Charitable Intent: A Moral or Social Construct? A Revised Theory of Planned Behavior Model

Sander van der Linden

Published online: 3 December 2011

© Springer Science+Business Media, LLC 2011

Abstract Given an increasing global need to elicit and stimulate charitable giving and in light of the limited social-psychological research on this subject, this study contributes to a better empirical understanding of the factors that underlie charitable giving (intentions). In contrast to previous research, it was hypothesized that moral norms rather than social norms are likely to play a significant role in the formation of charitable intentions. An extended Theory of Planned Behavior (TPB) model was constructed in order to test the influence of six social-psychological variables on an individual's intention to donate to charity. Respondents (N=143) completed an online questionnaire about charitable behaviour that assessed the constructs of the revised model. The present study found support for the stated hypothesis: while social norms (both descriptive and prescriptive) did not explain any of the variance in intention, moral norms accounted for a significant amount of the overall variance and were in fact identified as the strongest (relative) predictor of charitable giving intentions. In addition to moral norms, 'attitude', 'perceived behavioral control' and 'past behaviour' were also identified as significant predictors. The findings in this study support a revised TPB model that accounts for nearly 70% of the explained variance in charitable intent. Implications for both theory and practice are discussed.

Keywords Charitable giving · Moral norms · Pro-social behavior · Theory of Planned Behavior (TPB)

Introduction

For centuries humans have taught, recognized and fostered the vast benefits associated with charitable behavior. In fact, both philosophical and religious

Grantham Research Institute on Climate Change & The Environment, London School of Economics and Political Science, Clements Inn Passage, WC2A 2AZ London, United Kingdom e-mail: s.l.van-der-linden@lse.ac.uk



S. van der Linden (\subseteq)

teachings have long argued that charitable giving leads to prosperity. This also becomes apparent in the many proverbs and metaphors that have persisted throughout human history; "to give is to receive" or "give and it will be given to you". To the extent that there exists empirical evidence for such common claims, numerous recent studies have identified that charitable behavior stimulates mental as well as physical well-being (Brooks 2007). A quick overview of the most recent international comparison of charitable giving (CAF 2010), indicates that in most western countries, the percentage of the population that donates to charity (in a given month) varies roughly between 50% and 70%. While this covers a considerable range, in the face of the recent spike in natural disasters (e.g., New Orleans 2005, Haiti 2010, Japan 2011) and in support of other important pressing regional and local causes (e.g., climate change, cancer research, poverty) charitable giving is never unwelcomed. In fact, it is much needed at present and arguably, even more so in the future. In support of this need, establishing a better understanding of the psychological conditions that underlie charitable giving intentions will play an important role in the elicitation and stimulation of charitable behavior.

So far, most research has focused solely on the descriptive role of demographic and socio-economic factors in explaining charitable behavior. For example, Drollinger (1998) found that income, education and religious affiliation are all associated with charitable giving. While evidence on religious influence is mixed (e.g., Brooks 2003; Borgloh et al. 2010) ample research (e.g., Pharoah and Tanner 1997 and Schervish and Havens 1997; Borgloh et al. 2010) has indicated that individual willingness to donate increases with education, age and income. A compelling finding by Borgloh et al. (2010) suggests that people prefer to donate to small organizations rather than larger ones when presented with information on the organization's revenue stream. A possible explanation for this preference includes Duncan's (2004) "impact model of philanthropy", which postulates that donators try to obtain maximum impact with their contributions. In addition, field experiments have shown that individuals are more willing to give if they know that others are giving as well (e.g., Frey and Meier 2004; Croson and Shang 2008; Martin and Randal 2008), a phenomenon known as 'conditional cooperation'. Still, other research explored the decision making process in charitable giving (e.g., Burgoyne et al. 2005), as well as the role of trust and commitment (Sargeant and Lee 2004) and the role of social relations (Radley and Kennedy 1995).

Yet, the literature that contributes to a social-psychological understanding of the factors that underlie an individual's decision to donate to charity has been extremely limited. This is surprising, as a grounded theoretical and empirical understanding of the psychological factors that contribute to the formation of an individual's charitable intention(s) should be regarded as a prerequisite for designing effective behavioral interventions. Particularly, because people are expected to carry out their intentions when the opportunity arises (Ajzen 1991) there is significant merit in understanding how underlying intentions are formed. Even considering the fact that intentions do not always translate into behavior (i.e. intention-behavior gap), this does not necessarily mean that individuals do not form their intentions, it could be for example, that there are simply structural –situational or control barriers preventing individuals from carrying out their intentions (Ajzen 1991). Thus, while the stimulation of actual charitable behavior is undoubtedly the end goal, the insights



gained from understanding what psychological factors are important in the formation of charitable intentions should be regarded as a crucial step towards achieving this goal.

Only recently, Smith and McSweeney (2007) extended the 'Theory of Planned Behavior' (Ajzen 1991) in an attempt to explain and predict donating intentions and behavior. The study presented in this paper builds on this research and makes a number of important contributions.

Firstly, this study questions the predictive validity of social norms (prescriptive and descriptive) in the context of charitable giving (intentions). Rather, it is hypothesized that (personal) moral norms are the main driver behind the formation of donating intentions, where personal or 'moral norms' are broadly defined as an individual's internalized code of conduct (Parker et al. 1995). As a result, the purpose of this study is to (1) evaluate to what extent a revised TPB model can indeed be established to predict and explain an individual's intention to donate to charity and (2) contrast the importance of (personal) moral convictions to that of explicit social considerations.

Previous Research

Theory of Planned Behavior

The 'Theory of Planned Behavior' (TPB) (Ajzen 1991) has been used extensively across academic disciplines over the last 25 years as an important tool for understanding and predicting human behavior (Armitage and Conner 2001). In its most simple form, the Theory of Planned Behavior states that people's behavior is determined by their intentions. In turn, these intentions are influenced by three underlying constructs, namely; 'Attitude', 'Subjective Norm' and 'Perceived Behavioral Control'. According to Ajzen (1991), human behavior is guided by three kinds of considerations; (1) beliefs about the likely outcomes of the behavior and the evaluations of these outcomes (behavioral beliefs), (2) beliefs about the normative expectations of others and the motivation to comply with these expectations (normative beliefs) and (3) beliefs about the presence of factors that may facilitate or impede performance of the behavior and the perceived power of these factors (control beliefs). In their respective aggregates, behavioral beliefs produce a favourable or unfavourable attitude toward the behavior; normative beliefs reflect perceived social pressure (subjective norm) while control beliefs give rise to perceived behavioral control. In combination, these three constructs lead to the formation of 'intention', where behavioral *intention* is assumed to be the immediate antecedent of the actual behavior.

