. Our survey attempted to quantify how many respondents would change their minds, that is, would donate blood, in two events that are particularly sensitive for young people: friendship and monetary reward.

ISSN 2386-7876 – © 2025 Communication & Society, 38(2), 252-266

After excluding non-donor participants who could not donate for medical reasons, 96.9% would be willing to change their behavior if a friend needed it, while 74.3% would give blood in exchange for financial reward (e.g.,100€). Gender was not found to be a stronger predisposing factor in either of the two hypothetical situations presented (p-value=0.3797 and 0.3857, respectively). However, it was found that those who responded that they were not willing to give blood because of fear were the least willing to change their mind (95.6% and 63%, respectively) compared to those who had adduced other reasons: laziness, lack of information and temporary failure to meet one of the requirements.

Once intentionality was tested, another essential piece of information for blood donation to take place was checked: recognizing the locations where donation takes place. Just over half of the respondents (52.1%) stated they were sure they knew where they could go to give blood, but nearly half (44.7%) were mistaken when asked to identify these places, the most common mistake being "any hospital" or "the Red Cross". It should be noted on this point that neither public hospitals nor Red Cross facilities have donation units in the city where the survey was carried out (unlike in other cities). Additionally, the fact of having a family member who was a blood donor did not result in greater probability of providing correct answers (p-value=0.4328), nor did being enrolled in a science university course, as science students provided an incorrect answer in 43.5% of the cases, a lower percentage than that found among Social Sciences and Humanities students (51.3%), but higher than the rates found among those studying Engineering courses (34.8%).

Those who admitted that they did not know where to go to donate blood were asked where they would go to obtain this information. Most of them (76.2%) referred to health sources, the most repeated options being hospitals, either in general or a specific one cited by name; a health center or outpatient clinic; and their family physician. In addition to healthcare referents, participants mentioned the Internet (8.1%) as a reliable source of information and some public institutions (5.4%) such as the university and its various faculties or the local council to obtain information. Some don't know/no answer responses were provided (8.4% of the total), which we interpreted as apathy and/or lack of interest in the subject.

4. Discussion

The ability of health systems to meet the demand for blood products depends, to a large extent, on selfless blood donations (WHO, 2017). The Covid-19 pandemic demonstrated the importance of having a pool of highly aware donors (Flavelle, 2020). However, for a communication campaign to be effective, the message to be conveyed must successfully know and reach the target audience (Martín-García, Buitrago & Martínez-Sanz, 2024). Based on the Theory of Planned Behavior, our research explored the Spanish university students' behavior and knowledge about altruistic blood donation.

The participants in both the focus groups (n=44) and the general survey (n=656) showed that this population group was interested in learning who receives the requested help. This would largely explain the success of empathetic persuasive storytelling in contrast to narratives in terms of intention to donate and sharing the message on social media, as identified in the experimental study by Durántez Stolle, Martínez Sanz and Rodríguez de Dios (2022). Humanizing recipients is a useful strategy to encourage younger people to donate blood, as verified in our research by presenting the sample with the hypothetical situation of donating blood for a friend. Almost all participants said that they would be willing to do it, which expressed a high level of self-efficacy. In the same vein, Suemnig et al. (2017) identified that one of the main motivations for first-time donors was to have been accompanied by a friend. With regard to gender, the survey showed that the reasons for not giving blood were significantly

ISSN 2386-7876 – © 2025 Communication & Society, 38(2), 252-266

different depending on whether the respondent was male or female, which points to the need for the construction of a differentiating gender-focused narrative.

The research carried out confirmed the thesis defended by Bagot, Murray and Masser (2016), which states that the percentage of the population who are blood donors, even given the right conditions, is low (around 5%). In our study, only 3 out of 10 university students who met the requirements to give blood had done so. The circumstance that most predisposes these young people to take action in this regard is having a direct family member (parents or siblings) who is a donor. This strengthens the Social Learning Theory, which maintains that altruism is learned by imitation and shows that role models are key. Stock and Möckel (2021) advocate conducting campaigns on platforms such as Instagram that highlight the perceived wellbeing of those who donate and engage real donors in the task of recruiting new volunteers. The focus groups showed that explicit images of blood and donation caused rejection. Lemmens et al. (2005) advise that communication campaigns in favor of blood giving should avoid needle exposure and pre-donation moments (the height of nervousness) and focus on enhancing the rewarding feelings that this selfless act evokes. However, Martínez-Sanz and Arribas-Urrutia (2023) found that the trend was the opposite on TikTok since, far from making light of the experience, there is a predominance of videos where young donors (either alone or accompanied by friends) are seen to go through the entire process, including the taking of the blood, which is strongly reaffirmed by the follower community.

