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An Adapted Post-Donation Motivational Interview Enhances Blood Donor Retention

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Abstract

Background—Blood donors may hold conflicting thoughts about future donation. While they may perceive the direct benefit to themselves and others, they often report compelling reasons not to give again. As a result the standard encouragements to return may not be sufficient to motivate some donors. The present study examined the effects of a post-donation adapted motivational interview on blood donor attitudes and repeat donation behavior.

Study Design and Methods—Donors (n=215) were randomly assigned to either an adapted motivational interview (AMI) or a no-interview control group. Approximately one month after their index donation, donors in the AMI group completed a brief telephone interview to clarify individual-specific motivations and values concerning blood donation and address potential barriers. They were then asked to complete questionnaires regarding donation attitudes, anxiety, self-efficacy and intention to donate. Donors in the control group were also contacted one month post-donation and asked to complete the same series of questionnaires.

Results—Donors in the AMI group reported greater intention to provide a future donation, $F = 8.13$, $p < 0.05$, more positive donation attitudes, $F = 4.59$, $p < 0.05$, and greater confidence in their ability to avoid adverse reactions, $F = 10.26$, $p < 0.01$. Further, AMI was associated with higher rates of attempted donation at 12 months (OR, 2.48; 95% CI, 1.27–4.87).

Conclusion—Application of an adapted motivational interview may be an effective strategy to increase the donor pool by enhancing retention of existing donors.

Keywords

Blood donation; Motivational interviewing; Donor Retention

Introduction

Several factors have combined to reduce the number of eligible blood donors and place a strain on the current blood supply. These include a greater demand for blood by older adults, as well as the increasing number of medical procedures that require blood products.¹ In addition, new testing methods and donor qualification criteria used to guard against emerging infectious agents such as Creutzfeldt-Jacob disease, babesia, and trypanosomes

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have also reduced the number of eligible donors.² Recent estimates indicate that based on a consideration of all restrictions only 38.7% of the US population is currently eligible to donate blood.²

Most people who have donated blood in the past view donation as something they should be doing, but only a small proportion of these individuals become regular, committed donors. In a recent study by Schreiber and colleagues, not having a convenient place to donate, poor treatment by staff, negative physical reactions, fear, the length of the process and a poor overall experience were all important reasons for not returning to donate.³ In contrast, research investigating factors that encourage blood donation have identified altruism as the primary reason specifically reported by donors for donating blood, along with awareness of need, social pressure, and desire to replace blood used by family or friends.⁴ Others suggest that benevolence, the idea that donating blood is personally rewarding; for example, gaining increased self-esteem or recognition, is another particularly important motivator.⁵ Interestingly, donors who give blood for intrinsic reasons (“it was the right thing to do,” “I heard that blood was needed”) are more likely to continue to donate and develop a blood donor identity role than donors who donate for external reasons such as gifts or rewards.⁴ This observation is especially important because it suggests that efforts to build upon a donor’s intrinsic motivations may be an effective strategy to increase donor commitment.

An established strategy shown to build on intrinsic motivation as a means of promoting change is motivational interviewing (MI). Existing research supports the efficacy of MI as a tool for resolving ambivalence and increasing motivation towards the adoption of a variety of health promoting behaviors, including lifestyle changes to modify diabetes risk, interventions to promote treatment adherence among those with chronic disease (e.g., hypertension, HIV), and adoption of diet and exercise regimens in weight-loss trials.^{6–11} Motivational interviewing is a client-centered counseling style for eliciting behavior change by helping clients to explore and resolve ambivalence which inhibit positive behavior change.¹² The process of motivational interviewing involves helping clients explore reasons for and against change and reflect on how current behaviors prevent the realization of life goals or the fulfillment of core values. As with those who are conflicted about changing personally relevant health behaviors (e.g., drug abuse, smoking, diet/exercise, treatment adherence, etc.), the principles and techniques of MI may help potential blood donors to resolve ambivalence regarding the pro-social health behavior of blood donation and to increase intrinsic motivation.