Thus, given a sufficient degree of actual control over the behavior, (perceived control serves as a proxy) people are expected to carry out their intentions when the opportunity arises. Although people can hold many beliefs, the beliefs described above relate to those that are easily accessible to the individual. Additionally, while in theory, the three predictors are conceptually independent of each other, empirically it is often the case that the factors are interrelated due to the fact that the same information can influence multiple predictors (Ajzen 2006). Furthermore,



the weights of each determinant are empirically derived and are not necessarily equal. Depending on the individual and the situation; 'Attitude', 'Subjective Norm' and 'Perceived Control' might have different effects on behavioral intention (Miller 2005). A meta-review has identified that empirically, the Theory of Planned Behavior generally explains about 40% to 60% of the variance in intention (Sutton 1998; Fishbein and Ajzen 2010), but the percentage of variance in actual behavior that appears to be predicted by intention is generally lower, varying between 30% and 40% (Fishbein and Ajzen 2010). This is also commonly referred to as the 'behavior-intention gap' (e.g. Sheeran 2002).

The Distinction between Social and Moral Norms

Moral norms refer to the idea that some behaviors are just inherently right or wrong regardless of their personal or social consequences (Manstead 2000). The exact terminology can get a bit confusing at times. For example, generally speaking, prescriptive (also called 'injunctive') norms are usually subdivided into two additional subgroups, namely; personal (or moral) norms and social norms (Schwartz 1977). Prescriptive social norms refer to the social expectation of how an individual ought to behave. Within the Theory of Planned Behavior, 'subjective norms' are really a measure of prescriptive social norms (i.e. they measure the social expectation or perceived 'social pressure' to engage in a behavior). Yet, prescriptive personal norms (i.e., moral norms) are not de facto included in the Theory of Planned Behavior.

An important question is how moral norms are theoretically distinct from social norms? While these two constructs may be closely related under certain circumstances it is nevertheless quite possible that a person's moral convictions do not coincide with the expectations that exist in that person's social environment (Manstead 2000). One way to think of the relationship between these two norms is that cultural indoctrination and social learning play an important role in the acquisition of morality (Krebs and Janicki 2002). In fact, social reference groups deliver standards for what is viewed as either right or wrong. It is then over time, when people have internalized social norms that they become a personal moral norm. Moral norms are considered to be the link between internalized general values and more specific opinions and expectations about how to behave in a tangible situation (Schwartz 1977). Thus, although moral norms may originate from social group norms, once they have become internalized and autonomous, they exercise influence over an individual's behavior independently of any immediate social context (Manstead 2000).

Another way to think about the difference between these two norms is summarized by Bicchieri (2006). The author argues that while social norms are followed conditionally upon the satisfaction of normative and observable expectations of others, moral norms are followed unconditionally based upon internal, emotional processes (Bicchieri 2006, p.21). Thus, 'moral norms' emphasize feelings of personal responsibility rather than reflecting exogenous social pressure and thus they should have an independent effect on intention. In particular, moral considerations are deemed to be important in situations where one's self interest and the interest of others are at odds with each other (Gorsuch and Ortberg 1983).



Many prominent social-psychological theories depart from the premise that (moral) norms are the main driver of a range of pro-social behaviors. For example, both the Norm-Activiation-Model (Schwartz 1977) as well as the Value-Belief-Norm theory (Stern et al. 1999) propose that feelings of personal obligation and moral responsibility lead to the formation of pro-social behavior. Therefore, when trying to predict and explain behaviors such as charitable giving, it is warranted to include moral norms as an explanantory variable. However, a long standing debate has been whether the effect of moral norms is already captured sufficiently by the other predictors of the Theory of Planned Behavior. For example, both Kaiser et al. (2005) and Manstead (2000) have identified some overlap between attitude constructs and moral norms. This has led to the question of whether there is any additional benefit to the inclusion of a separate, independent measure of an individual's personal norm. Ajzen (1991) has commented that in principle the TPB is open to the inclusion of additional predictors if it can be shown that these additional predictors can capture a significant proportion of the variance in intention after the theory's standard variables have been taken into account (p.199).

In fact, Beck and Ajzen (1991) found that moral norms indeed add to the explanatory power of the TPB as an independent predictor of intention. Similar findings were put forth in a meta-review by Conner and Armitage (1998) and Armitage and Conner (2001). In addition, Manstead (2000) as well as Smith and McSweeney (2007) also conclude that especially in the context of pro-social behaviors (such as donating), moral norms can serve as an important additional predictor.

Conceptualizing Social Norms in the Theory of Planned Behavior

In addition to the inclusion of moral norms, a further discussion surrounds the conceptualization of the 'subjective norm'. Within the TPB, the subjective norm is operationalized as measuring social prescriptive norms (i.e., social pressure/expectations). In particular, a meta-study carried out by Armitage and Conner (2001)—which included 185 independent tests of the TPB, identified the 'Subjective Norm' component as the weakest predictor of behavioral intention. A few possible explanations are provided by the authors. To begin with, subjective norms are often measured in a more global sense and (strong) direct social pressure to engage in a behavior might not always be present. In addition, some researchers tend to use single-item measures, possibly increasing the error variance of the measurements used. Others have postulated that the problem stems from the fact that those individuals whose actions are influenced by social pressure merely constitute a minority (e.g., Trafimow and Finlay 1996). Yet, the most prominent explanation seems to imply that subjective norms are in fact important but the problem rather lies in the conceptualization of this measurement within the TPB.

In fact, a number of researchers (e.g., Smith and McSweeney 2007; Cialdini et al. 1991; Terry and Hogg 1996) have proposed to make a conceptual distinction between *descriptive* and *prescriptive* norms. Prescriptive social norms relate to how significant others think a person ought to behave (prescribing behavior) whereas *descriptive* social norms merely describe the behavior of significant others. This distinction between social influences indicates a separate source of motivation (Deutsch and



Gerard 1955) and has proved to be effective in the context of the TPB (Rivis and Sheeran 2003) as well as in understanding and promoting pro-social behaviors (e.g., Warburton and Terry 2000; White et al. 2009). In their latest publication, Fishbein and Ajzen (2010) have also validated the use of this distinction (p.131).

Yet, some authors (e.g., Smith and McSweeney 2007) operationalize their measure of the 'subjective norm' exclusively in terms of perceived approval or disapproval of the behavior in question and therewith fail to include more direct measures that assess the extent to which individuals actually feel a certain behavior is 'expected' of them (i.e., whether or not they feel 'socially pressured' to engage in the behavior). For example, it is not that surprising that respondents may deem it very likely that others would approve of them donating to charity. Yet, the mere perception that significant others 'approve' of the behavior does not necessarily mean that one feels socially pressured to engage in the behavior. Thus, these dimensions differ conceptually from each other and so their effect on behavioral intention may vary as well.

