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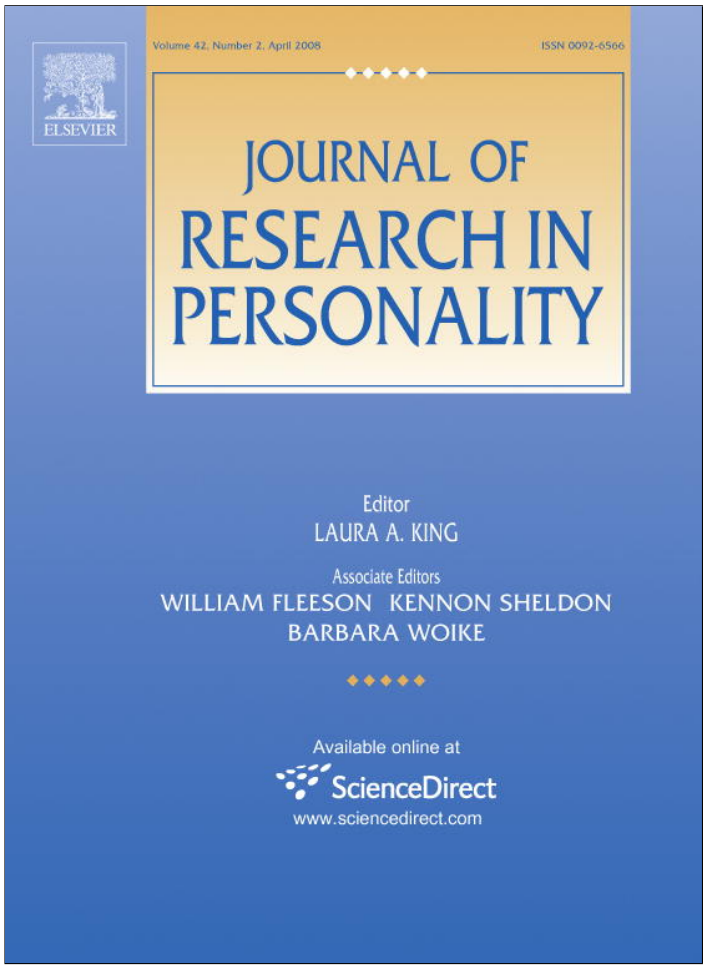

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Pleasure and pressure based prosocial motivation: Divergent relations to subjective well-being ☆

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Abstract

We propose two fundamentally different motives for helping: gaining pleasure and fulfilling one's duty ("pressure"). Using the newly developed Pleasure and Pressure based Prosocial Motivation Scale, we demonstrated the distinctiveness of pleasure and pressure based prosocial motivation in three studies. Although the two motives exhibited different relations to a variety of personality characteristics, they were similarly related to trans-situational helping. Of particular interest, pleasure based prosocial motivation was positively related to self-actualization, self-esteem, life satisfaction, and positive affect and negatively related to negative affect. On the contrary, pressure based prosocial motivation was unrelated to self-actualization, self-esteem, life satisfaction, and positive affect but positively related to negative affect. These results qualify research showing that prosocial life goals generally increase subjective well-being.
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Keywords: Prosocial motivation; Prosocial personality; Altruism; Pleasure; Pressure; Duty

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1. Introduction

Helpful behavior depends on situational variables (e.g., Batson, 1991; Latané & Darley, 1970; Piliavin, Dovidio, Gaertner, & Clark, 1981) and on stable dispositions (e.g., Bierhoff, Klein, & Kramp, 1991; Eisenberg et al., 2002; Penner & Finkelstein, 1998; Staub, 1974). Research on both aspects has raised important questions about *why* people help, with a large amount of debate about whether helpfulness is always motivated by egoistic concerns (e.g., Cialdini, Brown, Lewis, Luce, & Neuberg, 1997) or whether helpfulness can also be an expression of pure selflessness (e.g., Batson, 1998). The present research takes a different perspective on this issue. Specifically, we postulate two broad motives underlying a prosocial orientation as a stable personality variable (i.e., the prosocial personality): *Pleasure* based prosocial motivation and *pressure* based prosocial motivation. In this paper, we introduce a measure of these motives and show that the distinction between the two motivations provides a more complete understanding of the prosocial personality.