The present study used a telephone-based adapted motivational interview (AMI) to encourage recent donors to review their donation experience in the context of their wider motivations for giving, and augmented this approach by problem-solving solutions to perceived barriers (e.g., concerns about adverse reactions, inconvenience, lack of time). The phone interview preserved the guiding principles of MI and MI-consistent behaviors by providing an empathic, non-confrontational forum which used reflective listening and empathic responding to 1) validate and understand the donor’s experience; 2) promote and clarify individual-specific motivations; 3) address any existing ambivalence or barriers to donation; 4) highlight the relationship between expressed values and future donation behavior; 5) enhance perceived confidence in the context of blood donation while honoring the donor’s autonomy regarding the decision to donate and; 6) develop a future donation plan.

Recent blood donors were randomly assigned to either a no-interview control or a motivational interview group. Donors in the no-interview control group received a brief telephone call approximately one month after their index donation; during the call they were asked to complete a series of questionnaires available either online or to be returned by

regular mail. Donors assigned to the AMI group completed an approximately 10 minute telephone motivational interview prior to being asked to complete the same series of questionnaires. It was hypothesized that, compared to no-interview controls, participants in the motivational interview group would report greater intentions of providing a repeat donation, more positive attitudes toward donation, less anxiety about donating, and greater self-efficacy related to preventing negative donation reactions. Further, it was anticipated that those assigned to AMI would be more likely to attempt a repeat donation compared to those assigned to the no-interview control group.

Materials and Methods

Participants

A final sample of 215 whole-blood donors (127 women and 88 men) was recruited from blood drives held by Hoxworth Blood Center in Cincinnati, Ohio between September, 2007 and September, 2009. Participants ranged in age from 18 to 67 years (Mean = 31.1; SD = 13.5), and had a history of 0 to 103 past donations (Mean = 7; SD = 14). The motivational interview group consisted of 106 individuals (49 men and 57 women) and the no-interview control group consisted of 109 individuals (39 men and 70 women). The sample consisted of 71.0 % Whites, 24.3 % Blacks, 0.5 % American Indian, 0.5 % Asian, and 3.7 % other ethnicities.

Materials

Donor Characteristics and Demographic Questionnaire—The donor characteristics questionnaire requested basic donor demographics (e.g., name, age, sex, height, weight, race/ethnicity, prior donation history) and contact information.

Intentions Scale—The intention scale³ is a three-item measure of the likelihood that a donor will give blood again within the next “3”, “6”, and “12” months, based on a five-point Likert-type scale with anchors of “Very Unlikely” to “Very Likely”. The sum of the three items yields a total score ranging from 3 to 15 (with higher scores indicating greater intention). In the present study, the intention scale had an internal consistency reliability of $\alpha = .86$. (See Table 1).

Attitude Scale—The attitude scale¹³ is a 5-item measure of how “The idea of donating blood in the next year seem”. Each item is rated on a 7-point Likert-type scale along the following dimensions: “bad versus good”, “unpleasant versus pleasant”, “dissatisfying versus satisfying”, “repulsive versus attractive” and whether the idea of donating blood in the next eight weeks makes them “sad versus happy”. The sum of the five items yields a total score ranging from 5 to 35 (with higher scores indicating more positive attitudes). In the present study, the attitude scale had an internal consistency reliability of $\alpha = .88$. (See Table 1).

State Anxiety Inventory—A 4-item short-form adaptation of the Spielberger State Anxiety Inventory (STAI-Y)¹⁴ was administered (see Table 1). Each item is rated on a 4-point Likert-type scale with anchors of “Not At All” to “Very Much So”. The sum of the four items yields a total score ranging from 4 to 16 (with higher scores indicating greater anxiety). In the present study, the anxiety scale had an internal consistency reliability of $\alpha = .74$.

Blood Donation Related Self-Efficacy Scale—The blood donation related self-efficacy scale¹⁵ is a 9-item measure of participants’ perception that they can engage in behavior that reduces the possibility of negative donation reactions (e.g., faintness,

dizziness, weakness). Items are rated on a 7-point scale with anchors of “Strongly Agree” to “Strongly Disagree”, and total scores ranged from 9 to 63. In the present study, the self-efficacy scale had an internal consistency reliability of $\alpha = .75$. (See Table 1).

