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Identity and Personality Influences on Donating Money, Time, and Blood

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Abstract

Building on previous research that examined role identity in relation to volunteering, this study explored the impact of identity and personality for three giving behaviors: donating money, volunteering time, and donating blood. This study examined the contribution of general identity as a helpful person, role identity specific to each behavior, and personality traits of conscientiousness and agreeableness within the decision-making framework of the theory of planned behavior (TPB). Participants ($N = 203$) completed a questionnaire measuring role identity (general and behavior-specific), conscientiousness and agreeableness, and the TPB constructs of attitude, subjective norm, perceived behavioral control, and intention to donate. Three months later, participants reported whether they had engaged in each behavior. The results demonstrated that identity as a donor (i.e., specifically of money, time, or as a blood donor) emerged as more important in determining people's giving actions than general role identity as a helpful person or global personality characteristics.

Identity and Personality Influences on Donating Money, Time, and Blood

Many vital services provided to the population to enhance quality of life or save lives rely on an individual's good will and generosity. However, there is a consistent shortage in supply of these valuable resources. Up to 30% of Australians need a blood transfusion at some point in their lives, yet only 3% of eligible donors give blood (Australian Red Cross Blood Service, 2012). In the World Giving Index, the Charities Aid Foundation (2013) reported that only 34% of Australian adults volunteered their time to community organizations and charities. Further, although 67% of Australians report donating money to charitable organizations, the rates of giving among Australians are considerably lower compared to other developed nations (Charities Aid Foundation, 2013). It is, therefore, essential to continue to improve understanding of the factors that motivate individual choices to engage in donation behaviors. This article explores the contribution of identity factors in planned and reported donation for three giving behaviors: donating money, volunteering time, and donating blood.

Self (Role) Identity

According to identity theory (Stryker, 1987), people have distinct components of self for each of the role positions they occupy in society. For example, a person's role identities may include the fact that she is a mother, a wife, a daughter, a social worker, or a blood donor. The self is conceived of as being a collection of identities that reflects the roles that a person occupies in the social structure. A role identity can be defined as a set of behavioral tendencies with engagement in identity-congruent behaviors serving to confirm and validate a person's status as a role member (Hogg, Terry, & White, 1995).

A number of studies (Batson et al., 1986; Carlo et al., 2005; Penner & Finkelstein, 1998; Romer et al., 1986; Omoto & Snyder, 1995) have demonstrated that identity as an altruistic or helpful person in general (or similar concepts such as self-endorsement of

altruistic values) is particularly salient to individuals who choose to engage in giving behaviors. Increasingly, however, rather than exploring whether the general self-concept as a helpful person precedes donation, studies have instead focused on the contribution of more specific role identities (e.g., as a person who donates blood or volunteers their time) to the decision to engage in each particular giving behavior (blood donation or volunteering). There is growing evidence that the strength of the individual's role identity for particular giving behaviors predicts the donation of blood, time, and money (Finkelstein, Penner & Branick, 2005; Hyde, Knowles, & White, 2013; Lee, Piliavin, & Call, 1999; Masser et al, 2009; Piliavin & Callero, 1991).

For instance, Grube and Pilliavin (2000) explored the role identity of volunteers at the American Cancer Society and examined whether role identity as a volunteer was predictive of number of hours volunteered and years of volunteer service within the organization. They found that role identity as a volunteer of time was the best predictor of time given to the organization and intent to leave. They also found that specific role identity as a volunteer with this organization was predictive of hours donated to other charities; those who were most strongly identified with the American Cancer Society volunteered fewer hours to other organizations.

Further, there is evidence to suggest that self-identity adds significantly to the prediction of intentions within decision-making models, such as Ajzen's (1991) theory of planned behavior (TPB) and its predecessor, Fishbein and Ajzen's (1975) theory of reasoned action (e.g., Armitage & Conner, 2001b; Charng, Piliavin, & Callero, 1988; Giles et al., 2004; Hyde et al., 2013; Terry, Hogg, & White, 1999), accounting on average for an additional 1% of the variance in intentions over and above the standard TPB predictors (Conner & Armitage, 1998). For instance, Armitage and Conner (2001b) found that self-identity (as a blood donor) explained an additional 8% of the variance in

intentions to donate blood, over and above the other TPB variables. More recently,

McMahon and Byrne (2008) found that an extended TPB accounted for 51% of the

variance in intention to donate, with the degree to which an individual identified that

being a blood donor was important to his or her self-concept significantly adding to the

prediction of intentions. Overall, the research examining role identity suggests that

potentially both the general role identity as a helpful or giving person and more

behaviorally-specific identity as a blood donor, volunteer, or charitable donor may be

relevant to understanding people's giving behaviors.

Personality

An alternative way to conceptualise the impact of individual differences on giving

behavior is personality theory. Personality characteristics represent more stable and

enduring characteristics or qualities of self (McCrae & John, 1992) and may be more

predictive of behavior than social cognitive predictors that can change over time.

Research undertaken by Penner and Finkelstein (1998) examined the prosocial

personality in predicting volunteer behavior. Their measure of prosocial personality

incorporated both other-oriented empathy (the degree to which a person experiences

empathy for and responsibility to promote the wellbeing of others) and helpfulness (the

tendency to engage in prosocial and helpful actions). They identified that other-oriented

empathy predicted time spent volunteering 5 months later. Although a significant

relationship was found, the correlation was quite small. The researchers suggested that

this finding may be a result of restriction of range in the sample, with a large proportion

of participants identifying as volunteers and endorsing other-oriented empathy to a high

degree.