1.1. Pleasure and pressure based prosocial motivation

The most frequently mentioned motive in the literature on the motives that underlie the prosocial personality is the motive to gain pleasure from helping. The possibility that a prosocial orientation is motivated by the anticipation of positive affect (pleasure) is acknowledged by virtually all scholars in the field (e.g., Archer, Diaz-Loving, Gollwitzer, Davis, & Foushee, 1981; Batson, 1987; Baumann, Cialdini, & Kenrick, 1981; Cialdini et al., 1997; Harris, 1977; Schaller & Cialdini, 1988; Smith, Keating, & Stotland, 1989; Weiss, Buchanan, Alstatt, & Lombardo, 1971; Williamson & Clark, 1989). Following this research, we call the first motivation that underlies the prosocial personality "pleasure based prosocial motivation". Importantly, the motivation to help others in order to gain pleasure can be contrasted with the motivation to fulfill a duty or conform to a social norm—what we call "pressure based prosocial motivation". For example, Campbell (1975) argues that helping behavior is motivated by pressure from cultural institutions, Rosenhan (1970) proposed a concept called "normative altruism", and Bierhoff et al. (1991) found that people who help in the event of an accident possess a profound sense of duty.

It is of interest that, there are several broader theories on motivation indicating that it may be crucial to distinguish between pleasure and pressure based prosocial motivation. First, the distinction between pleasure and pressure based prosocial motivation is consistent with the long-standing distinction between intrinsic and extrinsic motivation, respectively (e.g., Deci & Ryan, 1985). We conceptualize pleasure based prosocial motivation as more of an intrinsically driven motivation, whereas we conceptualize pressure based prosocial motivation as more extrinsically driven. In addition, Higgins (e.g., 1987, 1989) distinguishes between goals that function as ideals and goals that function as oughts. Ideals are the representation of attributes you would ideally like to possess, whereas oughts are the representation of attributes you feel you should or ought to possess. Further, Higgins (1997) proposed that ideals are associated with a promotion focus (a subjective framing of one's own behavior as approaching), whereas oughts are associated with a prevention focus (a subjective framing of one's own behavior as avoiding). Pleasure based prosocial motivation is conceptualized as involving ideal representations, whereas pressure based prosocial motivation is conceptualized as involving ought representations. Consequently,

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pleasure and pressure based prosocial motivation are conceptualized to be associated with higher promotion and prevention foci, respectively. Finally, the even broader motivational distinction between seeking pleasure and avoiding pain (e.g., Freud, 1920) is another indicator that it may be crucial to distinguish between pleasure and pressure based prosocial motivation. That is, pleasure based prosocial motivation may be a specific instantiation of the search for pleasure, whereas pressure based prosocial motivation may be a specific instantiation of avoiding guilt due to a lack of fulfillment of one's perceived duties.

Although these models of motivation support our claim that pleasure and pressure based prosocial motivation correspond to fundamental dimensions of motivation, our main reason for focusing on these two particular motives is that they may help to explain inconsistent findings in the literature concerning the relations between prosocial motives and subjective well-being. Prosocial goals and values have been assumed to facilitate the satisfaction of fundamental psychological needs, such as relatedness and growth (Deci & Ryan, 1985; Fromm, 1976; Maslow, 1954; Rogers, 1961). The satisfaction of fundamental psychological needs, in turn, should lead to higher subjective well-being (Deci, 1980; Maslow, 1954). Consequently, many researchers have concluded that a prosocial orientation should positively contribute to subjective well-being (see Kasser, 2000, for a review), and many tests have provided evidence that other-oriented life goals are indeed positively related to subjective well-being (Kasser & Ryan, 1993, 1996, 2001; Kasser, Ryan, Zax, & Sameroff, 1995; Ryan, Sheldon, Kasser, & Deci, 1996; Schmuck, 2001; Sheldon & Kasser, 1998). However, Sagiv and Schwartz (2000) failed to find this positive relationship in a large-scale study that tested the relation between subjective well-being and an interpersonal value orientation, which included "helpfulness" as one component (see Schwartz, 1992).