Study Design and Treatments

Recruitment and Assignment

A flowchart of the study protocol is provided in Figure 1. Potential participants were recruited in either the pre-donation waiting area or the post-donation canteen. Donors who met the study’s inclusion criteria (i.e. eligible to donate, at least 18 years of age) were invited to participate in the study. Those interested in participating in the study completed an informed consent form, a brief demographic questionnaire (e.g., name, age, sex, height, weight, race/ethnicity, prior donation history), and provided future contact information (i.e. telephone number and mailing address). Of those participants recruited before donation, 37 were deferred at the health screening and therefore could not donate or participate in the study.

Recruited participants were randomly assigned by the principal investigator to either a no-interview control group ($n = 212$) or a motivational interview group ($n = 215$) based on a computer-generated list of random numbers. The intervention was conducted independent of typical Hoxworth Blood Center procedures; hence all participants received usual-care from the blood collection agency in terms of follow-up contact and reminders. Of all recruited participants, 212 did not complete all study components (i.e., 103 participants from the no-interview control group did not complete study questionnaires, 81 participants in the motivational interview group did not complete the motivational interview and 28 participants of the remaining motivational interview group did not complete the study questionnaires). The overall attrition for non-completers was 212 of 427 (49.6%). Examination of demographic variables (e.g., age, sex, height, weight, race, prior donation history) revealed no significant differences between those who completed all study components ($n = 215$) compared to non-completers ($n = 212$) on all variables except number of previous donations. Further analysis revealed that with regard to previous donations 70.1% of non-completers had three or fewer past donations compared to 57.7% of those who completed all study components, $\chi^2(1, N = 412) = 6.87, p = .01$. Thus, relatively novice donors (i.e. three or fewer past donations) were more likely to be non-completers.

Telephone Contact

Multiple telephone calls were made in order to reach participants and find a convenient time to discuss the study questionnaires or conduct the adapted motivational interview. Participants were contacted an average of 23.2 days ($SD = 18.6$) following their index donation. Participants in the no-interview control group received a brief telephone call after their index donation to discuss the study questionnaires and to determine whether they preferred to complete the questionnaires online or by regular surface mail. Those who chose to complete the study questionnaires online were e-mailed instructions containing a link to the study website and a unique identification code to permit access to the secure website. Those who chose to complete the study questionnaires by regular surface mail were sent an instructional letter and the study questionnaires accompanied by a pre-paid return envelope. The telephone call to participants in the motivational interview group consisted of a brief motivational interview and then a brief discussion about the study questionnaires, ($\bar{x} = 8$ minutes and 42 seconds; $SD = 2$ minutes and 28 seconds). As with the control group, participants were given the option to complete the questionnaires either online or via regular surface mail. Upon receipt of the completed questionnaires, all participants were mailed \$10 in appreciation of their participation.

The Motivational Interview Intervention

The motivational interviews were conducted by the first author (K.S.S.), a clinical psychology graduate student trained in motivational interviewing. Treatment integrity was ensured by regular supervision and a detailed review of the first 25 motivational interviews by a doctoral level clinical psychologist. This intervention was manualized and followed a prepared script that posed open-ended questions and offered reflective responses, affirmations and summaries in order to identify (a) specific motivation for donating, (b) any ambivalence the participant felt about donating, and (c) any barriers or concerns the participant experienced that may prevent future donation. The intervention was divided into several sections: 1) introduction and permission to interview; 2) identifying initial motivations (both intrinsic and extrinsic); 3) identifying concerns about future donation and problem-solving for solutions; 4) identifying barriers to donation and problem-solving for solutions; 5) completing scales to identify level of importance and confidence concerning donating; 6) identifying how donating blood fits in with the donor's personal goals and values; 7) constructing a donation plan and 8) summarizing the session.

The procedures used in the study were reviewed and approved by the Institutional Review Boards of Ohio University and the University of Cincinnati.

