Published in final edited form as:

Transfusion. 2008 April ; 48(4): 742–748. doi:10.1111/j.1537-2995.2007.01600.x.

Blood donor satisfaction and intention of future donation

Dorothy D. Nguyen, Deborah A. DeVita, Nora V. Hirschler, and Edward L. Murphy

Blood Systems Research Institute, the Department of Laboratory Medicine and the Department of Epidemiology/Biostatistics, University of California, and the Blood Centers of the Pacific, San Francisco, California; and Kaiser Permanente, Redwood City, California

Abstract

BACKGROUND—New regulatory requirements for donor eligibility challenge blood centers to recruit and retain enough donors. This study evaluated correlations between overall satisfaction with the donation process and donor demographics and the effect of both on a donor's intent to return.

STUDY DESIGN AND METHODS—An anonymous, self-administered questionnaire was given to donors at multiple sites of one blood center over a 3-week period. First-time and repeat donors were asked questions on demographic characteristics, satisfaction with the current donation process, motivation for current and future donations, and intent to return.

RESULTS—More than 75 percent of donors rated the overall donation process at 9 or 10 on a scale of 10 (mean, 9.19; standard deviation, 1.09), with female, high school-educated, and first-time donors giving higher satisfaction ratings than male, college-educated, and repeat donors, respectively (all $p < 0.001$). Donor satisfaction was correlated with intent to return for another donation ($p = 0.002$). For the current donation, donors rated altruistic motivations most highly. Medical testing was the most highly rated incentive for future donations, followed by frequent donor programs and convenient donation times and locations; preferences varied by demographic subgroup.

CONCLUSIONS—Blood donor satisfaction varies among demographic and donation history subgroups and is positively correlated with the intent to return for future donation. Although the primary motivation among all donors was altruism, incentives to future donation may need to be tailored according to demographic subgroups.

Blood centers are challenged to maintain an adequate blood inventory in the face of increasing blood utilization. A survey of 1735 blood centers (131) and hospitals (1604) in the United States showed that blood collection per thousand US population of donor age (18–65 years) was 85.6 in 2004 compared to 88.0 in 2001. This was a decrease of 2.7 percent from the 2001 rate. The number of whole blood (WB) and red blood cells (RBCs) transfused in 2004 totaled 14,182,000 units, a small but not significant increase over 2001 totals. During this time, blood centers were responsible for the collection of 14,305,000 WB and/or RBC units or 93.6 percent of the supply; hospitals collected 983,000 WB and/or RBC units or 6.4 percent of the total.¹

More complex and advanced therapeutic treatments in the fields of surgery and hematology and oncology have led to increasing blood utilization. For example, according to the OPTN/UNOS Registry, the number of lung and liver transplants has been increasing from 1990 to 2005.^{2,3} In addition, 20,000 hematopoietic stem cell transplants are performed annually in the United States.⁴ This increased demand in the surgical and medical subspecialty arenas spurred the development of better blood collection technology (e.g., automated technology to collect multiple platelet [PLT] units, double RBCs, and plasma-RBCs) in recent years.

Over the past two decades, more complex infectious disease testing and donor deferral and enhanced regulatory scrutiny has distracted blood centers from customer service to detailed documentation of the entire process. In addition to this redirected energy, enhanced market competition and cost cutting may have diverted resources from donor recruitment and retention.⁵ The development of robust recruitment and retention efforts is now more important than ever before. In the past several years blood centers have revisited and refocused their efforts in enhancing recruitment strategies in order to increase the number of new donors while retaining the current donors.

Satisfaction with the blood donation process has been evaluated by others^{6,7} as an important factor in recruitment and retention programs. We are unaware, however, of studies examining blood donor satisfaction and motivation concurrently at the time of donation. To better understand how donors perceive satisfaction with a donation experience and increase understanding of motivational factors, we studied first-time and repeat blood donors with a brief anonymous survey administered during the donation process.