Using the five-factor model of personality (McCrae & John, 1992), a number of

researchers (e.g. Carlo et al., 2005; Claxton-Oldfield & Banzan, 2010; Omoto, Snyder, &

Hackett, 2010; Paterson, Reniers, & Vollm, 2009) have explored the role of personality as a predictor of the decision to perform giving behaviors. Both conscientiousness and agreeableness have been identified as particularly relevant to giving behaviors. Those people reporting greater levels of conscientiousness and agreeableness are more likely to volunteer time (Carlo et al., 2005; Claxton-Oldfield & Banzan, 2010). Conscientiousness is characterised by competence, order, achievement striving, self-discipline and deliberation (Costa, McCrae, & Dye, 1991; McCrae & John, 1992). Agreeableness reflects individual differences in cooperation, generosity, warmth, and willingness to compromise in favor of social harmony (Costa et al., 1991; McCrae & John, 1992). In earlier research, Penner et al. (1995) demonstrated that other-oriented empathy is moderately correlated with agreeableness.

Although studies have demonstrated that both personality and identity variables are important to understanding giving behaviors, further research is needed to understand how these variables operate to predict intentions and actual giving behaviors. This paper builds on the work of Grube and Piliavin (2000) to further examine the contribution of role identity to planned and reported donation of money, time, and blood. Distinct from Grube and Piliavin's (2000) work, this study explores the influence of identity and personality on intentions and behaviors of university students as young persons who have great potential to give but may not necessarily engage in giving behaviors (ABS, 2007; Gage & Thapa, 2012). Younger people are considered as optimal blood donors given their generally good health and likelihood of a prolonged donation career (Lemmens et al., 2005); as a population in which to encourage life-long charitable giving practices (Hart et al., 2002; Metz, McLellan & Youniss, 2003); and as a potential group who are under-researched and have the potential to fulfil charitable organizations' volunteer initiation and maintenance objectives (Francis, 2011; Gage & Thapa, 2012). Given the

focus in this study is on planned behavior, the theory of planned behavior was employed

as a framework in which to examine the relative contributions of identity and personality

variables.

The Theory of Planned Behavior (TPB)

The theory of planned behavior (Ajzen, 1991) is a well-validated decision-making

model examining people's attitudes, intentions, and behaviors. The model proposes that

intention to perform a behavior is the most proximal determinant of behavior. Intention is

predicted by three constructs: attitudes (positive/negative evaluations about performing

the behavior), subjective norm (perceived pressure from important others to perform the

behavior) and perceived behavioral control (PBC; perceived control over performing the

behavior; also directly predicting behavior). A meta-analysis (Armitage & Conner,

2001a) demonstrated that the TPB predictors accounted for 39% of variance in intention

and 27% of variance in behavior.

The TPB has been applied to giving behaviors, including blood donation (Giles &

Cairns, 1995; Godin et al., 2005; Masser, et al., 2012; Masser et al., 2009), volunteering

time (Hyde & Knowles, 2013; Warburton & Terry, 2000), and donating money

(Knowles, Hyde, & White, 2012; Smith & McSweeney, 2007). Despite its success in

predicting both intentions and behavior, researchers have proposed revisions to include

variables that may increase the model's predictive ability (Conner & Armitage, 1998). A

number of the proposed additions to the model focus on self perceptions that relate to

enduring qualities or characteristics that people ascribe to themselves that may impact on

behavioral decision-making. These additional variables have become particularly

relevant to giving behaviors, where researchers hypothesise that personality traits (i.e.,

enduring emotional, interpersonal, experiential, attitudinal, and motivational styles;

McCrae & John, 1992) and self-identity (i.e., the extent to which performing a particular

role behavior is an important component of an individual's self-concept; Hogg, Terry, &

White, 1995; Stryker, 1987) may be important in shaping the decisions to engage in

giving behaviors. Especially as these behaviors often require individuals to overcome

significant barriers to performance (e.g., convenience, effort or time commitment, fear or

anxiety; Armitage & Conner, 2001b; Warburton & Terry, 2000), more stable aspects of

self, such as self-identity, may be relevant to strengthen intentions and help sustain

behavior over time (Ferguson, 2004).

It should be noted that the standard TPB has received much criticism, especially

recently, with suggestions that the model is not useful to inform behavior change

interventions, that the validity of the model's propositions is in question, and that the

model is only partially complete in its representation of belief initiation through to

behavioral enactment and, thus, unable to explain all of the processes of people's

decision-making adequately (e.g., Sniehotta, Presseau, & Araujo-Soares, 2014).

Researchers have criticised the model for ignoring determinants such as unconscious

influences (Sheeran, Gollwitzer & Bargh, 2013) and people's emotions (Conner et al.,

2013). Despite its noted limitations, however, an advantage of employing the standard

TPB in this context is its parsimony given the primary focus of the present study in

examining the influence of identity and personality constructs on altruistic decision-

making, and the openness of the model to including additional variables as long as they

increase the explained variance over and above the standard TPB constructs and make

theoretical sense (Ajzen, 1991). This approach allows a straightforward assessment of

relevant identity and personality variables within a broader decision-making context.

Further, employing the TPB as the basic framework enables comparisons of the results of

this research with numerous prior studies adopting a TPB approach to understanding

giving behaviors.

The Present Research

This study contributes to our understanding of people's giving decisions by examining the impact of both role identity (specific and general) and personality variables (for giving behaviors, the two most relevant factors of agreeableness and conscientiousness) for a number of key giving intentions and behaviors (volunteering, donating money, and donating blood). To date, previous research has examined role/self identity for giving behaviors (e.g., Armitage & Conner, 2001b; Hyde, Knowles, & White, 2013; Masser et al, 2009, 2012; McMahon & Byrne, 2008) but has not investigated the relative contribution of both a specific and a more general concept of role identity (i.e., general role as an altruistic person as opposed to behavior-specific role identity such as "blood donor"). To the best of our knowledge, nor has previous research directly compared the influence of role identity to that of personality factors relevant to giving behaviors, despite the ongoing inclusion of personality factors in examinations of people's giving (e.g., Claxton-Oldfield & Banzan, 2010; Claxton-Oldfield, Claxton-Oldfield, & Paulovic, 2013; Omoto et al., 2010; Paterson et al., 2009). Therefore, this study aims to contribute to the field by adopting a comprehensive examination of different conceptualisations of the self-concept in the context of giving behaviors within a single study guided by an extended TPB framework. In doing so, a direct comparison of the influence of specific and general role identities and personality characteristics, that are usually separately employed, can be undertaken to better understand the determinants of people's decisions to donate money, time, and blood.