It is striking that students enrolled in either medicine or nursing programs did not stand out regarding intention; quite the contrary, their donation rate was below the average in their subject area. The question arises, therefore, as to what perspective is taken and to what extent is this issue addressed in sufficient depth in their university programs. Unless future health practitioners are fully aware of the importance of blood donation, it is unlikely that they will convey this need to the general population when they engage in their work. A detailed study of curricula and how donation is addressed could complement and explain the data found here. This is the view held by Gazibara et al. (2015), who advocate that greater efforts are necessary to increase the pool of blood donors among future doctors.

Other concerning issues include the persistent common misbeliefs held about blood donation that are explicitly related to remuneration, the expiry of blood products, the transmission of diseases and the minimum age required to give blood. Many gaps in knowledge were identified among the university students surveyed, including those enrolled in science courses, which strongly points to the need for information campaigns that use channels specifically prioritized by young people. Several studies (Lemmens et al., 2005; Sereti et al., 2021; Zucoloto & Martinez, 2018) have suggested that making non-donors feel more informed about giving blood could encourage donation intention. Consequently, future avenues of research could include exploring the communication strategies employed by blood donation centers and checking whether and how aid is personified, and whether the false beliefs that circulate on the Internet are combated. In short, whether the participation of these health organizations in social media is adapted to the circumstances and demands of the public.

The main limitation on the scope of this study is that it was conducted on a representative sample of university students from a specific campus, making it difficult to extrapolate its conclusions to the entire Spanish university community, despite the campus size (N=12,951) and its wide range of studies offered within the main areas of knowledge. In the future, we intend to continue this line of research by expanding the sample of young university students in Spain and adding an intercultural comparison as well, comparing the findings with the

ISSN 2386-7876 – © 2025 Communication & Society, 38(2), 252-266

research conducted in other countries, so that we can provide a broader perspective concerning the factors that influence blood donation behavior.

5. Conclusion

This research analyzes the main reasons why Spanish university students whether or not become blood donors and whether this might be related to the branch of study they are pursuing. We apply the Theory of Planned Behavior to study how their intentions regarding donation (the best predictor of donating, indeed) are influenced by their knowledge, their social role models, and their perception of their ability to act on the matter. In this way, we help understand how communication and awareness campaigns can be improved to ultimately lead to an increase in the donor pool.

The methodology applied, a mixed and sequential design that included several focus groups and a survey responded by 656 Spanish university students representing different branches of knowledge, made it possible to answer the main research questions:

- Q1. Regarding the information young university students have about the donation process, we can conclude that there is an intermediate level of knowledge, with many erroneous beliefs still present. In the focus groups, as a main fact to be highlighted there was the lack of knowledge about both the blood collection points and the entities responsible for donations and donors, but the surveys revealed a high degree of doubt about basic concepts (35.9%) and erroneous data (as much as the true ones), with no relevant relationship to either having a relative as a donor, or to each student´s gender.
- Q2. The determining factors for donation can be divided into the action (either positive or negative) and its connection with intention, knowledge, and referents as predictors, as established by TPB:

  - Why do they donate? Only a quarter of young university students are donors, with no difference between male and female. Their main motivations are their own conviction of its benefits (69.8%) and external suggestion (23.6%), especially in critical moments, which promote self-efficacy or the perception of their ability to carry out the action. Most noteworthy in this regard is the statistically significant influence of having a close donor as a referent (p-value = 0.0263).

  - Why don't they donate? Concerning the arguments for not donating, there is a statistically significant difference (p-value with chi-square < 0.01) related to the gender of the respondent, with slackness and fear being the barriers for the majority of men (43.2% and 26%, respectively), while for women the two most important are fear (30.6%) and failure to meet basic requirements (21.7%), such as in cases of being underweight or having recent tattoos. These data suggest a greater knowledge and intention to donate among women, although they have a lower capacity for actual action. The focus groups revealed a high level of empathy and interest in getting to know the profile of blood donation recipients.
- Q3. Regarding the differences in knowledge, attitudes, and actions in relation to the branch studied, the survey results were striking: contrary to expectations, those studying Medicine and Nursing neither showed greater knowledge nor donated more than those from other branches. However, within the Engineering field, statistically speaking, a slightly greater commitment was found when compared to the other branches (p-value with chi-square = 0.0223).
- Q4. All the results provide useful information for targeting communication and awareness campaigns. Specifically, the potential for campaigns with an emotional burden, but without directly depicting the donation process, was observed. These were

ISSN 2386-7876 – © 2025 Communication & Society, 38(2), 252-266

campaigns personalizing both recipients (to generate empathy) and donors (to foster identification). In addition to more traditional institutional campaigns, the power of personal role models stands out here, underscoring and stressing the importance of social media campaigns, able to viralize the actions of donors, who become informants and promote imitation in their social circles (Martínez-Sanz & Durántez-Stolle, 2024).