MATERIALS AND METHODS

Study design and population

Over a 3-week period in July 2004, a self-administered survey was given to a convenience sample of 1000 first-time and repeat blood donors at Blood Centers of the Pacific. The surveys were distributed at four fixed blood collection sites in Northern California, as well as to mobile blood drives. The blood center collected 137,754 donations and deferred 22,542 donors in 2004. We distributed surveys among sites in proportion to their mean annual collections. The study protocol was approved by the institutional review board of the University of California San Francisco.

Survey methods

Immediately after donating, first-time and repeat donors were approached by a blood bank volunteer in the canteen area and asked if they would complete a brief, voluntary, and self-administered research survey to rate their satisfaction with the donation process. To preserve anonymity, donors put their completed surveys in a designated envelope before leaving the canteen. Questions on donor motivation were modeled after the Retrovirus Epidemiology Donor Study (REDS) project.⁸ Questions included basic demographics, satisfaction with the current donation process, motivation for the current donation, attractiveness of incentives for future donation, and intent to return. Responses were recorded on 5- and 10-point Likert-type scales. Forms were developed with Teleform software (Cardiff, Vista, CA) to allow automated data entry via scanning of the completed surveys.

Statistical analyses

Frequencies of demographic and blood donation variables were used to describe the study population. Univariate analysis included the generation of descriptive frequencies of variables concerning donor satisfaction, intent to return, and motivation for the current donation and attractiveness of incentives for future donation. The 5- and 10-point rating scales were collapsed to smaller categories where necessary to account for sparse data. Chi-squared tests and Fisher's exact tests were used to assess bivariate associations between demographic and blood donation variables compared to donor satisfaction, intent to return, and motivation. Finally, stratified analyses were used to address potential confounding in the bivariate associations. Associations at the $p < 0.05$ level were considered significant. All statistical analyses were carried out with computer software (SAS Version 8.02, SAS Institute, Cary, NC).

RESULTS

Of the 1000 donors surveyed, 884 forms were returned. After excluding 33 incomplete surveys, a total of 851 surveys were evaluable for the study. Table 1 shows the demographic characteristic of these donors. More than half of the donors were aged 40 or over, and males and females were equally represented. Three-quarters were Caucasian but minorities were well represented, and half had completed a college education. The great majority of subjects were repeat donors and WB donors, with less than 10 percent first-time, plateletpheresis, or autologous donors.

Donors were very satisfied with the overall donation process, as indicated by a mean score of 9.19 (standard deviation [SD], 1.09) with 75 percent giving rankings of 9 or 10 on a scale of 10 (Fig. 1). Donors aged less than 40 years were more satisfied than their older counterparts ($p = 0.04$), although this may have been confounded by the fact that more younger donors were first-time donors. Women were more satisfied than men with the overall donation process ($p < 0.001$). There was no difference in satisfaction between white and nonwhite donors. Donors with a college education were less satisfied with the overall donation process compared to less educated donors ($p < 0.001$). Compared to repeat donors, first-time donors were significantly more satisfied with the overall donation process ($p < 0.001$), and this appeared to account for most of the apparently higher satisfaction in younger donors in stratified analyses.

We also examined satisfaction with each step of the donation process. Mean scores on a scale of 10 were 8.93 (SD, 1.38) for the receptionist, 9.08 (SD, 1.16) for the interviewer, 9.24 (SD, 1.09) for customer service by the phlebotomist, and 9.11 (SD, 1.26) for phlebotomy skills. Similar to findings with the overall donation process, donors less than 40 years old, women, and the less educated were more satisfied with the receptionist, donor interview, and customer service of the collections staff than older, male, and more educated donors, respectively (all $p < 0.05$). Showing a different pattern, phlebotomy skills were rated highly by donors across all demographic subgroups, with the exception that less educated donors ranked phlebotomy skills more highly than more educated donors ($p < 0.01$). There were no racial differences in satisfaction with various steps of the donation process.