Past Behavior or Habit?

Finally, past behavior has also been implicated as an important independent predictor of pro-social behaviors, including charitable giving (Lee et al. 1999). In particular, researchers have argued that the frequency with which a behavior has been performed in the past can be used as an indicator of habit strength, as in this sense habit can be understood as repeated behavior in a stable context (Ouellette and Wood 1998). When a strong habit develops, performance of the behavior is assumed to become automated under control of stimulus cues (Albarracín et al. 2005). Yet, habit should not be confused with high frequency behavior as it has been shown that habits vary independently of behavioral frequency (Verplanken 2006). Furthermore, the relation between past behavior and intention is often not fully mediated by the TPB's predictors.

Ajzen (1991, 2002) argues that a significant shared method variance exists between past and future measures of behavior and that if a significant residual effect is found it rather points to the fact that other factors have not been accounted for. In particular, Ajzen argues that past behavior cannot simply be considered to be a causal factor in its own right nor should it be assumed that past behavior is a valid measure of habit (Ajzen 1991, 2002). However, 'other factors' that have not been accounted for could of course also reflect the influence of habit, given that habit is not explicitly represented in the theory. In the context of charitable giving, other evidence also support the presence of a habitual component. For example, Rosen and Sims (2010) report that charitable behavior is indeed likely to be a habit forming, learned behavior as they found that donating time and money in adolescence is a strong predictor of charitable behavior in adults. Similarly, neurological evidence has pointed out that the brain's mesolimbic system is activated when individuals donate money (Moll et al. 2006). The mesolimbic system is part of the overall mammallian reward reinforcement system, a dopaminergic pathway that is known for modulating behavioral responses to stimuli (e.g. food, drugs, sex and money). In short, charitable behavior is associated with systematic experiences of reward and reinforcement (Moll et al. 2006), conducive to the formation of habits (Verplanken and Aarts 1999). Thus, the role of past behavior (and possibly habit) should not simply be neglected.



The Revised TPB Model

At present, Smith and McSweeney (2007) are the only researchers to have presented a revised, extended TPB model for predicting donating intentions. In the initial construction of their revised model the authors have argued for the inclusion of moral norms, a distinction between descriptive and prescriptive social norms as well as the inclusion of past behavior. As a result, the revised model proposed by Smith and McSweeney (2007) included the following components: 'Attitude', 'Perceived Behavioral Control', 'Descriptive Norm', 'Prescriptive Norm', 'Moral Norm' and 'Past Behavior'. The study conducted by the authors included 227 members of the general community in Queensland, Australia. A hierarchical multiple regression was conducted. With all variables in the equation, the extended TPB model accounted for $adjR^2=67\%$, F(13, 172)=29.64, P<0.001 of the variance in intention, where 'Attitude', 'Perceived Behavioral Control', 'Prescriptive Norms', 'Moral Norms' and 'Past Behavior' were all found to be significant predictors of an individual's intention to donate to charity. The 'Descriptive Norm' measure was found to be an insignificant predictor.

With regard to these findings, there are a numbers of comments to be made. As the authors mentioned themselves, their sample represented a small subset (N=227) of a local population in Queensland, Australia and thus without more research it remains unclear to what extent these initial findings can be generalized. In addition, Smith and McSweeney (2007) also provide a few relevant recommendations based on their findings. In particular, the authors mention that the predictive validity of social norms provide avenues for future interventions, especially because the influence of social norms carries across contexts (e.g. Reno et al. 1993). Thus, the perception of normative support, approval and desirability of charitable giving across reference groups should be stressed. Yet, these recommendations are questioned in the current paper. As mentioned earlier, because Smith and McSweeney (2007) only measured 'perceived approval' of the behavior, it is postulated here that by applying such one-dimensional measurements it becomes relatively easy to overstate the effect of social norms on intention. In an attempt to assess the influence of social norms on charitable intentions, the study presented in this paper takes on a more balanced approach where both; the approval and social pressure (expectation) dimensions are taken into account.

With regard to the general importance of norms, it could be argued that the extent to which they matter depends on the donating-context. For example, a possible distinction between 'public' and 'private' donating behavior can be made. While 'sporadic' public donations (e.g., collection boxes or giving to homeless people) do occur of course, it is not unreasonable to assume that a significant majority of donating behavior rather takes place in an anonymous or private setting. Therefore, from a theoretical perspective, it is rather unlikely that social norms play a significant role in explaining behavioral intentions to donate to charity. Instead, personal/moral norms are expected to explain more of the variance in intention. Even considering public situations, where the behavior in question is observable by others, it is likely that donating intentions are guided by moral considerations more so than by any perceived social expectations. This assumption is not unreasonable. To illustrate, it is not uncommon to encounter homeless persons or charitable



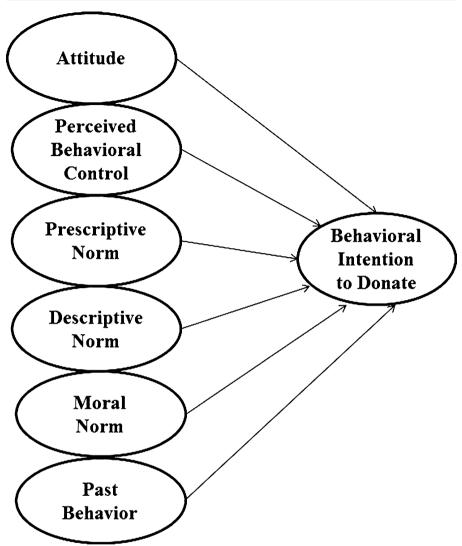


Fig. 1 Extended TPB model

organizations in public places asking for a donation, as a result, it is posited that feelings of compassion and empathy as well as considerations of what is the 'right' thing to do are likely to trump any perceived social pressure. This view is also supported by other evidence. For example, a national survey of giving in Canada (CCP 2004 (Canadian Centre for Philanthropy)) reported that 94% of the respondents gave out of *compassion*. Compassion is in fact a form of empathy, an emotional process that is strongly linked to moral behavior (Tangney et al. 2007). To the extent that Smith and McSweeney (2007) have pointed to the importance of

¹ Of course, in some situations when it remains relatively unclear what the appropriate norm is, it is likely that people will look at others for clues (e.g., Festinger 1954).



moral norms, the authors comment that the effect found in their study might have been subject to a sampling bias as a large majority of the respondents (82%) reported to have religious affiliations and hence might have had stronger moral convictions.