Assessment of Repeat Donation

To determine whether each donor returned to provide a subsequent donation, Hoxworth Blood Center staff used Safe-Trace software to determine specific dates of subsequent donation attempted by each blood donor at 3-month intervals from the index donation. Repeat donation attempts were examined for all participants who had been in the study for at least 3 (n = 215), 6 (n = 215), 9 (n = 215) and 12-months (n = 154) since the index donation. Thus, data was obtained on whether a donor attempted a repeat donation (yes/no) and the total number of attempted donations over a 12-month period.

Statistical Analysis

Statistical analyses were performed using SPSS software, Version 16.0 (SPSS Inc., IL, USA). Chi-square analyses were conducted to examine differences between the motivational interview and the no-interview control groups on all categorical demographic measures including sex, prior donation history, education, income, marital status and employment. Independent samples t-tests were used to examine group differences in age and weight. The primary analyses consisted of a series of 2 Group (control, motivational interview) \times 2 Sex (female \times male) Analyses of Variance (ANOVA) to compare the effect of the motivational interview and donor sex on donation intention, attitude, anxiety and self-efficacy scores. Chi-square analyses were conducted to compare the proportion of donors in each group who attempted a donation within 3-, 6-, 9-, and 12- months from their index donation. Specifically, analyses conducted at each interval compared the proportion of all participants in each group who returned up until that time point. If a donor returned within the first three months, then they are represented as "returned" within each of the subsequent intervals. The total number of repeat donations within the subsequent year was also examined using ANOVA. Finally, correlation analyses were used to examine the association between donor intention, attitude, anxiety, self-efficacy and actual repeat donation. All hypothesized differences were considered statistically significant for p-values less than 0.05, one-tailed.

Results

Demographic Comparison

As displayed in Table 2, there were no significant differences between the motivational interview and the no-interview control groups on sex, past donations, race, education,

marital status and age. However, significant group differences were observed for income, χ^2 (5, N = 213) = 15.24, $p = 0.01$ and employment, χ^2 (4, N = 194) = 5.99, $p = 0.01$. Follow-up analyses revealed that, compared to those assigned to the no-interview control group, the motivational interview group included a greater proportion of students and individuals earning less than \$20,000 per year. It should be noted that when the following analyses examining donation intention, attitudes, anxiety and self efficacy were repeated including employment status as a covariate the pattern of results did not change.

Donation Intention, Attitude, Anxiety and Self-efficacy

Results of the 2 Group \times 2 Sex analyses revealed that those who received the motivational interview reported greater intentions to donate in the future, more positive attitudes towards donation, and greater self-efficacy for preventing negative donation reactions (all $p < 0.05$; Table 3). Donor anxiety was marginally lower ($p=0.07$) in the motivational interview group compared to no-interview controls. The specific means and standard deviations of intention, attitude, anxiety and self-efficacy for the no-interview control and motivational interview groups are provided in Table 4. There were no other significant main or interaction effects observed.

Repeat Donation

Chi-square analyses of repeat donation attempts revealed no significant differences between the groups in rate of new donation attempts at 3 or 6 months. However, as can be seen in Figure 2, marginally higher rates of repeat donation attempts were observed in the motivational interview group versus the no-interview control group at 9 months (OR, 1.60; 95% CI, 0.93–2.78) and significantly higher rates of repeat donation attempts at 12 months (OR, 2.48; 95% CI, 1.27–4.87).

Although the 12-month return rate was significantly higher for the motivational interview group versus the no interview controls, the difference in the mean number of returns between the motivational interview group (Mean = 1.33, SEM = 0.14; Range = 0–6) and the no-interview controls (Mean = 0.98, SEM = 0.12; Range = 0–6) was marginal ($p=0.06$). Figure 3 illustrates the proportion of donors in each group who returned 0, 1, 2, or 3 or more times in the 12-month follow-up interval.

Correlation between Intention, Attitude, Anxiety, Self-Efficacy and Repeat Donation

Correlation analyses were conducted to examine the relationships between the study variables (intention, attitude, anxiety, self-efficacy) and repeat donation. Results revealed that only intention to provide a future donation was significantly associated with donor return behavior, r (215) = .19, $p = .01$.