Among repeat donors, current satisfaction was correlated with satisfaction at their last donation experience ($p < 0.001$; Fig. 2). Of interest, satisfaction with the current donation tended to be higher than that remembered for the prior donation among these repeat donors.

Among all donors, satisfaction with the current donation process was significantly associated with intent to return for future donation ($p = 0.002$). Intent to return was strongly associated with repeat donors status ($p < 0.0001$), but was not significantly associated with age, sex, race, or education, although there was a trend toward higher intent to return among donors aged 40 years or older ($p = 0.09$) and donors with a college education ($p = 0.09$). When we examined current satisfaction as predicting intent to return in analyses stratified by these other variables, the association was strong and persistent in repeat donors ($p < 0.001$). Owing to small numbers, a nonsignificant trend of satisfaction predicting intent to return was observed among first-time donors ($p = 0.17$), but no difference in the association was seen in other age, sex, race, or education subgroups.

Motivational factors for the current donation were evaluated by the survey with a 5-point Likert scale. In all donors, altruistic motives were rated highly, followed by self-image and health concerns; that is, "Donating is good for my health" (Fig. 3A). In contrast, social pressure, media appeals, reaching a targeted donation amount, and incentives were poorly rated. Older donors rated "Donating blood is a duty" more highly than younger donors ($p < 0.001$) while they rated "I wanted to feel good about myself" marginally less highly than younger donors ($p = 0.07$). Female donors rated the following more highly than males: "I want to help others" ($p = 0.002$)

and “I saw a media appeal” ($p = 0.003$); whereas males rated “Donating is good for my health” more highly ($p = 0.04$). Less educated donors ranked the following motivators more highly than donors with a college education: “I don’t want to disappoint others” ($p < 0.0001$), “Donating is good for my health” ($p < 0.0001$), “I saw a media appeal” ($p = 0.02$), “Receiving a gift or recognition” ($p = 0.04$), and “I wanted to reach a target number of donations” ($p = 0.001$). First-time donors rated: “I don’t want to disappoint others” more highly than repeat donors ($p = 0.02$). Finally, donors at mobile sites ranked the following motivators more highly than donors at fixed sites: “I saw a media appeal” ($p = 0.005$) and “I was asked to donate at work” ($p < 0.001$) while donors at fixed sites ranked the following motivator more highly than donors at mobile sites: “I was asked to donate by the blood center” ($p < 0.001$).

The attractiveness of incentives for future donations was similarly evaluated with a 5-point Likert scale. In contrast with the motivations for current donation, there was much less of a preference gradient among incentives for future donation (Fig. 3B). Among all donors, free medical testing (e.g., PSA and cholesterol testing) was most popular and showed no subgroup preference, followed by a tie between frequent donor program, being asked more often, more convenient locations, and donation times. Better phlebotomy, a shorter donor history form, donor incentives, and being thanked more often were not rated as highly. Younger donors rated the following motivators more highly than older donors: “Being thanked more often” ($p = 0.03$), “Being asked more often” ($p < 0.001$), “Better phlebotomy” ($p < 0.0001$), “Incentives (gifts, rewards, recognition)” ($p < 0.01$), and “More convenient locations” ($p = 0.008$); older donors wanted a “Shorter donor history form” ($p = 0.004$). Nonwhite donors rated the following motivators more highly than white donors: “Being thanked more often” ($p = 0.05$), “Better phlebotomy” ($p = 0.0001$), “Incentives” ($p = 0.05$), and “More convenient locations” ($p = 0.005$). There were no differences in incentives to future donation by education. First-time donors rated “Better phlebotomy” ($p = 0.04$) and “More convenient locations” ($p = 0.005$) more highly than repeat donors. Finally donors at mobile sites wanted “More convenient locations” ($p < 0.0001$) and “More convenient times” ($p = 0.002$).