Based on the reviewed literature and above discussion, it is hypothesized that (1) social norms are unlikely to play a role in the formation of charitable intentions and (2) instead, it is expected that moral norms are likely to add significant explanantory power to the model and serve as a (relatively) important predictor of charitable giving intentions. In order to test the stated hypotheses the current study employs a revised TPB model, presented in Fig. 1. The next section will outline the design and methodology of the study, followed by a presentation of the results, a discussion of the main findings and their implications and lastly, the paper concludes with an overview of the study's limitations and suggestions for further research.

Design and Method

Method and Respondents

Respondents were invited to participate in an online study about charitable giving and were recruited through the university's (London School of Economics) departments and research centres, the experimenter's social network and through the assistance of various private organizations. Furthermore, the study was conducted in English as it was assumed that the participants had sufficient knowledge of the language to understand the questions asked. All questions were constructed congruent with the TPB questionnaire guidelines as stipulated by Ajzen (2006). Additionally, in order to reduce response bias, a number of questions were worded negatively (reverse scaled). Items were ordered randomly throughout the questionnaire. A common standard definition of donating behavior was applied (i.e., donating money to charities or community service organizations in the next 4 weeks). All questions were designed using 7-point bipolar adjective scales.

In total, (N=143) responses were gathered online (81 females and 62 males). The age of the respondents ranged between 19 and 57, with a mean age of 28 (SD=8.5). The majority (66%) of the sample respondents were Europeans (most notably Dutch 21%, German 14% and UK nationals 23%), (14%) were North-American and the remaining (20%) varied greatly including (Asian, Middle-Eastern, Australian, North African and Latin-American nationals). In terms of education, roughly 40% of the respondents had completed at least a bachelor degree, 43% a master's degree and about 7% a doctorate, therewith at least 90% of the respondents had received a college education. About 36% of the respondents were either full time or part time employed, 5% reported to be unemployed while about 59% of the respondents were still students. Furthermore, exactly 50% of the respondents indicated to have religious affiliations. With regard to income, about 45% of the respondents reported to earn above their national average, 18% reported average while 37% reported to earn below their national average. Lastly, a large majority of respondents (73%) indicated to vote on the left side of the political spectrum while only (27%) indicated to vote on the right side.



Measures

Attitude

The (direct) measure of attitude was assessed with three semantic differential scales, e.g., "I believe that donating money to charities or community service organizations in the next four weeks would be" (1 very bad—7 very good, 1 very unfavourable- 7 very favourable, 1 pointless—7 worthwhile). Items were scored such that higher scores indicated a more positive attitude toward charitable giving. Responses were averaged to represent a reliable scale of the attitude construct $(\alpha=.85)$.

Perceived Behavioral Control

Similarly, Perceived Behavioral Control (PBC) was assessed with three direct measures. While two questions focused on measuring perceived control, e.g., "Overall, how much control do you think you have over donating money to charitable organizations in the next four weeks?" (1 no control—7 complete control), one measurement focused more on external impeding factors to the behavior (autonomy), e.g., "The decision to donate to charity in the next four weeks is entirely up to me" (1 strongly disagree,—7 strongly agree). Higher scores indicated more perceived control. Responses were averaged to represent an index of the PBC measures (α =.58). A slight discrepancy in measurement dimensions affected the reliability score. Exclusion of the autonomy measure increases the cronbach's alpha score to (α =.73).

Prescriptive (Social) Norm

Subjective norms were captured with three measures as well. While two questions focused more on measuring explicit social pressure, e.g., "It is expected of me that I donate money to charities or community service organizations in the next four weeks" (1 strongly disagree—7 strongly agree), one question assessed external approval of the behavior e.g., "Significant others would approve of me donating to charitable organizations in the next four weeks" (1 very unlikely—7 very likely). One item was negatively worded (reverse scored). Responses were averaged to describe an index of the Subjective Norm (α =.50). The relatively low reliability score is due to measuring two slightly different dimensions of the subjective norm. Exclusion of the softer 'perceived approval' measure increases the reliability score to (α =.65).

Descriptive (Social) Norm

Three items were used to assess descriptive norms, e.g., "How likely do you think it is that people close to you, will donate money to charities or community service organizations in the next four weeks" (1 very unlikely—7 very likely). One item was reverse scored. A reliable scale was achieved for the descriptive norm measurement (α =.83).



Moral Norm

Similarly, moral norms were captured with three direct measurements, e.g., "I believe I have a moral obligation to donate money to charities or community service organizations in the next four weeks" (1 strongly disagree—7 strongly agree). One item was reverse scored. A reliable scale was obtained (α =.72).

Past Behavior

Past donating behavior was also assessed with three direct measurements, e.g., "How often during the last 4 weeks have you donated money to charities or community service organizations?" (1 not at all—7 very frequently). Respondents were asked how often they engage in the behavior and whether they engaged regularly in the target behavior. A reliable index was obtained to describe past donating behavior $(\alpha=0.79)$.

Behavioral Intention

Lastly, the respondent's intention to donate in the future was assessed with three direct measurements, e.g., "I intend to donate money to charities or community service organizations in the next four weeks" (1 strongly disagree—7 strongly agree). A reliable index was constructed to represent the respondent's future intention to donate (α =.94). A time period of four weeks was used. The reason for this is twofold: (1) often charitable giving is done in periodic installments and (2) people might have limited abilities when it comes to making future financial projections. Hence four weeks seemed like a reasonable time-frame for specifying the behavioral action. The same measure was also applied by Smith and McSweeney (2007).

Demographical Information

Respondents were asked to provide information regarding their age, sex, employment status, income level, nationality, religious affiliation, educational level and political preference.

Results

Descriptive Statistics

Means, standard deviations and (inter)correlations among the predictor variables are presented in Table 1. Intentions to donate to charity were positively correlated with each of the revised TPB's constructs so that strong donating intentions were associated with positive attitudes toward giving, strong feelings of perceived control over the behavior, the description of other people's behavior, perceived social pressure, past donating behavior as well as moral consideration to engage in



N=143	INT	ATT	PBC	PN	DN	MN	PB	Mean	SD
Intention (INT)	(0.94)							4.17	1.94
Attitude (ATT)	0.50***	(0.85)						5.59	1.13
Perceived Behavioral Control (PBC)	0.29***	0.15*	(0.58)					5.58	1.20
Prescriptive Norm (PN)	0.23**	0.24***	0.01	(0.50)				3.97	1.08
Descriptive Norm (DN)	0.28***	0.18**	0.25***	0.34***	(0.83)			4.74	1.36
Moral Norm (MN)	0.67***	0.54***	0.05	0.48***	0.27***	(0.72)		3.84	1.49
Past Behavior (PB)	0.73***	0.42***	0.13*	0.23***	0.23**	0.61***	(0.79)	3.49	1.64

Table 1 Descriptive statistics and intercorrelations for the revised TPB variables

the behavior. Low to moderate correlations were found among the predictor variables (rs=.13 to .61).²

In assessing discriminant validity, the question is raised whether measures that theoretically should not be related to each other are in fact, observed not to be related. For example, it is argued in this paper that moral norms serve as an additional and distinct theoretical predictor in the current TPB model. Yet, it might be the case that one of the adjective items measuring attitude (e.g., good-bad) has some shared variance with measures used to assess moral norms (e.g., Manstead 2000). Furthermore, in case of high-inter correlations there is a need to assess discriminant validity in order to have confidence in subsequent research findings (Farrell 2009). Yet, it is questioned whether this is indeed the case. A glance at the inter-correlations (Table 1) between moral norms and attitude (rs=.54), intention (rs=.67) and prescriptive (social) norms (rs=0.48) indicates moderate rather than high inter-correlations.