In the present study, specific role identity as a donor of money, time, or blood was expected to predict intention to donate money, volunteer time, or donate blood, respectively. General role identity as a helpful person was expected to predict intention to donate money, volunteer time, and donate blood. Personality factors of agreeableness and

conscientiousness were expected to predict intentions to donate money, volunteer time, and donate blood. In accordance with the TPB (Ajzen, 1991), it was expected that intention to donate money, volunteer time, and donate blood would be predicted by attitudes, subjective norm, and PBC and intention and PBC were expected to predict self-reported donation behavior at follow-up.

Method

Participants and Design

Ethical clearance was obtained from the University's Human Research Ethics Committee. The study employed a prospective design with two points of data collection. Students (N = 203) enrolled in an undergraduate psychology subject (from a range of degree courses such as health, business, science, and law) at a major Australian university served as participants. At time one, participants completed a hardcopy questionnaire assessing TPB variables and specific self-identity measures as they related to donating money, donating blood, and volunteering time in the next 3 months, as well as a general measure of self-identity and personality factors of conscientiousness and agreeableness. Most students received partial course credit and entry into a prize draw to win one of four AUD$50 music gift cards in appreciation of their participation. Three months later, participants were invited to complete a follow-up questionnaire to report their giving behaviors for the preceding 3-month period. A 3-month time period was chosen due to the constraints of the University's course credit system which limits student participation within one semester and precludes a follow-up time beyond 3 months. In addition, it was believed that a 3-month time period would facilitate more accurate recall of the behaviors performed and was consistent with the requirement for Australian blood donors to wait 3 months before their next donation.

At Time 1, the sample comprised 48 (24%) males and 155 (76%) females. The mean age of participants was 21.63 years ($SD = 7.54$; range = 17- 65 years). The majority of participants (74.6%) identified as Caucasian. Most (86.41%) participants responded as having a religion. Students were given the option at Time 1 to provide their contact details on a separate sheet of paper if they consented to be emailed 3 months later for the Time 2 follow-up survey assessing their behavior with surveys linked by unique code identifiers. At Time 2, data were gathered for 51% of the original sample, comprising 22 (27.16%) males and 81 (78.64%) females who agreed to be/could be recontacted. Checks were conducted to determine if the responses of those who completed the surveys at both time points differed from the responses of those who only completed the Time 1 survey. Three one-way MANOVAs were conducted on the extended TPB variables (i.e., intention, attitude, subjective norm, PBC, specific role identity) for the three giving behaviors, as well as an additional MANOVA for the three constructs that were constant across the different giving behaviors (i.e., general role identity, conscientiousness, agreeableness). Non-significant effects were found for the three giving behaviors of donating money, $\lambda = .98$, $F(5, 195) = 1.01$, $p = .412$, partial $\eta^2 = .03$; volunteering time, $\lambda = .99$, $F(5, 188) = .34$, $p = .887$, partial $\eta^2 = .01$; and donating blood, $\lambda = .96$, $F(5, 185) = 1.41$, $p = .221$, partial $\eta^2 = .04$. A significant multivariate effect for the three constructs constant across the giving behaviors was found, $\lambda = .94$, $F(3, 198) = 4.22$, $p = .006$, partial $\eta^2 = .06$, with the only significant univariate difference that participants who completed the surveys at both time points scored higher on conscientiousness ($M = 3.71$, $SD = .50$) than those who completed the survey at Time 1 only ($M = 3.47$, $SD = .49$).

Time 1 Measures

The three target giving behaviors were: (1) donating money to a charity or non-profit organization in the next 3 months, (2) volunteering time for the benefit of others, that is, to a charity/charitable organization or non-profit organization in the next 3 months and, (3) donating blood in the next 3 months. The questionnaire included items assessing standard TPB predictors constructed in line with recommendations (Ajzen 1991), as well as measures of self-identity and personality. TPB items were assessed at the same level of specificity in terms of target, action, context, and time to maximise congruence (Fishbein & Ajzen, 1975). All TPB items were scored on 7-point Likert scales from 1 (*strongly disagree*) to 7 (*strongly agree*) unless specified otherwise and 5-point Likert scales (1 (*strongly disagree*) to 5 (*strongly agree*) were used for the personality traits of conscientiousness and agreeableness. Some reversed items were included to reduce response bias (items subsequently recoded so scale items were in the same (positive) direction).

Intention. Two items assessed intention for each behavior: "I intend to volunteer my time for a charity/non-profit organization (donate blood/money) in the next 3 months" and "It is likely that I will volunteer my time for a charity/non-profit organization (donate blood/money) in the next 3 months". Bivariate correlations between the two items were r (202) $= .85, p < .001$ (money), r (196) $= .85, p < .001$ (time), and r (196) $= .86, p < .001$ (blood).

Attitude. Attitude was assessed with four items for each behavior using 7-point semantic differential scales: "For me, to volunteer my time for a charity/non-profit organization (donate blood/money) in the next 3 months would be: *good to bad; worthless to favorable; negative to positive; favorable to unfavorable*". All scales were reliable (αs = .93, .94, and .91 for money, time, and blood).

Subjective norm. Two items assessed subjective norm for each behavior: "Most people who are important to me would approve of me volunteering my time for a charity/non-profit organization (donating blood/money) in the next 3 months" and "Those people who are important to me would want me to volunteer my time for a charity/non-profit organization (donate blood/money) in the next 3 months". Bivariate correlations between the two items were r (202) = .74, $p <$. 001 for money, r (196) = .60, $p <$ .001 for time, and r (196) = .60, $p <$ .001 for blood.