A possible reason for these divergent findings may be that it is crucial to distinguish between pleasure and pressure based prosocial motivation. We showed above that a prosocial orientation is not necessarily intrinsically motivated. Ryan, Deci, and Grolnick (1995) provided evidence that only an intrinsic motivation to achieve one's goals, but not an extrinsic motivation to achieve one's goals, is positively associated with subjective well-being. Deci and Ryan (1995) found similar effects of intrinsic and extrinsic motivation to achieve one's goals on self-esteem. Similarly, if a *prosocial* orientation arises from a sense of duty or pressure, this orientation should not facilitate the satisfaction of innate psychological needs and thus should not cause higher subjective well-being. Indeed, Maslow (1954) assumed that commitment to altruism is a characteristic of self-actualizing people. As a consequence of this relation, we expected a positive relationship between pleasure based prosocial motivation and subjective well-being, which should be mediated by self-actualization. Thus, the second major aim of the current research was to test the hypothesis that pleasure based prosocial motivation, but not pressure based prosocial motivation, is positively related to subjective well-being. Support for this hypothesis would provide an explanation for the incoherent findings in the literature that investigates the relationship between prosocial motives and subjective well-being.

2. Study 1

In Study 1, we tested the Pleasure and Pressure Based Prosocial Motivation Scale (3PMS), a new self-report measure that consists of two subscales measuring pleasure and pressure based prosocial motivation. The first aim of Study 1 was to show that the

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3PMS possesses good psychometric properties. Specifically, we expected that the items of the 3PMS cluster into the two proposed dimensions and that the two subscales possess sufficient internal consistency.

The second aim was to show that both subscales are positively related to trans-situational helping. To measure this trait, we used the most widely used measure to assess the prosocial personality, the Rushton Altruism Scale (RAS; Rushton, Chrisjohn, & Fekken, 1981). The RAS asks respondents to indicate the frequency with which they have performed each of 20 listed behaviors related to helpfulness. Rushton et al. (1981) validated the scale using a number of different criteria (e.g., peer reports) and reported internal consistencies ranging from $\alpha = .78$ to $\alpha = .87$.

As a third aim, we tested the convergent and discriminant validity of the new scale using a broad set of measures that are conceptually related to pleasure and pressure based prosocial motivation. Our predictions were based on the assumption that pleasure based prosocial motivation is a more intrinsic motive, whereas pressure based prosocial motivation is more extrinsic. For example, we expected that pleasure based prosocial motivation, but not pressure based prosocial motivation, would be associated with higher levels of subjective-well being, because internal motivations are presumed to cause greater self-actualization, which is related to subjective well-being (e.g., Maslow, 1962, 1970).

In addition, we expected that people who are high in pressure based prosocial motivation exhibit higher levels of personal need for structure and preference for consistency. These constructs reflect desires for internal cognitive consistency, which are maximized when people behave in accordance with internal values, beliefs, and attitudes. "Duty" or "pressure" in general can reflect such a commitment, in addition to reflecting external obligations (cf. Trafimow & Trafimow, 1999). Consistent with this view, Heine, Proulx, and Vohs (2006) recently argued that acting in line with moral norms is a way to satisfy one's need for consistency and structure. Thus, people with strong needs for consistency and structure should be highly motivated to fulfill moral duties, such as helpfulness, to satisfy their needs for consistency and structure (for a review see Cross, Gore, & Morris, 2003).

Finally, we assessed the criterion validity of the Pleasure based Prosocial Motivation subscale by examining its ability to predict self-reported pleasure experienced directly after helpful behavior. Because the studies reported in this paper were conducted online and were not financially rewarded, participation in our studies was itself a helpful behavior. To make this aspect salient, we informed our participants in Study 1 that the research project was being conducted by an undergraduate student, who could not afford the money to pay participants, which was actually the case. We hypothesized that participants high in pleasure based prosocial motivation experience more enjoyment of the study, whereas pressure based prosocial motivation is unrelated to study enjoyment.