While this of course remains (to a certain extent) a matter of debate, a recent review discussing practical issues in establishing discriminant validity classified inter-correlations to be high from (r=.78) and above (Farrell and Rudd 2009). Nonetheless, a multitrait-multimethod (MTMM) analysis revealed that the correlations presented in Table 1 did not exceed their mean scale reliabilities, indicating that the scales can indeed be regarded as empirically distinct (Campbell and Fiske 1959). Even when applying a correction for attenuation, the values did not exceed the proposed standard value for discriminant validity <0.85 (Campbell and Fiske 1959; John and Benet-Martinez 2000). Being aware of the fact that a degree of overlap certainly exists between the TPB constructs and that the multitrait-multimethod method is considered to be a less stringent test (e.g., Farrell 2009), based on the

² Even if some correlations (.61) are to be considered relatively high, an examination of the collinearity statistics revealed that each predictor fell within acceptable boundaries of tolerance (>.3) and the VIF coefficient (<5), ruling out any substantive multi-collinearity problems (O'Brien 2007).



^{*}p < 0.10, **p < 0.05, ***p < 0.01. Reliabilities are given in parenthesis along the main diagonal

reported inter-correlations and subsequent analysis it is determined that there is enough confidence to assume that discriminant validity exists between the scales and that an elaborate investigation into other methods (e.g., structural equation analysis) would be redundant.

Assessed on (1–7 scales), the averaged intention (among all participants) to donate to charity or a community service organization in the next four weeks was not particularly high ($\bar{x}=4.17$, SD=1.94) and did not differ significantly between religious and non-religious participants. The overall averaged 'Attitude' score ($\bar{x}=5.59$, SD=1.13) represented a fairly positive attitude toward charitable giving. The same can be said for 'Perceived Control' over the behavior ($\bar{x}=5.58$, SD=1.20). The extent to which referent individuals were perceived to engage in charitable giving was scored fairly neutral ($\bar{x}=4.74$, SD=1.36). Further inspection of the Prescriptive (Subjective) Norm ($\bar{x}=3.97$, SD=1.08) indicated a clear division between the averaged measurements of 'social approval' ($\bar{x}=6.20$), a relatively high score, versus a surprisingly low averaged ($\bar{x}=2.85$) score on the perceived 'social pressure' dimension

Predicting Donating Intentions with a Revised TPB Model

Hierarchical multiple regression was employed to regress charitable giving intentions onto the revised TPB variables, where:

$$Y = \beta 0 + \beta 1Ab + \beta 2Pbc + \beta 3Pn + \beta 4Dn + \beta 5Mn + \beta 6Pb + \epsilon$$

Y The intention to donate to charity

Ab Attitude toward the behavior

Pbc Perceived Behavioural Control

Pn Prescriptive Norm

Dn Descriptive Norm

Mn Moral Norm

Pb Past Donating Behavior

 ε Error Term

Inclusion of the original TPB variables in step 1 (Table 2) accounted for a significant amount of the variance in intention, $\operatorname{adj} R^2 = .33$, $\operatorname{F}(3, 139) = 23.58$, p < 0.001. Inspection of the beta weights revealed significant effects for attitude $\beta = .83$ (p < 0.001) and perceived behavioral control $\beta = .33$ (p < 0.01). The beta weight associated with prescriptive social norms was found to be insignificant. The introduction of moral and descriptive norms in step 2 also added significantly to the explained variance, $\operatorname{adj} R^2$ change=.24, $\operatorname{F}(2, 137) = 40.04$, p < 0.001. Further inspection indicated a significant effect for moral norm only $\beta = .83$ (p < 0.001). Descriptive social norms did not explain any of the variance in donating intentions and the associated beta weight was found to be insignificant. Hence the increase in explained variance can be fully attributed to moral norms.

Finally, in the third and final step 'Past Behavior' was added, also accounting for a significant change in the $adjR^2$ change=.11, F(1, 136)=46.92, p<0.001. The beta weight for past behavior was quite strong and significant β =.49 (p<0.001). The



final (revised) model explains 68% F(6, 136)=50.23, p<0.001 of the variance in donating intentions. Controlling for demographic factors (income, education, sex, age, nationality and religion) yielded no significant differences in the model. The only significant demographic predictor (with a marginal effect size) is 'Age' of the respondent β =.04 (p<0.01). Thus, the intention to donate increases somewhat with age. The step-wise multiple regression model is presented below in Table 2 and the final intention model in Fig. 2. In summary, an individual's intention to donate to charity increases when (1) an individual's 'attitude' becomes more favourable towards the behavior, (2) a strengthened sense of 'perceived control' over the behavior is established, (3) a stronger feeling of personal responsibility (moral norm) toward the behavior exists and finally (4) if the behavior has already been performed in the past (i.e., past behavior).

Discussion

A Social-Psychological Account of Charitable Intentions

Given the limited application of the Theory of Planned Behavior to understanding charitable giving, this research provides relevant insights into the social-psychological factors that underlie an individual's donating intentions. The results of this study support a revised TPB model that seems to be fairly holistic in explaining an individual's behavioral intention to donate to charity. With respect to the importance of moral norms, Manstead (2000), states that; "while entering the moral norm into the regression equation after the standard predictors of the TPB is a good way to assess any additional explanatory power, it is also likely to underestimate the predictive utility of the construct. Furthermore, it is not unusual for the beta weight associated with moral norm to be the highest in the final regression equation, showing that although it may not account for a great deal of explanatory variance, it is in fact a more powerful predictor of intentions than the standard TPB predictors" (p. 27).