Perceived behavioral control (PBC). Two items for each behavior measured PBC: "I have complete control over whether I volunteer my time for a charity/non-profit organization (donate blood/money) in the next 3 months"; and "It would be easy for me to volunteer my time for a charity/non-profit organization (donate blood/money) in the next 3 months". Bivariate correlations between the two items were r (202) = .47, $p <$ .001 (money) r (196) = .32, $p <$ .001 (time), and r (195) = .48, $p <$ .001 (blood).

Role-identity. Self identity was assessed using both a specific identity variable, relating to the degree to which each giving behavior was important to the participant's identity and a general identity variable to assess the degree to which giving others forms part of the individual's identity. The extent to which performing each giving behavior was central to the person's self-concept was measured using two items per behavior based on Terry et al. (1999): "Volunteering my time for a charity/non-profit organization (being a blood donor/donating money) is an important part of who I am", 1 (*no, definitely not*) to 7 (*yes, definitely*) and "I am the type of person who would volunteer my time for a charity/non-profit organization (donates blood/money)", 1 (*completely false*) to 7 (*completely true*). Bivariate correlations between the two items were r (201) = .71, $p <$ .001(money), r (195) = .73, $p <$ .001 (time), and r (195) = .61, $p <$ .001 (blood). To assess general role identity, two items were included: "Being helpful to others is an

important part of who I am" and "I am the type of person who helps others", both items

responded to on a scale from 1(*completely false*) to 7 (*completely true*). Bivariate

correlation between the two items was r (203) = .74, p < .001.

Conscientiousness. Conscientious was assessed using the 12-item scale from the

NEO Five-Factor Inventory (Costa & McCrae, 1992) (e.g., "When I make a commitment,

I can always be counted on to follow it through"). The scale was reliable (α = .81).

Agreeableness. Agreeableness was assessed using the 12-item scale from the

NEO Five Factor Inventory (Costa & McCrae, 1992). (e.g., "I would rather cooperate

with others than compete with them").. The scale was reliable (α = .79).

Time 2 Measures

For donating money and volunteering time at the 3-month follow-up, participants

reported their behavior in the preceding 3-month period (i.e., "In the past 3 months did

you donate money to a charity/charitable organization?" and "In the past 3 months, did

you donate your time for the benefit of others or a charity/charitable organization?",

yes/no). For blood donation, participants reported whether they had donated blood at a

blood collection site in the past 3 months. To ensure that we captured the full range of

behaviors related to blood donation, those respondents who answered no to this question

were then asked if in the previous 3 months they had attempted to donate blood by 1)

visiting a blood donation site but being unable to donate for medical reasons, 2) making

an appointment to donate blood, or 3) looking at the Australian Red Cross Blood Service

website to find out more information about donating blood. Thus, for the purposes of

this study, blood donation behavior included reported donation or completion of any of

these steps.

Results

Tables 1 to 3 present the means, standard deviations, and correlations for the study's variables. Across the three behaviors, all variables (including behavior) were correlated significantly with intention except for conscientiousness.

[tables 1-3 here]

Predicting Intentions

Three hierarchical multiple regression analyses using pairwise deletion were conducted to predict participants' intentions to (1) donate money to a charity, (2) volunteer time to a charity, and (3) donate blood. At step 1, the TPB variables of attitude, subjective norm, and PBC were entered and the variables of specific role identity, general role identity, and the two personality variables were entered at step 2. No issues were identified with collinearity diagnostics across the three behaviors: all tolerance values were >4.5 and all Variance Inflation Factor (VIF) values were <2.22.

Additional sets of analyses were conducted controlling for (1) sex or (2) past behavior in the first step of the analyses. On average, in the previous 3 months to completing the Time 1 survey, 60% of participants reported that they had donated money, 13.8% had donated time, and 3% had donated blood. At the final step, these analyses produced the same pattern of results as reported except sex was an additional significant predictor for both intention to donate blood and intention to donate money (with females intending to donate more than males). Of note, the correlations between role identity and past behavior across the three behaviors were modest (rs = .21, .21, .27 for money, time, and blood, respectively).

Tables 4-6 present the regression analyses for intention to donate money, time, and, blood, respectively. For intention to donate money, the step 1 TPB variables explained a significant 62.1% of the variance, ΔF (3, 196) = 106.85, $p < .001$. The addition of the step 2 identity and personality variables explained an additional

significant 9.2% of the variance, ΔF (4, 192) = 15.32, $p < .001$. Overall, the model

predicted a significant 71.20% of the variance, F (7, 192) = 67.92, $p < .001$. The

significant predictors at the final step were subjective norm, PBC, and specific role

identity.

For intention to volunteer time, the step 1 TPB variables explained a significant

43.7% of the variance, ΔF (3, 190) = 49.12, $p < .001$. The addition of step 2 identity and

personality variables explained an additional significant 21.1% of the variance, ΔF (4,

186) = 27.78, $p < .001$. Overall, the model accounted for a significant 65% of the

variance, F (7, 186) = 48.79, $p < .001$. The significant predictors at the final step were

subjective norm, PBC, and specific role identity.

For intention to donate blood, the step 1 TPB variables explained a significant

41.5% of the variance, ΔF (3, 187) = 45.95, $p < .001$. The addition of step 2 identity and

personality variables explained an additional significant 16.5% of the variance, ΔF (4,

183) = 18.41, $p < .001$. Overall, the model accounted for a significant 59% of the

variance, F (7, 183) = 37.54, $p < .001$. The significant predictors at the final step were

attitude, PBC, and specific role identity.

[tables 4-6 here]

Predicting behavior

To analyse the relationship between donation/volunteering intentions and

reported behavior at 3-month follow-up, three logistic regressions were conducted, (1)

money donation to a charity , (2) volunteering time to a charity and , (3) blood donation.