DISCUSSION

The majority of the respondents surveyed gave high satisfaction ratings of their overall donation experience, although we did note some differences according to age, sex, education, and first-time versus repeat donor subgroups. For all donors, satisfaction with the current donation experience was associated with the intent of future donation. Although altruism was the strongest motivator to blood donation in this population, there were subtle differences in motivational factors for blood donation among the different subgroups surveyed.

Women surveyed in this study reported higher satisfaction levels than men. This could be explained by a strong altruistic orientation in women. Steele and coworkers⁹ found that both men and women were motivated by “empathetic concern” to donate blood, but women scored significantly higher than men in this category. Similarly, Glynn and colleagues⁸ found that women were motivated to donate if they perceived a need and were more likely to be strongly influenced (e.g., by reminders) to donate than men. Moreover, of the donors sampled in their study, women were more likely to respond than men.⁸ Thus, we hypothesize that women in our study gave higher satisfaction ratings on this survey as an extension of their altruistic attitude toward blood donation. Younger donors (16–39 years) in this study gave significantly higher ratings of their experience than donors aged 40 years and older. Similar findings were observed for first-time donors, however, and we suspect the young donor association may have been confounded by their first-time status. First-time donors may give higher satisfaction ratings than repeat donors either because of the novelty of the experience or because minor deficiencies in service or performance are more evident to the more experienced donors.

Donors who attended some college or higher education surveyed in this study were less satisfied with the overall donation process, noting less satisfaction during the interview. Several reasons may account for this lower satisfaction finding. Donors with more education may have a different perception of the value of their time or may be accustomed to higher quality service. This supports the need to hire, train, and retain qualified employees who provide excellent customer service while maintaining quality. Because this study was conducted when our blood center was still using the face-to-face interview, satisfaction levels with the interview may improve with the planned introduction of a computer-assisted donor self-interview,¹⁰ especially in more educated donors. Finally, donors rated phlebotomy skills highly with no difference by age, sex, race, or fixed versus mobile site. Customer service skills of the phlebotomists were rated even higher, important because the interpersonal skills of the phlebotomist have been associated with a reduction in the likelihood of donors experiencing a reaction.¹¹

Of interest, repeat donors' recollection of their prior donation experience was associated with their level of satisfaction for their current donation, suggesting that much variability in donor satisfaction is determined by individual differences in attitude and perception. The curious finding that repeat donors ranked their current donation experience higher than their prior donation may be due to a "fading" of satisfaction over time because there is a lag in the time between their prior donation to the time of the survey. This phenomenon could be measured by studying the same donors' satisfaction ratings over shorter intervals after donation and could suggest hypotheses aimed at boosting satisfaction recall as a donor retention intervention.

Consistent with other studies,^{7,12} this study found that satisfaction with the current donation influenced a donor's intent to return to donate in the future. Because frequent donations contribute to the safety and stability of the blood supply, a positive experience leads to a lasting impression that is important in retaining current donors and converting first-time into repeat donors. Thus, the strategy for growing and keeping a donor base is threefold: getting donors in the door, keeping them happy while they are giving blood, and motivating them to return. We must caution, however, that we measured intent to return rather than actual return. The REDS group has indicated that although the intent to return is a reasonable surrogate for actual return, its predictive capability is low.¹³ The same article indicated that the relationship between actual return and satisfaction with the previous donation may be confounded by other variables.

In keeping with other studies,^{8,14,15} most donors were motivated in their current donation by a desire to help others or the belief that donating blood is a duty. When asked about which interventions would encourage them to donate more frequently in the future, we found medical testing and frequent donor programs to be most popular. This is consistent with other surveys¹⁵⁻¹⁷ where receiving a health screen and the belief that donating blood was a health benefit were distinct motivators.