 Table 2
 Hierarchical multiple regression

Intention to donate	Model (1) β	Model (2) β	Model (3) β
Attitude	0.83***	0.32**	0.21**
Perceived Behavioral Control	0.33**	0.35***	0.27**
Prescriptive norm	0.20	-0.23	-0.16
Descriptive norm		0.36	0.07
Moral norm		0.83***	0.51***
Past donating behavior			0.49***
N	143	143	143
adj. R^2	0.33	0.57	0.68
Δ adj. R^2		0.24	0.11
F	23.58	38.11	50.23

Standardized beta coefficients; p < 0.05, ** p < 0.01, *** p < 0.001



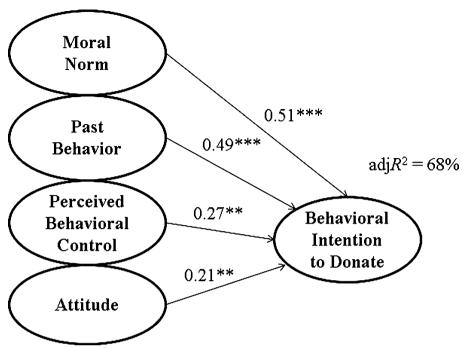


Fig. 2 Results of the revised TPB model. Note: Beta values are taken from the final hierarchical multiple regression. Only significant predictors are included. *p < 0.10, **p < 0.05, ***p < 0.01

This study reveals that, consistent with previous research, moral norms can indeed be regarded as an empirically distinct predictor. Not only did moral norms carry the strongest beta weight (being a more powerful predictor of donating intentions than either attitude or perceived behavioral control), they also accounted for a significant increase in the explained variance of the intention to donate to charity. More specifically, in the current study (after controlling for the other TPB predictors) the variance in charitable intentions that is uniquely explained by moral norms (7%) is higher than what has been reported by previous studies (cf., e.g., Conner and Armitage 1998; Smith and McSweeney 2007).

In fact, the present study indicates that moral norms were the only significant norm-predictor. These results confirm both hypotheses that were stated at the start of this paper; while moral norms explain a significant amount of variance, social norms (both prescriptive and descriptive) do not play a significant role in the formation of charitable intent. These findings are not completely out of line with previous research. For example, both Smith and McSweeney (2007) and White et al. (2009) only found partial evidence for the predictive validity of social norms in morally relevant-behaviors. There are a number of reasons that might explain the difference between findings in the current study and previous research.

To begin with, some authors have suggested that the inclusion of moral norms can force out the significance of subjective norms (e.g., Kurland 1995). Yet, this study found no evidence for the influence of the social norms to begin with (see Table 2). More importantly, in analysing the different dimensions of the measurements used to assess prescriptive social norms it becomes apparent that there is a significant



difference between perceived approval of the behavior and perceived social pressure. In fact, most respondents deemed it very likely that others would approve of them donating to charity in the next 4 weeks while perceived social pressure to engage in charitable behavior was virtually non-existent (as perceived by the respondents). Thus, these dimensions differ conceptually from each other and so their effect on behavioral intention may vary as well.

In particular, external approval is often easier elicited than actual social pressure. Given that 'approval' often tends to be the preferred measure of prescriptive social norms in TPB studies, it is likely that previous studies (e.g., Smith and McSweeney 2007) have possibly overstated the effect of social influences on charitable intentions. Alternatively, the argument might be raised that the reliability coefficient of the overall prescriptive social norm index (.65) used in this study was less than optimal. Yet, none of the measurements used in the current study to assess social norms yielded any predictive validity.

Another possible explanation reverts back to the idea that a significant amount of charitable giving is done privately or anonymously and as discussed earlier, even for some public activities, activation of moral norms is more likely. Furthermore, social expectations to engage in charitable giving do not seem to be explicitly articulated given the relatively low perceived 'social pressure' to engage in the behavior. Similar to the findings of Smith and McSweeney (2007), the current study could not validate the significance of descriptive social norms in the formation of charitable intent either. Smith and McSweeney (2007) also point out that due to the private nature of the behavior people might not be aware of the extent to which referent individuals engage in the target behavior and hence descriptive norms might simply not play a significant role in decisions to give to charity. These results seem to contradict frequent recommendations made on the underappreciated role of descriptive norms as a form of social control (e.g., Cialdini 2005, 2007), where it is assumed that descriptive norms trigger norm-congruent behavior as in; "if a lot of other people are doing it, it is probably a good thing". Having said this, it must also be acknowledged that no efforts were made in the current study to make norms more salient—which is a precondition for social norms to affect behavior, as pointed out by Cialdini et al. (1991). In addition, the argument may be considered that questionnaires are not the only way of assessing social norms, especially given the fact that other (field) studies have shown that people tend to underestimate the extent to which they are subject to social influences (e.g., Schultz et al. 2007; Nolan et al. 2008), possibly undermining the reliability of self-report measures.

Finally, 'Past Behavior' was also found to be a strong significant predictor of the behavioral intention to donate. While Ajzen (1991, 2002) suggests that the interpretation of the role of past behavior must be made with caution, evidence from other disciplines (e.g. Rosen and Sims 2010; Moll et al. 2006) suggests that donating behavior is likely to be a learned and habituated behavior and thus its implication in this study and future works should not be ignored.

In conclusion, this study proposes a different revised TPB model, where; 'Moral Norms', 'Attitude', 'Perceived Behavioral Control' and 'Past Behavior' were all found to be significant predictors of an individual's intention to donate to charity.



Implications

The present study highlights that the Theory of Planned Behavior is a useful framework for better understanding charitable giving intentions. In particular, this study has tested a more integrated model, allowing for a broader investigation into the different social-psychological factors that are likely to predict charitable giving intentions. Empirical identification of the factors that underpin charitable intentions (and possibly behaviors) has important implications for both public (governmental) campaigns and charitable organizations, especially by providing the direction in which future appeals/interventions could be designed. In particular, while past research has emphasized the role of social norms in stimulating pro-social intentions and charitable giving (e.g., Smith and McSweeney 2007), the current TPB study provides no evidence for the role of social norms in the formation of (at least) donating intentions. In light of the method and design of the present research, this of course does not imply that social norms cannot or conclusively do not play a role in charitable behavior. Yet, given that this study provides most support for the prevalence of moral norms as a significant predictor of donating intentions, public campaigns and charitable organizations could pay more attention toward targeting people's sense of moral responsibility toward charitable giving (i.e., "it is the right thing to do" or "we all have a moral obligation to give to the less fortunate") as well as making relevant moral emotions more salient (i.e., eliciting empathy and compassion).