Discussion

The results of the present study demonstrate that an adapted motivational interview (AMI) is associated with greater intention to provide a future blood donation, more positive donation attitudes, and greater self-efficacy (i.e., confidence) in the ability to prevent adverse donation reactions. Moreover, AMI appears to promote repeat donations as indicated by the larger proportion of attempted donations at 12 month follow-up among those who received the motivational interview intervention compared to those in the no-interview control group.^a

^aAdditional Chi-square analyses revealed that those who failed to complete the study (i.e., 184 participants who did not complete the AMI or study questionnaires) had repeat donation attempt rates that were not significantly different from the no-interview group. This suggests that the observed effect of the AMI on donor retention was not a product of unusually low return rates in the control group.

In the current study, three main concerns were raised during the motivational interview regarding barriers to providing a repeat donation. These included fear of re-experiencing a negative donation reaction (57%), difficulty finding a vein (23%) and concerns about the safety of the blood donation process (9%). Additional concerns or obstacles also addressed throughout the motivational interview included fear of pain, difficulty finding time to donate, and the likelihood of deferral. In line with these concerns and barriers to repeat donation, common elements of the AMI involved providing education and problem-solving strategies to address: 1) specific ways that donors may decrease the likelihood of having a negative physical donation reaction (e.g., pre-donation hydration), 2) anxiety regarding difficulties locating a suitable vein for donation (e.g., requesting an experienced phlebotomist), and 3) concerns about the overall safety of blood donation. In addition to addressing potential barriers to donation, another potential contributor to the beneficial effects of motivational interviewing involved reframing the behavior of donating blood within the context of the donor's personal goals and values. For example, donors who did not express clear motivations for donating were able to examine how blood donation fit within their specific values or life goals. These reported values included helping those in need, continuing a family tradition, supporting organizations within their community, doing something to improve the life of someone else, or wanting to feel like a worthwhile member of society. In this manner donors are able to recognize how donating blood is consistent with what matters most to them and are thus presented with a powerful motivator to donate again.

While the aforementioned areas of focus may be critical elements in accounting for the observed effects of motivational interviewing, it must be noted that individual intervention components were not specifically evaluated. Therefore, given the encouraging results from the present study, future studies should consider using dismantling strategies to identify active ingredients or necessary components for changes in donor attitudes and behavior.

Although motivational interviewing has been extensively used with addictive behaviors, including smoking¹⁶ and drug use¹⁷, as well as in the treatment of other health problems such as diabetes,^{7, 11} the current study is the first to extend the application of motivational interviewing to an altruistic behavior. Accordingly, the success of motivational interviewing in this context presents a new framework from which future researchers may apply this technique to similar behaviors (e.g., organ donation). Of note, the observed effect sizes in the current study indicate that the proportion of variance in intention, attitudes, anxiety, and self-efficacy accounted for by AMI were small; between 2% and 5%. However, converted to Cohen's *d*, the differences between the motivational interview and no-interview control group ranged from 0.27–0.43, which is within the range of similar studies comparing motivational interviewing to no-treatment.^{18–21} Further, despite these small effect sizes, in the context of blood donation even a small enhancement of donation related intentions, attitudes and self-efficacy may have important effects on retention. For example, the 22% higher return rate associated with the AMI versus the no-interview group at 12 months would represent a meaningful increase in blood collections if applied to the entire donor population. Specifically, given an estimated one year repeat donation rate of 62%,²² a 22% increase in the annual return rates of nearly 10 million US donors²³ would represent a gain of 2.2 million additional units of blood. While it may not be feasible to provide AMI on this scale, the effects of AMI on donor retention suggest that this intervention should be considered at least as a focused intervention for those at greater risk of non-return such as first time donors and those who experience a negative donation reaction. Although implementation of AMI would require additional training of donor recruitment staff, previous studies have demonstrated that this technique can be manualized and competently applied by non-specialists who have received 2–31 hours of training.²⁴ We believe that the additional investment of time and energy is justified by the fact that AMI will complement

existing strategies to increase retention by providing a medium for donors to resolve ambivalence, perceived barriers and concerns.