This study applied the Theory of Planned Behavior to analyze and discover the relationship that young Spanish university students have with donating blood, with special emphasis on social learning, i.e., taking into account their knowledge of the process, the presence of referents and the individual and social perception of blood giving, in line with Giles et al. (2004) or Torrent-Sellens et al. (2021). The results show the importance of self-efficacy and personalized narratives, as well as the need to expand information and awareness campaigns, especially among students in the health sector.

The extension of this theory has shown the influence of variables such as personal feelings of responsibility or awareness of need, reinforcing previous results such as those of McMahon and Byrne (2008). Finally, it is worth highlighting the essential role played by the information disseminated by both health institutions in their ordinary communication (Weidmann et al., 2022) and by the media (Masser, Hyde & Ferguson, 2020), as it was found that both the level of knowledge acquired, and the level of knowledge perceived as true affect the intention to donate blood.

References

Abril, E. (2016). Explaining Voluntary Blood Donation from a Communication Perspective. *Cuadernos.info*, (38), 17-33. https://doi.org/10.7764/cdi.38.697

Asún, R., & Zúñiga, C. (2013). ¿Por qué se participa? Explicando la protesta social regionalista a partir de dos modelos psicosociales. *Psicoperspectivas, 12*(2): 38-50. https://doi.org/10.5027/psicoperspectivas-Vol12-Issue2-fulltext-260

Bagot, K. L., Murray, A. L., & Masser, B. M. (2016). ¿Cómo podemos mejorar la retención de donantes primerizos? Una revisión sistemática de la evidencia actual. *Transfusion Medicine Reviews*, 30(2), 81-91. https://doi.org/10.1016/j.tmrv.2016.02.002

Ballesteros-Aguayo, L., & Chaparro Escudero, M. (2022). Plataformas digitales y bulos en salud: el caso de #SaludSinBulos. *Estudios sobre el Mensaje Periodístico*, *28* (2), 249-259. https://doi.org/10.5209/esmp.75683

Bednall, T., Bove, L. L., Cheetham A., & Murray A. L. (2013). Una revisión sistemática y un metaanálisis de los antecedentes de la conducta y las intenciones de donación de sangre. *Social Science & Medicine*, 96(3), 86-94. https://doi.org/10.1016/j.socscimed.2013.07.022

Bermúdez, M. (2020, 22 de agosto). El miedo a donar: cómo la pandemia ha condicionado las donaciones de sangre. *Newtral*. https://www.newtral.es/el-miedo-a-donar-como-la-pandemia-ha-condicionado-las-donaciones-de-sangre/20200822/

Boenigk, S., Leipnitz, S., & Scherhag, C. (2011). Valores altruistas, satisfacción y lealtad entre donantes de sangre por primera vez. *Revista internacional de marketing del sector voluntario y sin fines de lucro*, 16(4), 356-370. https://doi.org/10.1002/nvsm.433

Chiem, C., Alghamdi, K., Nguyen, T., Han, J. H., Huo, H., & Jackson, D. (2022). El impacto de la COVID-19 en los servicios de transfusión sanguínea: una revisión sistemática y un metanálisis. *Medicina de transfusión y hemoterapia*, 49(2), 107-118. https://doi.org/10.1159/000519245

Desrues, T. (2015). Los jóvenes en el mundo árabe de la "Primavera" democrática al "Invierno" yihadista. Participación y activismo político y social. *Revista de Estudios Internacionales Mediterráneos*, 19, 1-14. http://doi.org/10.15366/reim2015.19.001

Durántez-Stolle, P., Martínez-Sanz, R., & Rodríguez-de-Dios, I. (2022). Effects of narrative-persuasive frames on Twitter regarding blood donation: pride versus empathy and people versus numbers [Efectos de los marcos narrativo-persuasivos en Twitter sobre donación de sangre. Orgullo frente a empatía y personas vs. números]. *Profesional de la Información*, 31(4), https://doi.org/10.3145/epi.2022.jul.15