In addition, other significant correlates with intention were, attitude, perceived behavioral control and past behavior. Hence stressing the positive outcomes of charitable giving and enhancing people's perceived sense of control over their donations (e.g., by demonstrating how it positively affects the lives of others) might also prove a fruitful avenue for future interventions. Finally, in light of the current findings and given the nature and development of both habits and moral norms as a product of (social) learning and cultural exposure, perhaps other, long-term methods should also be considered that take into account the pedagogical influence different societal institutions and communities (e.g., family, school, religion) have over teaching, fostering and promoting charitable giving among the general public.

Bob Hope once said; "If you haven't got any charity in your heart, you have the worst kind of heart trouble". While he was probably joking at the time, the empirical evidence seems to agree with Bob Hope. Do people simply give because others are doing so or are their giving intentions rather guided by ingrained moral convictions? Current evidence seems to suggest that the answer points towards the latter.

Strengths, Limitations and Future Research

The current study has a number of strengths. Firstly, the present study constructively builds on previous research that has used the Theory of Planned Behavior to explain charitable giving behavior. Secondly, in order to minimize measurement error and response bias, multi-item scales for all constructs were employed, anonymity was ensured, a number of items were worded negatively and items assessing each construct of the TPB were ordered randomly throughout the questionnaire. Thirdly, the sample employed in this study is more varied compared to previous studies and represents a



more balanced distribution of respondents with religious affiliations. In fact, no evidence was found to suggest that individuals with religious affiliations attach higher importance to moral norms in forming their intention to donate to charity.

However, the present study was of course not without limitations. In particular, the variability in educational background among the respondents was quite low. In fact, the majority of respondents reported to have received higher education. To what extent this might have influenced the results remains unsure. Yet, given the fact that the empirical evidence regarding a possible correlation between higher education and moral reasoning is mixed at best (e.g., see Armon and Dawson 1997) there is no obvious reason to assume that higher educated individuals would necessarily feel a stronger moral obligation to donate to charity.

In addition, a drawback of the current design is that it was not longitudinal in nature, therefore, the predictive role of intentions in actual charitable behavior could not be further investigated. Furthermore, a less than optimal reliability score was obtained for some of the constructs. Future studies could employ more measurements to increase the overall scale reliabilities. In addition, an interesting avenue for future research could be the role of habit in charitable behavior, in particular by conceptualizing it independently from past behavior measures. Finally, as some potential problems have been pointed out regarding the use of regression analysis as a means to test for additional predictors within the TPB (e.g., Trafimow 2004), future research may thus also consider employing other, experimental approaches to investigate the role of social and moral norms in charitable intentions and behavior. In particular, it will be interesting to see if and how manipulation of an individual's moral norm can help stimulate charitable giving.

References

Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50, 179–211.

Ajzen. (2002). Residual effects of past on later behavior. Habituation and reasoned action perspectives. Personality and Social Psychology Review, 6, 107–122.

Ajzen, I. (2006). Theory of planned behavior. Constructing A TPB Questionnaire. Retrieved on December 21st, 2010 from: http://www.people.umass.edu/aizen/pdf/tpb.measurement.pdf.

Albarracín, D., Johnson, B. T., & Zanna, M. P. (2005). The handbook of attitudes. Mahwah: Lawrence Erlbaum.
Armitage, C. J., & Conner, M. (2001). Efficacy of the theory of planned behavior: A meta-analytic review.
British Journal of Social Psychology, 40, 471–499.

Armon, C., & Dawson, T. L. (1997). Developmental trajectories in moral reasoning across the life span. Journal of Moral Education, 26(4), 433–453.

Beck, L., & Ajzen, I. (1991). Predicting dishonest actions using the theory of planned behavior. *Journal of Research in Personality*, 25, 285–301.

Bicchieri, C. (2006). The grammar of society. New York: Cambridge University Press.

Borgloh, S., Dannenberg, A., and Aretz, B. (2010). Small is beautiful: Experimental evidence of donor's preferences for charities. ZEW Discussion Paper, No. 10–052.

Brooks, A. C. (2003). Religious faith and charitable giving. *Policy Review*, 121. Retrieved on November 19th, 2011 from: http://www.hoover.org/publications/policy-review/article/6577.

Brooks, A. C. (2007). Does giving make us prosperous? *Journal of Economics and Finance*, 31(3), 403–411.Burgoyne, C. B., Young, B., & Walker, C. M. (2005). Deciding to give to charity: A focus group study in the context of the household economy. *Journal of Community and Applied Social Psychology*, 15, 383–405.

Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. Psychological Bulletin, 56, 81–105.