Whereas the present findings provide additional support for the efficacy of AMI, and specific support for its application as a new strategy to enhance blood donor retention, certain study limitations must be noted. First, while the present study did include a no-interview control group it was not equivalent to the AMI group in terms of the length of donor attention. Future studies might use a control interview that is of similar length to the AMI to distinguish between the specific effects of the motivational interview versus the potential effect of additional attention. An additional limitation is the use of a post-test design to assess intention, attitudes, and self-efficacy. Future studies would benefit from a pre/post design examining study variables at baseline and following application of the intervention to more clearly discern the effect of the intervention. Despite these limitations, particular strengths of the current study included manualization of the AMI, use of a community sample including a significant number of minority participants, and an objective assessment of repeat donations based on donor database records.

In conclusion, AMI is associated with greater intention to provide a future donation, more positive attitudes toward donating blood, and greater confidence in the donor's perceived ability to prevent adverse reactions. Most importantly, AMI increased the likelihood of providing a repeat donation within the subsequent year. These findings suggest that motivational interviewing is an effective strategy to increase donor retention and widespread application may have a significant impact on the donor pool.

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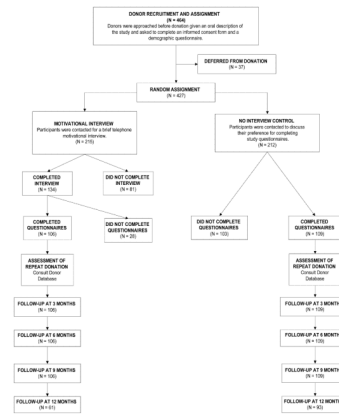


Figure 1.
Overview of Recruitment and Assignment Procedure

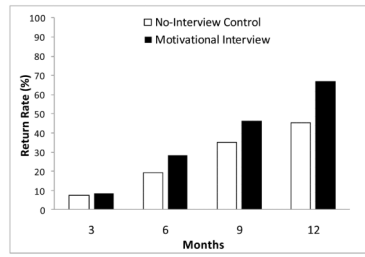


Figure 2.
Percent Return Rates for No-interview Control and Motivational Interview Groups.

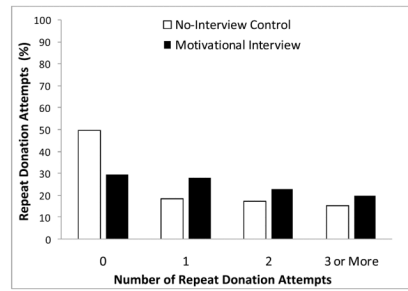


Figure 3.
Repeat Donation Attempts for No-interview Control and Motivational Interview Groups.

Table 1**Scales and Internal Consistency Reliabilities**

<i>Intention Scale:</i> Below are a number of questions related to your intentions about donating blood. Please read each statement carefully and indicate where you fall on the 5-point scale.		
1. How likely is it that you will give blood again in the next 12 months?	Very unlikely/likely	$\alpha = .86$
2. How likely is it that you will give blood again in the next 6 months?		
3. How likely is it that you will give blood again in the next 3 months?		
<i>Attitude Scale:</i> Below are a number of statements related to your current feelings and thoughts about blood donation. Please read each statement carefully and indicate where you fall on the 7-point scale.		
1. The idea of donating blood in the next year seems:	Bad/Good Unpleasant/Pleasant Dissatisfying/Satisfying Sad/Happy Attractive/Repulsive	$\alpha = .88$
<i>Anxiety Scale:</i> Read the statements below and circle the number that corresponds with how you feel right now about donating blood based on the 4-point scale.		
1. I feel calm	Not at all/	$\alpha = .74$
2. I am tense	Somewhat/	
3. I feel upset	Moderately so/	
4. I feel content	Very much so	
<i>Self-Efficacy Scale:</i> Below are a number of statements related to your current feelings and thoughts about blood donation. Please read each statement carefully and indicate where you fall on the 7-point scale.		
1. I feel confident that I can do things to keep from having a bad blood donation experience.	Strongly disagree/Moderately disagree/Slightly disagree/Neither disagree or agree/Slightly agree/Moderately agree/Strongly agree	$\alpha = .75$
2. Nothing I can do will change my donation experience.		
3. I am able to reduce the intensity of a negative reaction such as faintness, dizziness, weakness, lightheadedness or nausea.		
4. There are things I can do to reduce any uncomfortable blood donation reaction.		
5. Once I am donating blood, there is nothing I can do to affect my reaction.		
6. If I do certain things before donating blood, I can increase the chances of having a positive experience.		
7. I can prevent negative reactions by changing the things that I do.		
8. I can do things to control how much I am affected by negative reactions to donation.		
9. I cannot control the way I react to donating blood.		