Flavelle, C. (2 de junio de 2020). La Cruz Roja advierte de una caída "asombrosa" en los suministros de sangre. *The New York Times*. https://nyti.ms/3beUWpU

Gazibara, T., Kovacevic, N., Maric, G., Kurtagic, I., Nurkovic, S., Kisic-Tepavcevic, D., & Pekmezovic, T. (2015). Factores asociados con la actitud positiva hacia la donación de sangre entre los estudiantes de medicina. *Transfusion and Apheresis Science*, 53(3), 381-385. https://doi.org/10.1016/j.transci.2015.07.007

Giles, M., McClenahan, C., Cairns, E., & Mallet, J. (2004). Una aplicación de la teoría del comportamiento planificado a la donación de sangre: la importancia de la autoeficacia. *Health Education Research,* 19(4), 380-391. https://doi.org/10.1093/her/cyg063

González-Lizárraga, M. G., Becerra-Traver, M. T., & Yanez-Díaz, M. (2016). Ciberactivismo: Nueva forma de participación para estudiantes universitarios. *Comunicar: Revista Científica de Comunicación y Educación*, 24(46), 47-54. https://doi.org/10.3916/C46-2016-05

Hossain Parash, M., Suki, N. M., Shimmi, S. C., Hossain, A., & Murthy, K. D. (2020). Examen de la intención de los estudiantes de realizar donaciones voluntarias de sangre utilizando una teoría del comportamiento planificado: un enfoque de modelado de ecuaciones estructurales*. Transfusion Clinique et Biologique*, 27(2), 70-77. https://doi.org/10.1016/j.tracli.2020.02.002

Johnson, B., & Onwuegbuzie, A. (2004). *Investigación de métodos mixtos: un paradigma de investigación cuyo momento ha llegado*. Educational Researcher, 33(7), 14-26. https://doi.org/10.3102/0013189X033007014

Lemmens, K. P., Abraham, C., Hoekstra, T., Ruiter, R. A., De Kort, W. L., Brug, J., & Schaalma, H. P. (2005). ¿Por qué los jóvenes no se ofrecen como voluntarios para donar sangre? Una investigación de los correlatos de las intenciones de donación entre los jóvenes no donantes. *Transfusion*, 45(6), 945-955. https://doi.org/10.1111/j.1537-2995.2005.04379.x

Martín-García, A., Buitrago, Á., & Martínez-Sanz, R. (2024). Mi vida con una ostomía: el rol del paciente influencer en Instagram. *Contratexto, 41*. https://doi.org/10.26439/contratexto2024.n141.6851

Martín-Santana, J. D., Cabrera-Suárez, M. K., Deniz-Deniz, M. D. L. C., & Reinares-Lara, E. (2021). Orientación al donante y calidad del servicio: factores clave en la satisfacción y fidelización de los donantes de sangre activos. *Plos one*, 16(7), e0255112. https://doi.org/10.1371/journal.pone.0255112

Martínez-Sanz, R., & Arribas-Urrutia, A. (2023). Blood donors wanted: narrative innovation on TikTok to enable mobilization [Se buscan donantes de sangre: innovación narrative en TikTok para activar la movilización]. *Profesional de la Información, 32*(3), e320305. https://doi.org/10.3145/epi.2023.may.05

Martínez-Sanz, R., & Durántez-Stolle, P. (2024). Social Learning on TikTok: the Community as a Literacy Axis on Blood Donation. [Aprendizaje social en TikTok: la comunidad como eje alfabetizador sobre hemodonación]. *Comunicar, 79*, 47-58. https://doi.org/10.58262/V33279.5

Masser, B., Hyde, M., & Ferguson, E. (2020). Exploración de los predictores de las intenciones de donación de sangre de los miembros de la comunidad australiana y del comportamiento relacionado con la donación de sangre durante la pandemia de COVID-19. *Transfusion*, 60(12), 2907-2917. https://doi.org/10.1111/trf.16067

Mayan, M. J. (2016). *Fundamentos de la investigación cualitativa*. Routledge.