2.1. Method

2.1.1. Participants

Five hundred and ninety two (441 women, 138 men, and 13 unknown) participants completed this online-study (http://www.online-studies.org). The study was advertised on John Krantz's web portal for online-studies—"Psychological Research on the Net" (http://psych.hanover.edu/research/exponnet.html). The mean age of the participants was 25.50 years ($SD = 9.41$). Four hundred and fifty two participants were from North

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Table 1
Descriptive statistics and internal consistencies of Studies 1, 2, and 3

Measure	*M*	*SD*	α
Study 1			
Prosocial personality	2.60	.65	.89
Pleasure based prosocial motivation	4.83	1.00	.80
Pressure based prosocial motivation	4.17	.97	.70
Self-actualization	4.41	.75	.84
Self-esteem	4.27	.87	.92
Positive affect	3.34	.61	.76
Negative affect	2.71	.70	.81
Preference for consistency	3.26	.84	.87
Personal need for structure	3.73	.76	.86
Study enjoyment	3.52	1.12	
Study 2			
Prosocial personality	4.57	.89	.67
Pleasure based prosocial motivation	5.41	1.11	.76
Pressure based prosocial motivation	3.95	1.17	.57
Life-satisfaction	4.58	1.45	.90
Interdependent self-construal	4.12	.76	.67
Independent self-construal	4.91	.77	.67
Study 3			
Prosocial personality	4.61	.98	.72
Pleasure based prosocial motivation	5.15	1.37	.86
Pressure based prosocial motivation	3.69	1.40	.77
Attachment anxiety	3.64	1.03	.83
Attachment avoidance	4.21	.93	.73

America, 50 from Europe, 16 from Asia, 10 from Australia, 9 from Middle or South America, 3 from Africa, and 36 from elsewhere on the world (16 unknown). One hundred and fifty eight participants possessed a college or university degree, 421 did not possess such a degree, and 13 did not indicate whether or not they possessed a degree. Five hundred and sixteen participants indicated that English is their first language, 63 indicated that English is not their first language, and 13 did not respond to this item.

2.1.2. Procedure

The language of the study was English. Participants completed questionnaires assessing self-esteem, preference for consistency, personal need for structure, subjective well-being, self-actualization, the prosocial personality, pleasure and pressure based prosocial motivation, and study enjoyment, in the listed order. Participants then read a feedback letter and were thanked for their participation. The descriptive statistics and internal consistencies of the measures are reported in Table 1. The internal consistencies were satisfactory.

2.1.2.1. Self-esteem. The Self-Liking/Self-Competence Scale—Revised Version (Tafarodi & Swann, 2001) contains an 8-item Self-Liking subscale and an 8-item Self-Competence subscale. Example items for the Self-Liking subscale are "I am very comfortable with myself" and "I feel great about who I am." Example items for the Self-Competence subscale are "I am highly effective at the things I do" and "I am very talented." Participants

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responded to each item using a 5-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). As in previous research (e.g., Bernard, Gebauer, & Maio, 2006; Verplanken, Friborg, Wang, Trafimow, & Woolf, 2007), the two subscales were averaged to create a global self-esteem score.

2.1.2.2. Preference for consistency. The short form of the Preference for Consistency Scale (Cialdini, Trost, & Newsom, 1995) contains 9 items. Example items are "It is important to me that those who know me can predict what I will do" and "I make an effort to appear consistent to others". Participants responded to each item using a 5-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

2.1.2.3. Personal need for structure. The Personal Need for Structure Scale (Thompson, Naccarato & Parker, 1992, as reported in Neuberg & Newsom, 1993) contains 12 items. Example items are "I enjoy having a clear and structured mode of life" and "I become uncomfortable when the rules in a situation are not clear." Participants responded to each item using a 5-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

2.1.2.4. Subjective well-being. The PANAS (Watson, Clark, & Tellegen, 1988) contains a 10-item Positive Affect subscale and a 10-item Negative Affect subscale. Example items for the Positive Affect subscale are "enthusiastic" and "active." Example items for the Negative Affect subscale are "upset" and "ashamed." Participants indicated whether or not "I generally feel this way..." using a 5-point scale ranging from 1 (*very slightly or not at all*) to 5 (*extremely*).

2.1.2.5. Self-actualization. The Self-Actualization Index (Jones & Crandall, 1986) contains 15 items, such as "It is better to be yourself than to be popular" and "I can express my feelings even when they may result in undesirable consequences." Participants responded to each item using a 5-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

2.1.2.6. Prosocial personality. The Rushton Altruism Scale (Rushton et al., 1981) contains 20 items, such as "I have given money to a charity" and "I have helped carry a stranger's belongings (books, parcels, etc.)." Participants responded to each item using a 5-point scale ranging from 1 (*never*) to 5 (*very often*).