Behavior was coded as '0' (not enacted), and '1' (enacted). Inspection of the correlation

matrices (see Tables 1-3) showed that, of the identity and personality variables, it was the

identity variables (especially specific role identity) that had higher associations with

donation behavior. Therefore, given the small sample size at follow-up, only identity

variables were included in the final logistic regressions. At step 1, The TPB variables of intention and PBC were entered, followed by specific role identity, and general role identity at step 2 (see Table 7). Additional sets of analyses were conducted controlling for (1) sex or (2) past behavior in the first step of the analyses. At the final step, these analyses produced the same pattern of results as reported except past behavior was significant for volunteering time (those who had volunteered in the last 3 months more likely to report that they had volunteered at the Time 2 follow-up), and with the predictors of intention and specific role identity slightly weaker for predicting money donation with the inclusion of past behavior.

For donating money, at the 3 month follow-up, 53.4% of participants reported that they had donated. Step 1 produced a significant chi-square test of improvement in classification rate compared to chance, χ^2 (2) = 19.65, p <.001, with the correct classifications percentage at 67%. Intention was the only significant predictor, Nagelkerke R^2 = .23. The odds ratio for intention indicated that, for a 1 unit change in intention, the estimated change in the odds of donating money was 2.21. The addition of the step 2 variables also significantly reduced the error in classification, χ^2 (2) = 6.23 p = .044, with the correct classifications percentage at 70%. Overall, the model significantly reduced error in classification, χ^2 (4) = 25.88, p < .001, with both intention to donate and specific role identity as a donor of money emerging as significant predictors, Nagelkerke R^2 = .30. The odds ratio for intention in step 2 indicated that, for a one unit change in intention, the estimated change in the odds of donating money is 1.76, while a one unit change in specific role identity led to an estimated change in the odds of donating of 1.79 (see Table 7).

For volunteering time, at the 3-month follow-up, 14.7% of respondents indicated that they had volunteered time. Two cases were found to unduly influence the regression

equation and were removed from the analysis. Step 1 produced a significant chi-square test of improvement in classification rate compared to chance, χ^2 (2) = 25.20, $p < .001$, with the correct classifications percentage at 90%. Intention was the only significant predictor, Nagelkerke R^2 = .42. The odds ratio for intention in this model indicated that, for a 1 unit change in intention, the estimated change in the odds of volunteering time was 4.37. The addition of the Step 2 variables did not significantly reduce the error in classification, χ^2 (2) = 1.07, $p = .584$, with the correct classifications percentage at 93%. Overall, the model significantly reduced error in classification, χ^2 (4) = 26.27, $p < .001$ but intention was the only significant predictor of behavior, Nagelkerke R^2 = .44. The odds ratio for intention in step 2 indicated that, for a one unit change in intention, the estimated change in the odds of volunteering is 3.75.

For donating blood, at 3-month follow-up, 3.9% of respondents reported that they had donated blood in the preceding 3-month period. A further 26.3% of participants reported that they had made steps towards donating (attempted to donate blood but were unable to and/or reported exploring blood donation on the Australian Red Cross Blood Service website). Step 1 produced a significant chi-square test of improvement in classification rate compared to chance, χ^2 (2) = 12.38, $p = .002$, with the correct classifications percentage at 68.4%. Intention was the only significant predictor, Nagelkerke R^2 = .17. The odds ratio for intention in this model indicated that, for a 1 unit change in intention, the estimated change in the odds of donating blood was 1. 28. The addition of the other predictor variables in step 2 did not significantly reduce the error in classification, χ^2 (2) = .011, $p = .995$, with the correct classifications percentage at 68.4%. Overall, the model did reduce error in classification, χ^2 (4) = 12.39, $p = .015$, with intention emerging as the only significant predictor, Nagelkerke R^2 = .17. The odds ratio

for intention in step 2 indicated that, for a one unit change in intention, the estimated change in the odds of donating blood is 1.81.

[table 7 here]

Discussion

The present study enabled a direct comparison of variants of the self-concept employed across previous research studies examining donation behaviors, contributing to the extant literature by identifying the strongest determinant reflecting people's conceptualisation of themselves that serves to guide their giving decisions. Behaviorally-specific role identity emerged as a significant predictor of intention for all three giving behaviors. Neither the more broad construct of identity as a generally helpful person nor the personality characteristics of agreeableness and conscientiousness were found to significantly predict intentions. Although previous research has offered support for the notion of a self-description as generally helpful impacting on altruistic decision-making (e.g., Penner & Finkelstein, 1998; Grube & Piliavin, 2000), the present study instead provides evidence that it is when this identity is linked to a specific giving behavior that there is a stronger relationship to people's plans to help.

This finding is consistent with the work of Grube and Piliavin (2000) who found that role identity as a volunteer was predictive of amount of time volunteered. The current study expands these findings, providing evidence of this link for blood donation and donation of money in addition to replicating Grube and Piliavin's results for volunteering. It should be noted that the findings in support of the influence of a specific, rather than general, role identity could be at least partially explained by the process of maximizing measurement correspondence, especially in TPB studies. It could be argued that the effects for a general role identity may be mediated via the more behaviorally-specific role identity construct, akin to the stronger effects of specific, rather than global,

attitudes on behavior due to greater measurement correspondence (e.g., Heberlein &

Black, 1976; Vining & Ebreo, 1992).

In relation to the significant findings for specific role identity, it should be noted

that the construct of specific role/self identity has been shown previously to be distinct

from intention (e.g., Sparks & Shepherd, 1992). In the present study, although highly

intercorrelated, diagnostics did not indicate any issues of collinearity. Further, the

independence of specific role identity and past behavior has been established (e.g.,

Sparks & Shepherd, 1992) with the present study demonstrating effects for role identity

irrespective of past giving. Interestingly, most participants had recently donated money, a

small number had donated time, and very few had donated blood, at least in the 3 months

prior to the first survey. Prior donations before this 3-month period were not assessed,

however, to enable a more detailed examination of the relationship between identity and

previous behavioral enactment (important especially for blood donation given minimum

waiting times between donations and commonly employed deferment periods due to

illness and other ineligibility criteria). Future research should address this limitation and

continue to examine whether role identity remains independent from these related

constructs, including ascertaining the extent to which one's identity reflects something

important to them psychologically as well as whether it has been behaviorally enacted.