Our data also suggest the importance of "convenience" expressed especially by younger donors and those at mobile sites. Convenience may surpass altruism as a motivation in the younger generation of blood donors.¹⁸ Schreiber and colleagues¹⁹ found that inconvenient locations were cited as an important reason not to donate, especially by younger donors. Thus, donor recruitment and retention programs need to make donating blood more convenient by increasing mobile collection accessibility or increasing blood collecting hours to capture and retain all donors, especially younger donors, to maintain the nation's blood supply.

In our study, donors with a high school education rated several motivations higher than donors with college education, including: "I don't want to disappoint others," "Donating is good for my health," "I saw a media appeal," "Receiving a gift or recognition," and "I wanted to reach

a target number of donations.” Other studies have found that those with less education are less likely to return to donate than those with more education.^{7,20} Thus, a clearer understanding of the motivations in this group is warranted because this may suggest recruitment interventions or educational campaigns that could be targeted toward these less educated donors.

In our study, nonwhite donors were more likely than white donors to indicate that being thanked more often and better phlebotomy skills would induce them to donate more often. Similar concerns in minority groups have been expressed in the study by Schreiber and associates where poor treatment, poor staff skills, or a “bad experience” have been cited as reasons not to return to donate. Minority donors now comprise an increasing proportion of all donors in the United States, especially among younger donors.²¹ Therefore, blood centers may wish to experiment with more personalized service and locations to attract minority groups and encourage them to return sooner, thus setting the stage for them to become committed donors.

This study has several strengths. For example, in contrast to most retrospective donor evaluation studies,^{12,15,17,19} this study was administered on the day of donation, and was anonymous in nature, perhaps encouraging more honest responses. It had an adequate sample size for repeat and nonminority donors. Finally, it measured both donor satisfaction and motivation concurrently, so we were able to reevaluate known motivators as well as examine the importance of satisfaction on return behavior intention in the same donors.

The survey had some limitations. First, we used a convenience sample and our results could have been affected by sampling bias. Second, we had few minority donors represented in our data; future studies focusing on donor satisfaction and motivation in different racial and ethnic groups are important, as blood centers expand donor recruitment efforts that include groups of diverse race and/or ethnicity. Third, we had few first-time donors in our study; this group deserves further evaluation given a recent report that only 33 percent of donors actually return to donate within 1 year and 50 percent never return within 5 years.²² Finally, we had few apheresis donors, so our survey’s evaluation of satisfaction and motivation may not apply to these donors, who may be distinct in terms of their incentives and motivations for donating blood.^{23,24} Future studies of apheresis donor satisfaction are especially important because many females and transfused individuals will no longer be able to give PLTs or plasma because of transfusion-related acute lung injury (TRALI) deferrals.²⁵

In conclusion, in this time of scarcity of blood donors, this study illustrates that a donor’s sense of satisfaction is immediate but evanescent and may play a critical factor on his or her intent to return for future donations. Better customer service must therefore be included in the development of robust recruitment and retention efforts, as blood centers prepare for the challenge of a decreased donor base in the face of new testing recommendations and requirements for reducing the risk of TRALI and Chagas disease.^{25–28} As new interventions are implemented, additional studies of both donor satisfaction and motivation are needed to assess areas of strengths and weaknesses for ongoing quality improvement.

Acknowledgments

Supported by National Heart, Lung, and Blood Institute Grant K24-HL-75036 and Blood Systems Research Institute.