2.1.2.7. Pleasure and pressure based prosocial motivation. The Pleasure and Pressure based Prosocial Motivation Scale (3PMS) contains a 4-item Pleasure based Prosocial Motivation subscale and a 4-item Pressure based Prosocial Motivation subscale with two reverse-scored items per subscale. The items were formulated for this study. Participants responded to each item using a 5-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The items are listed in Table 2. The items were presented in the same order as shown in Table 2.

2.1.2.8. Study enjoyment. To assess the pleasure caused by participating in the current study, we asked participants, "Did you enjoy this study?" Participants responded to this item using a 5-point scale ranging from 1 (*not at all*) to 5 (*very much*). Most participants reported moderate amounts of pleasure from participation (see Table 1).

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Table 2
Items of the Pleasure and Pressure based Prosocial Motivation Scale (3PMS)

Subscale	Item
Pleasure	Supporting other people makes me very happy.
Pressure	I do not feel obligated to perform selfless acts towards others. (R)
Pleasure	I do not have a great feeling of happiness when I have acted unselfishly. (R)
Pressure	I feel indebted to stand up for other people.
Pleasure	When I was able to help other people, I always felt good afterwards.
Pressure	I do not regard it as my duty to act selflessly. (R)
Pleasure	Helping people who are doing not well does not raise my own mood. (R)
Pressure	I feel a strong duty to help other people in every situation where it is possible for me.

Note. Pleasure, pleasure based prosocial motivation; pressure, pressure based prosocial motivation; R, reverse scoring.

2.2. Results and discussion

2.2.1. Zero-order correlations

The zero-order correlations between all measures are reported in Table 3. The inter-correlations between the measures were small to moderate.

Table 3
Inter-correlations between all measures used in Studies 1, 2, and 3

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Study 1									
(1) Prosocial personality	—								
(2) Pleasure motivation	.45**	—							
(3) Pressure motivation	.39**	.58**	—						
(4) Self-actualization	.48**	.60**	.40**	—					
(5) Self-esteem	.25**	.24**	.11**	.50**	—				
(6) Positive affect	.39**	.37**	.29**	.46**	.42**	—			
(7) Negative affect	.09*	.08^{ns}	.22**	−.06^{ns}	−.35**	.32**	—		
(8) Pref. for consistency	.15**	.15**	.24**	.02^{ns}	.14**	.20**	.12**	—	
(9) Need for structure	.08^{ns}	.18**	.24**	.08*	−.05^{ns}	.14**	.27**	.58**	—
(10) Study enjoyment	.26**	.30**	.23**	.31**	.13**	.26**	.07^{ns}	.16**	.13**
Study 2									
(1) Prosocial personality	—								
(2) Pleasure motivation	.37**	—							
(3) Pressure motivation	.34**	.31**	—						
(4) Life satisfaction	−.06^{ns}	.23**	−.04^{ns}	—					
(5) Interdependence	.19*	.25*	.30**	−.07^{ns}	—				
(6) Independence	−.06^{ns}	.11^{ns}	.15^{ns}	.35**	−.09^{ns}	—			
Study 3									
(1) Prosocial personality	—								
(2) Pleasure motivation	.58**	—							
(3) Pressure motivation	.44**	.43**	—						
(4) Attachment anxiety	−.11^{ns}	−.29*	−.16^{ns}	—					
(5) Attachment avoidance	−.19^{ns}	−.27*	−.02^{ns}	.12^{ns}	—				

Note. $^{**}p < .01$, $^{*}p < .05$, $^{ns}p > .05$.

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2.2.2. Psychometric properties

Our first aim was to show that a two-dimensional model of the motivation underlying a prosocial orientation (pleasure and pressure) fits the data. As expected, a confirmatory factor analysis revealed that our two factor model fits the data well, CFI = .95; RMR = .08; CMIN = 83.07, and revealed a significantly better fit than a one factor solution ($chi^2 = 122.63$, $p < .0001$).[1] The two factors correlated at $r = .52$, $p < .01$.[2] Furthermore, the internal consistencies of the two subscales (α [Altruism Pleasure] = .80, α [Altruism Pressure] = .70) were good.