- Canadian Centre for Philanthropy (2004). *Understanding Canadian donors: Using the national survey of giving, volunteering and participating to build your fundraising program.* Retrieved on December 19th, 2010, from: www.givingandvolunteering.ca/pdf/reports/Understanding Donors.pdf.
- Charities Aid Foundation (2010). *The world giving index*. Retrieved on August 21nd, 2011, from: https://www.cafonline.org/pdf/WorldGivingIndex28092010Print.pdf.
- Cialdini, R. B. (2005). Basic social influence is underestimated. Psychological Inquiry, 16(4), 158-161.
- Cialdini, R. B. (2007). Descriptive social norms as underappreciated sources of social control. Psychometrika, 72(2), 263–268.
- Cialdini, R. B., Kallgren, C. A., & Reno, R. R. (1991). A focus theory of normative conduct. Advances in Experimental Psychology, 24, 201–234.
- Conner, M., & Armitage, C. (1998). Extending the theory of planned behavior: A review and avenues for further research. *Journal of Applied Social Psychology*, 28, 1429–1464.
- Croson, R., & Shang, J. (2008). The impact of downward social information on contribution decisions. *Experimental Economics*, 11, 221–233.
- Deutsch, M., & Gerard, H. B. (1955). A study of normative and informational influences upon individual judgement. *Journal of Abnormal and Social Psychology*, 51, 629–636.
- Drollinger, T. L. (1998). A multidisciplinary model of monetary donations to charitable organisations. Dissertation Abstracts International: Section B: The Sciences and Engineering, 59, 0458.
- Duncan, B. (2004). A theory of impact philanthropy. Journal of Public Economics, 88, 2159-2180.
- Farrell, A. M. (2009). Insufficient discriminant validity: A comment on Bove, Pervan, Beatty and Shiu. Journal of Business Research, 63(3), 324–327.
- Farrell, A. M. and Rudd, J. M. (2009). Factor analysis and discriminant validity: A brief review of some practical issues. Working Paper: Australia-New Zeeland Marketing Academy Conference (ANZMAC). Melbourne. Australia.
- Festinger, L. (1954). A theory of social comparison processes. Human Relations, 7, 117-140.
- Fishbein, M., & Ajzen, I. (2010). *Predicting and changing behavior: The reasoned action approach*. New York: Psychology Press.
- Frey, B. S., & Meier, S. (2004). Social comparisons and pro-social behavior: Testing "conditional cooperation" in a field experiment. *American Economic Review*, 94, 1717–1722.
- Gorsuch, R. L., & Ortberg, J. (1983). Moral obligation and attitudes: Their relation to behavioral intentions. *Journal of Personality and Social Psychology*, 44, 1025–1028.
- John, O. P., & Benet-Martinez, V. (2000). Measurement: Reliability, construct validation, and scale construction. In H. T. Reis & C. M. Judd (Eds.), *Handbook of research methods in social psychology* (pp. 339–369). New York: Cambridge University Press.
- Kaiser, G. F., Hübner, G., & Bogner, X. F. (2005). Contrasting the theory of planned behavior with the value-belief-norm model in explaining conservation behavior. *Journal of Applied Social Psychology*, 35(10), 2150–2170.
- Krebs, D., and Janicki, M. (2002). Biological foundations of moral norms. In M. Schaller and C. Crandall (Eds.), Psychological Foundations of Culture.
- Kurland, N. B. (1995). Ethical intentions and the theories of reasoned action and planned behavior. *Journal of Applied Social Psychology*, 25, 297–313.
- Lee, L., Piliavin, J. A., & Call, V. R. (1999). Giving time, money, and blood: Similarities and differences. Social Psychology Quarterly, 62, 276–291.
- Manstead, A. S. R. (2000). The role of moral norm in the attitude–behavior relation. In D. J. Terry & M. A. Hogg (Eds.), *Attitude, behavior, and social context: The role of norms and group membership* (pp. 11–30). Mahwah: Erlbaum.
- Martin, R., & Randal, J. (2008). How is donation behavior affected by the donations of others? *Journal of Economic Behavior and Organization.*, 67, 228–238.
- Miller, K. (2005). Communications theories; perspectives, processes, and contexts. New York: McGraw-Hill
- Moll, J., Krueger, F., Zhn, R., Pardini, M., Oliveira-Souze, R., & Grafman, J. (2006). Human frontomesolimbic networks guide decisions about charitable behavior. Proceedings of the National Academy of Sciences of the United States of America, 103, 42.
- Nolan, J. M., Schultz, W., Cialdini, R. B., Goldstein, N. J., & Griskevicius, V. (2008). Normative social influence is underdetected. *Personality and Social Psychology Bulletin*, 34, 913.
- O'Brien, R. M. (2007). A caution regarding rules of thumb for variance inflation factors. *Quality and Quantity*, 41(5), 673–690.
- Ouellette, J. A., & Wood, W. (1998). Habit and intention in everyday life: The multiple processes by which past behavior predicts future behavior. *Psychological Bulletin*, 124(1), 54–74.



- Parker, D., Manstead, A. S. R., & Stradling, S. G. (1995). Extending the theory of planned behavior: The role of personal norm. *British Journal of Social Psychology*, 34, 127–137.
- Pharoah, C., & Tanner, S. (1997). Trends in charitable giving. Fiscal Studies, 18, 427-443.
- Radley, A., & Kennedy, M. (1995). Charitable giving by individuals: A study of attitudes and practice. Human Relations, 48, 685–709.
- Reno, R. R., Cialdini, R. B., & Kallgren, C. A. (1993). The transitional influence of social norms. *Journal of Personality and Social Psychology*, 64, 104–112.
- Rivis, A., & Sheeran, P. (2003). Descriptive norms as an additional predictor in the theory of planned behavior: A meta-analysis. *Current Psychology: Developmental, Learning, Personality, Social, 22*, 218–233.
- Rosen, H. S., and Sims, S. T. (2010). Altruistic behavior and habit formation. Princeton's Center for Economic Policy Studies. Working Paper No. 210.
- Sargeant, A., & Lee, S. (2004). Trust and relationship commitment in the United Kingdom voluntary sector: Determinants of donor behavior. *Psychology and Marketing*, 21, 613–635.
- Schervish, P. G., & Havens, J. (1997). Social participation and charitable giving: A multivariate analysis. Voluntas, 8, 235–260.
- Schultz, W. P., Nolan, J. M., Cialdini, R. B., Goldstein, N. J., & Griskevicius, V. (2007). The constructive, destructive and reconstructive power of social norms. *Psychological Science*, 18(5), 429–434.
- Schwartz, S. H. (1977). Normative influences on altruism. In L. Berkowitz (Ed.), *Advances in experimental social psychology*, 10 (pp. 222–280). New York: Academic.
- Sheeran, P. (2002). Intention-behavior relations: A conceptual and empirical review. In W. Stroebe & M. Hewstone (Eds.), *European review of social psychology* (Vol. 12, pp. 1–30). Chichester: Wiley.
- Smith, J. R., & McSweeney, A. (2007). Charitable giving: The effectiviness of a revised theory of planned behavior model in predicting donating intentions and behavior. *Journal of Community and Applied Social Psychology*, 17, 363–386.
- Stern, P. C., Dietz, T., Abel, T., Guagnano, N., & Kalof, L. (1999). A value-belief-norm theory of support for social movements: The case of environmentalism. *Human Ecology Review*, 6(2), 81–97.
- Sutton, S. (1998). Predicting and explaining intentions and behavior: How well are we doing? *Journal of Applied Social Psychology*, 28, 1317–1338.
- Tangney, J. P., Stuewig, J., & Mashek, D. J. (2007). Moral emotions and moral behavior. Annual Review of Psychology, 58, 345–372.
- Terry, D. J., & Hogg, M. A. (1996). Group norms and the attitude-behavior relationship: A role for group identification. *Personality and Social Psychology Bulletin*, 22, 776–793.
- Trafimow, D. (2004). Problems with change in R2 as applied to theory of reasoned action research. *British Journal of Social Psychology*, 43, 515–530.
- Trafimow, D., & Finlay, K. A. (1996). The importance of subjective norms for a minority of people: Between subjects and within-subjects analyses. *Personality and Social Psychology Bulletin*, 22, 820–828.
- Verplanken, B. (2006). Beyond frequency: Habit as mental construct. British Journal of Social Psychology, 45, 639–656.
- Verplanken, B., & Aarts, H. (1999). Habit, attitude, and planned behavior: Is habit an empty construct or an interesting case of automaticity? European Review of Social Psychology, 10, 101–134.
- Warburton, J., & Terry, D. J. (2000). Volunteer decision making by older people: A test of a revised theory of planned behavior. *Basic and Applied Social Psychology*, 22, 245–257.
- White, M. K., Smith, R. J., Terry, J. D., Greenslade, H. J., & McKimmie, M. B. (2009). Social influence in the theory of planned behavior: The role of descriptive, injunctive and in-group norms. *British Journal of Social Psychology*, 48, 135–138.