ABBREVIATIONS

WB whole blood

References

1. Whitaker, B.; Sullivan, M. The 2005 nationwide blood collection and utilization survey report. Bethesda, MD: American Association of Blood Banks; 2005.
2. Cai J, Mao Q, Ozawa M, Terasaki PI. Lung transplantation in the United States: 1990–2005. *Clin Transpl* 2005;19:29–35. [PubMed: 17424723]
3. Qiu J, Ozawa M, Terasaki PI. Liver transplantation in the United States. *Clin Transpl* 2005;19:17–28. [PubMed: 17424722]
4. Weisdorf D, Carter S, Confer D, Ferrara J, Horowitz M. Blood and marrow transplant clinical trials network (BMT CTN): addressing unanswered questions. *Biol Blood Marrow Transplant* 2007;13:257–62. discussion 255–6. [PubMed: 17317578]
5. Simon TL. Where have all the donors gone? A personal reflection on the crisis in America’s volunteer blood program. *Transfusion* 2003;43:273–9. [PubMed: 12559025]
6. Piliavin, JA.; Callero, PL. Giving blood: the development of an altruistic identity. Baltimore (MD): The Johns Hopkins University Press; 1991.
7. Thomson RA, Bethel J, Lo AY, Ownby HE, Nass CC, Williams AE. Retention of “safe” blood donors. The Retrovirus Epidemiology Donor Study. *Transfusion* 1998;38:359–67. [PubMed: 9595018]
8. Glynn SA, Kleinman SH, Schreiber GB, Zuck T, Combs SM, Bethel J, Garratty G, Williams AE. Retrovirus Epidemiology Donor Study. Motivations to donate blood: demographic comparisons. *Transfusion* 2002;42:216–25. [PubMed: 11896338]
9. Steele WR, Schreiber GB, Guiltinan A, Nass C, Glynn SA, Wright DJ, Kessler D, Schlumpf KS, Tu Y, Smith JW, Garratty G. Retrovirus Epidemiology Donor Study. The role of altruistic behavior, empathetic concern, and social responsibility motivation in blood donation behavior. *Transfusion* 2008;48:43–54. [PubMed: 17894795]
10. Katz LM, Cumming PD, Wallace EL. Computer-based blood donor screening: a status report. *Transfus Med Rev* 2007;21:13–25. [PubMed: 17174217]
11. Stewart KR, France CR, Rader AW, Stewart JC. Phlebotomist interpersonal skill predicts a reduction in reactions among volunteer blood donors. *Transfusion* 2006;46:1394–401. [PubMed: 16934077]
12. France JL, France CR, Himawan LK. A path analysis of intention to redonate among experienced blood donors: an extension of the theory of planned behavior. *Transfusion* 2007;47:1006–13. [PubMed: 17524090]
13. Schlumpf K, Glynn S, Schreiber G, Wright DJ, Randolph Steele W, Tu Y, Hermansen S, Higgins MJ, Garratty G, Murphy EL. National Heart, Lung, and Blood Institute Retrovirus Epidemiology Donor Study. Factors influencing donor return. *Transfusion*. 200710.1111/j.1537-2995.2007.01519.x
14. Hupfer ME, Taylor DW, Letwin JA. Understanding Canadian student motivations and beliefs about giving blood. *Transfusion* 2005;45:149–61. [PubMed: 15660822]
15. Glynn SA, Schreiber GB, Murphy EL, Kessler D, Higgins M, Wright DJ, Mathew S, Tu Y, King M, Smith JW. Retrovirus Epidemiology Donor Study. Factors influencing the decision to donate: racial and ethnic comparisons. *Transfusion* 2006;46:980–90. [PubMed: 16734815]
16. Sanchez AM, Ameti DI, Schreiber GB, Thomson RA, Lo A, Bethel J, Williams AE. Retrovirus Epidemiology Donor Study. The potential impact of incentives on future blood donation behavior. *Transfusion* 2001;41:172–8. [PubMed: 11239218]
17. Glynn SA, Williams AE, Nass CC, Bethel J, Kessler D, Scott EP, Fridey J, Kleinman SH, Schreiber GB. Retrovirus Epidemiology Donor Study. Attitudes toward blood donation incentives in the United States: implications for donor recruitment. *Transfusion* 2003;43:7–16. [PubMed: 12519425]
18. Kolins J, Herron R. On bowling alone and donor recruitment: lessons to be learned. *Transfusion* 2003;43:1634–8. [PubMed: 14617325]
19. Schreiber GB, Schlumpf KS, Glynn SA, Wright DJ, Tu Y, King MR, Higgins MJ, Kessler D, Gilcher R, Nass CC, Guiltinan AM. National Heart, Lung, Blood Institute Retrovirus Epidemiology Donor Study. Convenience, the bane of our existence, and other barriers to donating. *Transfusion* 2006;46:545–53. [PubMed: 16584430]
20. Ownby HE, Kong F, Watanabe K, Tu Y, Nass CC. Analysis of donor return behavior. Retrovirus Epidemiology Donor Study. *Transfusion* 1999;39:1128–35. [PubMed: 10532608]