2.2.3. Relation to the prosocial personality

We conducted a multiple regression analysis to examine the amount of variance of the prosocial personality that was uniquely predicted by pleasure and by pressure based prosocial motivation. The upper part of Table 2 shows the results of this analysis. As expected, pleasure and pressure based prosocial motivation were significant independent predictors of increased trans-situational helping (as indexed by the RAS).

2.2.4. Convergent and discriminant validity

We conducted a series of multiple regression analyses to examine the extent to which pleasure and pressure based prosocial motivation uniquely explained variance in each of the following criterion variables: (a) self-actualization, (b) self-esteem, (c) positive affect, (d) negative affect, (e) preference for consistency, (f) personal need for structure, and (g) study enjoyment. As can be seen in Table 4, pleasure based, but not pressure based, prosocial motivation was positively related to self-actualization, self-esteem, and positive affect and it was negatively related to negative affect. In contrast, pressure based, but not pleasure based, prosocial motivation was positively related to negative affect and needs for consistency and structure. Finally, pleasure based, but not pressure based, prosocial motivation was positively related to enjoying participation in the study.

Our prediction of the positive relationship between pleasure based prosocial motivation and higher subjective well-being as well as higher self-esteem was based on the hypothesis that pleasure based prosocial motivation affects self-actualization, which in turn should increase subjective well-being and self-esteem. We tested this assumption using the mediation analysis recommended by Baron and Kenny (1986). Necessary conditions for mediation are that the independent variable (pleasure based prosocial motivation) correlates with the mediator (self-actualization) and that the mediator correlates with the outcome

[1] In this model, we expected the error variances of the two reverse-scored as well as the two non-reverse scored items of each factor to be related because of common method variance (Marsh, 1996).

[2] The correlation between the two subscales was not theoretically expected but was expected to occur based on methodological issues. First, given that the items of the two subscales were intermixed, it is likely that carryover effects occurred. Second, participants may have tried to be as consistent in their answers as possible because they may have incorrectly perceived the scale as a one-dimensional scale. Third, participants' responses may have been partially based on self-perception (Bem, 1967; Bem, 1972). That is, participants may have, to a certain extend, reasoned that they must be motivated to help others by seeking pleasure and by feeling pressure because they show helpful behaviour. The positive relation between the subscales is however not problematic at all. First, the relation is only moderate, and second, when testing the relation between one motivation and its correlate we control for the other motivation and thus partial out the method based overlap between the two motivations (for identical issues and identical solution to these issues, see Brennan, Clark, & Shaver, 1998; Tafarodi & Swann, 2001).

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Table 4
Standardized regression coefficients (βs) of pleasure and pressure based prosocial motivation on the criterion variables of Studies 1, 2, and 3

Criterion	Predictors	
	Pleasure	Pressure
Study 1		
Prosocial personality	.34***	.19***
Self-actualization	.56***	.07ns
Self-esteem	.27***	−.05ns
Positive affect (controlling for Negative affect)	.32***	.04ns
Negative affect (controlling for Positive affect)	−.18***	.23***
Preference for consistency	.01ns	.23***
Personal need for structure	.06ns	.20***
Study enjoyment	.26***	.07ns
Study 2		
Prosocial personality	.29***	.25**
Life satisfaction	.27**	−.13ns
Interdependent self-construal (controlling for independent self-construal)	.18*	.24**
Independent self-construal (controlling for interdependent self-construal)	.06ns	.13ns
Study 3		
Prosocial personality	.48***	.24*
Attachment anxiety (controlling for attachment avoidance)	−.23*	−.11ns
Attachment avoidance (controlling for attachment anxiety)	−.22*	.04ns

Note. The predictors were entered simultaneously in the regression.
Pleasure, pleasure based prosocial motivation; pressure, pressure based prosocial motivation.
* $p < .05$.
** $p < .01$.
*** $p < .001$.
ns $p > .05$.