The findings of the present study were distinct from that of previous studies

(Carlo et al., 2005; Claxton-Oldfield & Banzan, 2010) where agreeableness and

conscientiousness have both been associated with giving behavior. Across the three

behaviors, agreeableness was significantly correlated with intention to donate but, when

included in the regression model, it failed to account for significant variance. One

explanation for the absence of an effect may be our use of a global measure (NEO-FFI)

to represent agreeableness and conscientiousness whereby other researchers have

investigated lower order facets of the global personality traits based on the suggestion

that the use of global estimates may not allow for an understanding of the facets of the

trait which are most influential in behavioral performance (Rhodes et al., 2002). It may

be that facets of conscientiousness (e.g., dutifulness) and agreeableness (e.g., altruism or

sympathy) are more representative of this trait in determining giving decisions. There is

evidence also that personality characteristics may be less predictive of initial intentions to

donate and more predictive of the decision to continuing donating over time (e.g.,

Ferguson, 2004; Germain et al., 2007). It should be acknowledged, also, that the results

for personality are consistent with the TPB's contention that personality factors should

not exhibit direct effects on people's intentions, instead exerting an indirect effect via

beliefs, attitudes, norms, and control (Ajzen & Fishbein, 2005).

The TPB variables significantly predicted intention to donate money, volunteer

time, and donate blood, accounting for a substantial 62%, 44%, and 42% of the variance

in people's intentions, respectively. For intentions to donate money and volunteer time,

both subjective norm and PBC, but not attitude, emerged as significant predictors,

whereas participants' intention to donate blood was predicted by attitude and PBC, but

not subjective norm. Thus, people's variations in perceptions of control over performing

the behavior were important for all three giving behaviors examined. Pressure from

others, however, was more important than personal consideration of attitudes for both

donating money and volunteering time and is consistent with some TPB altruism studies

(e.g., Warburton & Terry, 2000). For blood donation, however, the personal influence of

one's own attitude dominates any pressure from others, consistent with other studies

(e.g., Giles et al., 2004; Masser et al., 2009), and may be due to the more private nature

of blood donation compared to the often more public display of donating time and money

where social influences could be more salient. Another plausible explanation for the

impact of subjective norm in this study may relate to the scale items reflecting social

approval (others approval of my performing the behavior) rather than social pressure

(perceived expectations to perform the behavior) with previous research demonstrating

that subjective norm measures reflecting social pressure show weaker effects on giving

intentions (van der Linden, 2011).

For predicting donation behavior, the TPB was partially supported. Intention, but

not PBC, predicted donating behavior for all three behaviors. Given the relatively small

percentage of respondents at follow-up, this relationship supports the robustness of the

intention-behavior link for understanding giving behavior. The absence of a significant

PBC-behavior link suggests that the influence of control perceptions on enacting giving

behaviors occurred indirectly through people's intentions, consistent with other studies

reporting a weak PBC-behavior link (e.g., Kaiser & Gutscher, 2003). Unexpectedly,

specific role identity also predicted money donation behavior directly, suggesting that

identifying as someone who donates money is of sufficient strength to impact on

decisions as well as preliminary plans.

It should be noted that the TPB is only one of many approaches used to predict

and understand giving behaviors. Other models include the functional approach to

volunteering (Clary et al., 1998) comprising functions that volunteering time is likely to

serve for individual volunteers and stage approaches to understand the behavior of

volunteers (e.g., Omoto & Snyder, 1995) and blood donors (e.g., Ferguson & Chandler,

2005) reflecting the 'readiness' of people to give, culminating in Omoto and colleagues'

(e.g., Omoto et al., 2010) Volunteer Process Model (VPM) describing both psychological

and behavioral features of volunteering. Other more integrative models extending the

TPB constructs include Fishbein and colleagues' Theorists' Workshop (TW) model

incorporating environmental constraints, ability, self standards, perceived risk, and

emotion (Fishbein et al., 2001). Future research may benefit from establishing the impact of conceptualisations of self, especially behaviorally-specific self-identity, within these other approaches reflecting the determinants of people's giving.

Applied Implications

The identification of multiple contributing factors in determining people's intention points to the need for strategies utilising a comprehensive approach incorporating attitudinal, normative, control, and identity factors to encourage the performance of donation behaviors. Given self-identity's impact on all three giving behaviors, an emphasis on people's identity as someone who performs specific giving behaviors (e.g., blood donor, volunteer, supporter of charitable organizations) as part of strategies to encourage donation may influence their efforts to undertake these actions. Rather than general appeals to generosity or helpful behavior, campaigns should be narrowly targeted towards specific donor behaviors and strengthen the identity associated with being a donor of particular goods or time. For instance, often-employed pleas by charitable organizations to "Just give" or "We rely on helpful people like you…" are less likely to be influential than targeted messages appealing to people's specific identities (e.g., "Calling all blood donors…"). Similar strategies are and should continue to be employed by blood donation service providers (stickers such as "Be kind to me, I'm a blood donor") and volunteering agencies celebrating volunteers by community "thank you volunteers" days and promotions about volunteers in local newspapers should be initiated and maintained in efforts to strengthen people's specific role identities for giving. The present study's results suggest that a reliance on appeals to past behavior (e.g., "We are contacting you as you so generously gave last year") should instead focus on identity-related appeals (e.g., "We are contacting you as we recognize your contribution as a valued volunteer…").