Table 2

Demographic Characteristics of the Sample

	All (n=215)	Control (n=109)	Motivation (n=106)
Sex			
Female	59.1%	64.2%	53.8%
Male	40.9%	35.8%	46.2%
Past Donations			
0	19.2%	21.9%	16.5%
1	21.2%	20.0%	22.3%
2	9.1%	7.6%	10.7%
3+	50.5%	50.5%	50.5%
Race			
Black	24.3%	23.9%	24.8%
American Indian/Alaska Native	0.5%	0.9%	0.0%
Asian American	0.5%	0.9%	0.0%
White	71.0%	71.6%	70.5%
Native Hawaiian/Pacific Islander	0.0%	0.0%	0.0%
Other	3.7%	2.8%	4.8%
Education			
9–12 grade, No Diploma	0.9%	0.0%	1.9%
HS Diploma/GED	18.3%	15.0%	21.7%
College, No Degree	44.1%	42.1%	46.2%
Graduate Degree	36.6%	43.0%	30.2%
Income			
\$0-\$20,000	44.6%	*35.5%	*53.8%
↑\$20,001–\$40,000	24.9%	29.9%	19.8%
\$40,001–\$60,000	14.1%	19.6%	8.5%
\$60,001–\$80,000	9.9%	7.5%	12.3%
\$80,001–\$100,000	3.8%	2.8%	4.7%
Over \$100,000	2.8%	4.7%	0.9%
Marital Status			
Previously or Still Married	41.3%	45.8%	36.8%
Never married	58.7%	54.2%	63.2%
Employment			
Working	62.4%	*70.7%	53.7%
Student	37.6%	27.3%	*46.3%
Mean Age (SD)	31.1 (13.5)	32.7 (13.8)	29.5 (13.0)

* p< .05

Table 3
 Result of 2 Group \times 2 Sex ANOVAs Evaluating Intention, Attitude, Anxiety and Self-efficacy.

Variables	Factor	F	df	p	η_p^2
Intention	Group	8.13	1, 211	.01	.04
	Sex	0.18		.67	.00
Attitude	<i>Group \times Sex</i>	2.28		.13	.01
	Group	4.59	1, 211	.03	.02
Anxiety	Sex	0.19		.67	.00
	<i>Group \times Sex</i>	1.30		.26	.01
Self-Efficacy	<i>Group</i>	3.37	1, 211	.07	.02
	Sex	0.46		.50	.00
Self-Efficacy	<i>Group \times Sex</i>	0.77		.38	.00
	Group	10.26	1, 211	.00	.05
Self-Efficacy	Sex	0.02		.89	.00
	<i>Group \times Sex</i>	1.37		.24	.01

Table 4

Means (SD) for Donation Intention, Attitude, Anxiety and Self-efficacy in Each Group

	Range of Scores	No-interview Control	Motivational Interview
Intention	3–15	11.1 (3.7)	12.5 (3.0)
Attitude	5–35	29.8 (5.3)	31.1 (4.4)
Anxiety	6–36	5.9 (2.5)	5.3 (1.6)
Self-Efficacy	9–63	46.2 (8.0)	49.7 (8.3)