McMahon, R., & Byrne, M. (2008). Predicción de la donación entre una muestra irlandesa de donantes y no donantes: extensión de la teoría del comportamiento planificado. *Transfusion*, 48(2), 321-331. https://doi.org/10.1111/j.1537-2995.2007.01526.x

Miah, M. (2020). Study of blood donation campaign communication methods and attributes of donors: A data analytics approach. *International Journal of Healthcare Management*, *15*(1), 17–27. https://doi.org/10.1080/20479700.2020.1836725

Morgan, D. L. (1998). Estrategias prácticas para combinar métodos cualitativos y cuantitativos: aplicaciones a la investigación en salud. *Qualitative Health Research*, 8(3), 362-376. https://doi.org/10.1177/104973239800800307

Mugion, R. G., Pasca, M. G., Di Di Pietro, L., & Renzi, M. F. (2021). Promoción de la propensión a la donación de sangre mediante la comprensión de sus determinantes. BMC *Health Services Research,* 21(1), Artículo 127. https://doi.org/10.1186/s12913-021-06134-8

Piersma, T. W., Bekkers, R., de Kort, W., & Merz, E. (2019). Donación de sangre a lo largo de la vida: la influencia de los acontecimientos vitales en la incapacidad de los donantes. *Journal of Health and Social Behavior*, 60(2), 257-272. https://doi.org/10.1177/0022146519849893

Piersma, T. W., Bekkers, R., de Kort, W., & Merz, E. M. (2021). Altruismo en la donación de sangre: ¿ojos que no ven, corazón que no siente? El cierre de centros de donación influye en la pérdida de donantes de sangre. *Health & Place*, 67, artículo 102495. https://doi.org/10.1016/j.healthplace.2020.102495

Ramondt, S., Zijlstra, M., Kerkhof, P., & Merz, E. M. (2020). Barriers to blood donation on social media: An analysis of Facebook and Twitter posts. *Transfusion*, *60*(10), 2294–2306. https://doi.org/10.1111/trf.15998

Sereti, C., Apostolidou, I., Baka, M., Koutsoubos, N., Seretis, A., & Theodoratou, M. (2021). Incentivos y limitaciones de los donantes de sangre griegos: aplicación del modelo de creencias de salud en el diseño de estrategias de reclutamiento. *Health Psychology Research*, 9(1). https://pmc.ncbi.nlm.nih.gov/articles/PMC8567774/

Stock, B., & Möckel, L. (2021) Caracterización de donantes de sangre y no donantes de sangre en Alemania mediante una encuesta en línea. *Salud y Tecnología*, 11(3), 595-602. https://doi.org/10.1007/s12553-021-00532-y

Suemnig, A., Konerding, U., Hron, G., Lubenow, N., Alpen, U., Hoffmann, W., Kohlmann, T., & Greinacher, A. (2017). Factores motivacionales para la donación de sangre en donantes primerizos y donantes repetidos: un estudio transversal en Pomerania Occidental. *Transfusion Medicine*, 27(6), 413-420. https://doi.org/10.1111/tme.12450

Torrent-Sellens, J., Salazar-Concha, C., Ficapal-Cusí, P., & Saigí-Rubió, F. (2021). Uso de plataformas digitales para promover la donación de sangre: evidencia motivacional y preliminar de América Latina y España. *Revista Internacional de Investigación Ambiental y Salud Pública*, 18(8), Artículo 4270. https://doi.org/10.3390/ijerph18084270

Weidmann, C., Derstroff, M., Klüter, H., Oesterer, M., & Müller-Steinhardt, M. (2022). Motivación, satisfacción de los donantes de sangre e intención de volver durante la pandemia de COVID-19. *Vox Sanguinis*, 117(4), 488-494. https://doi.org/10.1111/vox.13212

Organización Mundial de la Salud, OMS (2017). *Informe sobre la situación mundial de la seguridad y disponibilidad de la sangre 2016.* https://iris.who.int/bitstream/handle/10665/254987/9789241565431-eng.pdf

Organización Mundial de la Salud, OMS (2022). *Seguridad y disponibilidad de la sangre*. https://www.who.int/news-room/fact-sheets/detail/blood-safety-and-availability

Whyte, S., Chan, H. F., Hammarberg, K., & Torgler, B. (2020). Exploring the impact of terminology differences in blood and organ donor decision making. *PLoS ONE* 15(1): e0227536. https://doi.org/10.1371/journal.pone.0227536

Zucoloto, M. L., & Martinez, E. Z. (2018). Cuestionario de conocimientos sobre donación de sangre (BDKQ-Brasil): análisis de ítems y aplicación en usuarios de atención primaria de salud. *Hematología, Transfusión y Terapia Celular*, 40(4), 368-376. https://doi.org/10.1016/j.htct.2018.03.006