Based on the study's other findings, university-based blood donation drives should encourage positive attitudes towards donating blood (e.g., highlighting the benefits to others) and encourage students to feel control over any barriers to donation (e.g., overcoming inconvenience by signing up for university-based blood drives or in their local neighborhood if available). Volunteering may be encouraged by emphasizing simple ways to integrate volunteering into a busy student lifestyle to minimise the perceived barriers to committing to volunteering (e.g., allowing for short term commitments) and highlighting support from others as part of campaigns encouraging people to recognize and value the volunteers they know. Similarly, for charitable giving, it may be beneficial to remind potential donors that perceived barriers can be easily overcome. For instance, the perceived high financial cost of making a meaningful difference could be combated by messages that 'every cent counts'. Further, highlighting the benefit of multiple people making a one-off donation or allowing people to make smaller contributions over time in a sustained donation commitment may encourage students to donate money. Again, as for volunteering, it may prove useful also to emphasize others' approval including online options of having others 'like' posts reporting financial donations to charitable organizations so as to highlight the support of important people in their lives for their charitable actions.

Strengths and Limitations

The study's strengths comprised the examination of multiple giving behaviors which allowed for comparison of prediction across several behaviors and the examination of follow-up donation behaviors. The disadvantage of examining multiple behaviors simultaneously, however, is the constraint of using 2-item indicators given the use of a student sample recruited primarily via a course credit system with prescribed maximum time lengths to complete each study, thereby restricting survey length. Further, as we

examined multiple giving behaviors within the one initial (and follow-up) survey, we aimed to minimise participant burden. Of the 2-item scales, the inter-correlations for the PBC items were fairly low, possibly because each item was tapping a different element of PBC (self-efficacy and perceived control; see Conner & Armitage, 1998).

Further limitations include the reliance on a student sample, where the average age was somewhat younger than that of the general population, and the rates of giving behaviors among students may be somewhat different to those of the general population. Although students may have more time available for volunteering, they may also be motivated by factors including career development. In addition, donation of money among student samples may be reduced due to their typically limited financial resources. Thus, the likely homogeneity of a student sample in relation to education level and socio-economic status, and the probable differences in prosocial tendencies between students and other groups in the population including younger non-students, limits the generalisability of the study's findings. In addition, there was a predominance of female participants who tend to possess more prosocial tendencies, with females intending to donate money and blood more than males to in the present study. Future research, then, should establish the extent to which the current findings are relevant for a population broader than a university student sample, particularly to examine the donation-related identity and personality influences relevant to populations comprising more males and those reflecting a wider range of education levels and socio-economic status. The applicability of the findings to younger people who are not students should also be determined, as should the extent to which the findings are relevant to students at other types of universities (e.g., private institutions, residential colleges, rural and regional campuses).

Also, the time period between data collection points (3 months) may have been insufficient to allow individuals to act on intentions to donate, particularly for blood donation where planning and medical requirements can place additional constraints on one's capacity to follow through. Further, at follow-up, response rates were low. Future research should consider strategies to encourage participation in follow-up phases of the research (e.g. thank you gifts to encourage participation at both time points). It should be noted that the thank you gifts in the present study (i.e., prize draw entry) were normative for the university study credit system but future research should consider more topic-appropriate forms of appreciation (e.g., small donations made to preferred charities), if required at all.

Conclusion

Overall, this research demonstrates that specific role identity is predictive of intentions in three giving behaviors. In addition to some support for the premises of the TPB, participants' identity specifically as a donor of money, time, or blood impacted more on their donation intentions for each behavior than personality traits of conscientiousness and agreeableness, or general identity as a helpful person. Thus, this research provides an important clarification of which elements reflecting people's self-concept are the strongest drivers of their giving actions. Campaigns to promote giving behaviors should focus on reinforcing specific role identities for each behavior rather than appealing to people to be generally helpful or supportive of others in need. Given our reliance on people's altruistic actions to sustain charitable services, continued efforts to identify the key factors that encourage people's giving behaviors are critical to the ongoing viability of these vital agencies.

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Table 1

Means, Standard Deviations and Bivariate Correlations for Donating Money (n = 198)

Variable	M	SD	1	2	3	4	5	6	7	8
1. Intention	5.20	1.56								
2. Attitude	6.32	1.08	.53***							
3. Subjective Norm	5.47	1.30	.71***	.51***						
4. PBC	5.86	1.30	.68***	.45***	.61***					
5. Specific Role Identity	5.05	1.17	.70***	.49***	.57***	.43***				
6. General Role Identity	5.96	.92	.27***	.29***	.20**	.19**	.39***			
7. Agreeableness	3.68	.49	.37***	.28***	.33**	.27***	.30***	.37***		
8. Conscientiousness	3.59	.51	.10	.10	.05	.10	.04	.21**	.19**	
9. Behavior (*n* = 103)	-	-	.41***	.20*	.32**	.16	.39***	.10	-.05	.03

Note. PBC = Perceived Behavioral Control; * *p* < .05, ** *p* < .01, *** *p* < .001.

Table 2

Means, Standard Deviations and Bivariate Correlations for Volunteering Time (n = 191)

Variable	*M*	*SD*	1	2	3	4	5	6	7	8
1. Intention	4.23	1.66								
2. Attitude	6.04	1.24	.55***							
3. Subjective Norm	5.24	1.21	.63***	.53***						
4. PBC	5.31	1.19	.66***	.36**	.60***					
5. Specific Role Identity	4.62	1.62	.74***	.42**	.57***	.39***				
6. General Role Identity	5.97	.92	.30***	.38**	.30***	.15*	.42***			
7. Agreeableness	3.69	.49	.34***	.37**	.38***	.20**	.38***	.36***		
8. Conscientiousness	3.60	.51	-.03	.11	.03	.01	.02	.20**	.20**	
9. Behavior (*n* = 101)	-	-	.41***	.20*	.39**	.10	.39***	.10	-.05	.10

Note. PBC = Perceived Behavioral Control; * *p* < .05, ** *p* < .01, *** *p* < .001.