21. Wu Y, Glynn SA, Schreiber GB, Wright DJ, Lo A, Murphy EL, Kleinman SH, Garratty G. Retrovirus Epidemiology Donor Study (REDS) Group. First-time blood donors: demographic trends. *Transfusion* 2001;41:360–4. [PubMed: 11274590]
22. Schreiber GB, Glynn SA, Damesyn MA, Wright DJ, Tu Y, Dodd RY, Murphy EL. Retrovirus Epidemiology Donor Study. Lapsed donors: an untapped resource. *Transfusion* 2003;43:17–24. [PubMed: 12519426]
23. Julius CJ, Sytsma SR. Comparison of demographics and motivations of highly committed whole blood and platelet donors. *J Clin Apher* 1993;8:82–8. [PubMed: 8226710]
24. Trimmel M, Lattacher H, Janda M. Voluntary whole-blood donors, and compensated platelet donors and plasma donors: motivation to donate, altruism and aggression. *Transfus Apher Sci* 2005;33:147–55. [PubMed: 16115800]
25. Strong, D.; Lipton, K. AABB Association Bulletin 06–07. Bethesda: American Association of Blood Banks; 2006 Nov 3. Transfusion-related acute lung injury.
26. Kopko P, Silva M, Shulman I, Kleinman S. AABB survey of transfusion-related acute lung injury policies and practices in the United States. *Transfusion* 2007;47:1679–85. [PubMed: 17725734]
27. Strong, D.; Lipton, K. AABB Association Bulletin 06–08. Bethesda: American Association of Blood Banks; 2006 Dec 14. Information concerning implementation of a Licensed Test for Antibodies to *Trypanosoma cruzi*.
28. CDC. Blood donor screening for chagas disease—United States 2006–2007. *MMWR Morb Mortal Wkly Rep* 2007;56:141–3. [PubMed: 17318113]

Fig. 1. Overall donor satisfaction with the donation experience by demographic subgroups. Satisfaction was rated on a 10-point Likert-type scale; percentages of donors reporting each rating are given.

Fig. 2. Last donation satisfaction predicts satisfaction at current donation among repeat donors ($n = 760$). Satisfaction with the last donation is noted on the y -axis, and satisfaction with today's donation is noted on the x -axis, both on a 10-point scale. Ratings from 1 to 8 have been compressed for both variables.

Fig. 3. Motivational factors for today's donation (A) and attractiveness of recruitment incentives (B). Each motivation or incentive was rated on a 5-point Likert scale.

TABLE 1

Sociodemographic characteristics of participants (n = 851)

Characteristic	Number	Percent
Age (years)		
16–19	36	4
20–29	115	13.5
30–39	150	17.6
40–49	185	21.7
50–59	200	23.5
≥60	159	18.7
Not stated	6	1
Sex		
Women	416	49
Men	428	50
Not stated	7	1
Donation history		
First-time donor	65	8
Repeat donor	774	91
Not stated	12	1
Race		
Caucasian	655	77
African American	23	3
Hispanic/Latino	53	6
Asian/Pacific Islander	73	9
Other	34	4
Not stated	13	1
Education		
Grade school or less	2	0.2
Some high school	17	2
Completed high school	76	9
Some college	322	37.8
Completed college	243	28.6
Graduate school	169	19.8
Not stated	22	2.6
Donation type		
WB	763	90
Plateletpheresis	44	5
Autologous	25	3
Not stated	19	2