Table 3

Means, Standard Deviations and Bivariate Correlations for Blood Donation (n = 190)

Variable	M	SD	1	2	3	4	5	6	7	8
1. Intention	3.88	1.81								
2. Attitude	6.23	1.25	.40***							
3. Subjective Norm	5.35	1.28	.40***	.40***						
4. PBC	5.20	1.57	.58***	.20**	.36***					
5. Specific Role Identity	3.53	1.59	.62***	.35***	.32***	.27***				
6. General Role Identity	5.96	.91	.14*	.35***	.18**	-.02	.23**			
7. Agreeableness	3.67	.50	.16*	.35***	.23**	.07	.22**	.37***		
8. Conscientiousness	3.58	.50	-.05	.04	-.04	-.01	-.01	.14*	.19*	
9. Behavior (*n* = 98)	-	-	.25*	.24*	.01	.05	.26**	.15	-.07	-.02

Note. PBC = Perceived Behavioral Control; * $p < .05$, **$p < .01$, ***$p < .001$.

Table 4

Hierarchical Multiple Regression Analyses for Predicting Intentions to Donate Money (n = 198)

Variable	B	95% CI Lower Bound	95% CI Upper Bound	β	sr^2	R^2	ΔR^2
Step 1						.62***	.62***
Attitude	.20	.06	.35	.14**	.19		
Subjective Norm	.51	.37	.65	.42***	.45		
PBC	.47	.33	.62	.36***	.41		
Step 2						.71***	.09***
Attitude	.06	-.07	.20	.04	.06		
Subjective Norm	.32	.18	.45	.26***	.32		
PBC	.43	.29	.56	.32***	.42		
Specific Role Identity	.39	.29	.50	.37***	.46		
General Role Identity	-.05	-.196	.10	-.03	-.04		

Agreeableness	.24	-.04	.51	.08	.12
Conscientiousness	.09	-.16	.33	.03	.05

Note. CI = Confidence Interval; sr^2 = partial correlation coefficient; PBC = Perceived Behavioral Control;

 * *p* < .05, **p* < .01, ***p* < .001

Table 5

Hierarchical Multiple Regression Analyses for Predicting Intentions to Volunteer Time (n = 191)

| | | 95% CI | | | | | |
| | | Lower | Upper | | | | |
Variable	B	Bound	Bound	β	sr^2	R^2	ΔR^2
Step 1						.44***	.44***
Attitude	.02	-.15	.19	.01	.01		
Subjective Norm	.63	.43	.83	.46***	.41		
PBC	.37	.19	.56	.27***	.28		
Step 2						.65***	.21***
Attitude	-.11	-.25	.03	-.08	-.11		
Subjective Norm	.27	.10	.45	.20**	.22		
PBC	.33	.18	.48	.24***	.31		
Specific Role Identity	.56	.45	.68	.55***	.58		
General Role Identity	.01	-.18	.18	.01	.01		

Agreeableness	.15	-.18	.49	.05	.07
Conscientiousness	-.14	-.43	.15	-.04	-.07

Note. CI = Confidence Interval; sr^2 = partial correlation coefficient; PBC = Perceived Behavioral Control;

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 6

Hierarchical Multiple Regression Analyses for Predicting Intentions to Donate Blood (n = 190)

Variable	B	95% CI Lower Bound	95% CI Upper Bound	β	sr^2	R^2	ΔR^2
Step 1						.42***	.42***
Attitude	.39	.21	.56	.27***	.31		
Subjective Norm	.13	-.04	.31	.10	.11		
PBC	.55	.41	.68	.49***	.51		
Step 2						.59***	.17***
Attitude	.24	.08	.40	.17**	.21		
Subjective Norm	.04	-.11	-.19	.03	.04		
PBC	.47	.35	.58	.41***	.50		
Specific Role Identity	.51	.39	.63	.45***	.53		
General Role Identity	.00	-.21	.21	.00	.00		

Agreeableness	-.09	-.48	.29	-.03	-.04
Conscientiousness	-.18	-.53	.16	-.05	-.08

Note. CI = Confidence Interval; sr^2 = partial correlation coefficient; PBC = Perceived Behavioral Control;

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 7

B Weights, Chi-Square Statistics and Odds Ratios for Prediction of Donation of Money (n = 103), Volunteering Time (n = 97), and Blood

Donation (n = 98)

Variable	Donating Money			Volunteering Time			Blood Donation		
	B	Wald χ^2	Exp(B)[95% CI]	*B*	Wald χ^2	Exp(B)[95% CI]	*B*	Wald χ^2	Exp(B)[95% CI]
Step 1									
Intention	.79	12.26*	2.21 [1.42, 3.45]	1.47	10.55**	4.37[1.79, 10.53]	.60	9.43**	1.82 [1.24, 2.66]
PBC	-.30	1.32	.74 [.45, 1.23]	-.47	.96	.62 [.24, 1.51]	-.27	1.65	.767 [.51, 1.15]
Step 2									
Intention	.57	4.29*	1.76 [1.03, 3.01]	1.32	6.27*	3.75[1.33, 10.54]	.59	6.52*	1.81 [1.14, 2.84]
PBC	-.28	1.12	.76 [.45, 1.27]	-.53	1.16	.59[.22, 1.55]	-.26	1.54	.77 [.51, 1.16]
Specific Role Identity	.58	5.06*	1.79 [1.08, 2.97]	.45	1.00	1.57[.65, 3.82]	.01	.00	1.01 [.69, 1.47]
General Role Identity	-.56	3.22	.57 [.31, 1.05]	-.25	.15	.78[.22, 2.74]	.02	.01	1.02 [.62, 1.71]

Note. PBC = Perceived Behavioral Control; * $p < .05$, ** $p < .01$, *** $p < .001$; CI = Confidence Interval.