variable (subjective well-being or self-esteem). As shown in Table 1, these conditions were met. An additional condition is that the relationship between the independent variable and the outcome variable is significantly reduced when the mediator is controlled. Satisfying this condition, when pleasure based prosocial motivation and self-actualization were simultaneously regressed on subjective well-being or self-esteem, the effects of pleasure based prosocial motivation on positive affect, negative affect, and self-esteem were nonsignificant, $\beta(591) = .09$, *ns*, $\beta(591) = -.01$, *ns*, and $\beta(591) = -.04$, *ns*, respectively. The Sobel test (Sobel, 1982) revealed that these relationships were significantly weaker than the zero-order effects for positive affect, $z = 6.86$, $p < .001$, for negative affect, $z = -3.66$, $p < .001$, and for self-esteem, $z = 9.31$, $p < .001$. In contrast, the effects of pleasure based prosocial motivation on self-actualization remained significant after controlling for positive affect, $\beta(591) = .48$, $p < .001$, for negative affect, $\beta(591) = .55$, $p < .001$, and for self-esteem, $\beta(591) = .36$, $p < .001$. Thus, these analyses supported the assumption that pleasure based prosocial motivation affects self-esteem and subjective well-being through its effect on self-actualization.

We wanted to conduct one final set of analyses to test an alternative explanation for the relation between pleasure based prosocial motivation and (a) self-actualization, (b) self-esteem, and (c) study enjoyment. Specifically, it is possible that the relations between pleasure based prosocial motivation and these variables are not due to a positive effect of

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pleasure based prosocial motivation on these variables, but instead that the relations are actually spurious ones, which are caused by positive affect. In fact, the mood-as-information hypothesis (Schwarz & Clore, 1983) predicts that one source of information on which people base their self-evaluations is their current mood. That is, people in a positive mood should judge themselves as more self-actualized, as higher in self-esteem, as enjoying the study more, and also as enjoying helping in general more. In line with the mood-as-information hypothesis, we found that positive affect related positively to self-actualization, self-esteem, and study enjoyment (see Table 3). However, does positive affect completely account for the relationship between pleasure based prosocial motivation and its criterion variables? To test this alternative hypothesis, we conducted three multiple regression analyses with pleasure based prosocial motivation as the predictor and (a) self-actualization, (b) self-esteem, and (c) study enjoyment as the criterion variables, respectively. Crucially, in all three analyses we controlled for positive affect and pressure based prosocial motivation. The results of the multiple regression analyses do not support the alternative hypothesis. In fact, the effects of pleasure based prosocial motivation on self-actualization, $\beta(591) = .48$, $p < .001$, self-esteem, $\beta(591) = .15$, $p < .001$, and study enjoyment, $\beta(591) = .21$, $p < .001$, all remained highly significant.

2.2.5. Summary

People high in trans-situational helping (as indexed by the RAS) exhibit higher levels of both pleasure and pressure based prosocial orientation. This result supports our hypothesis that both motives underlie the prosocial personality. The data also support our hypothesis that prosocial goals and values are not necessarily associated with high subjective well-being and self-esteem. As expected, only pleasure but not pressure based prosocial motivation, was positively associated with subjective well-being and self-esteem. In addition, participants who were high in pressure based prosocial motivation exhibited more negative affect and higher needs for consistency and structure. Furthermore, as predicted, only pleasure but not pressure based prosocial motivation was positively associated with study enjoyment. Moreover, we found that self-actualization completely mediated the relationship between pleasure based prosocial motivation and subjective well-being as well as self-esteem. These results are consistent with Maslow's (1962, 1970) assumption that intrinsic motivation leads to higher levels of self-actualization, which leads to higher subjective well-being. Finally, we provided evidence against the alternative explanation that the relations between pleasure based prosocial motivation and (a) self-actualization, (b) self-esteem, and (c) study enjoyment are spurious ones, which are due to an effect of positive affect on all of these constructs (cf. Schwarz & Clore, 1983).

3. Study 2

Study 2 addressed three goals. The first goal was to replicate the finding of Study 1 that both prosocial motivations predict the prosocial personality. The second goal was to further investigate the divergent relationship between the two prosocial motivations and subjective well-being. Diener (1984) distinguished between an affective and a cognitive component of subjective well-being. In Study 1, we focused solely on the affective component by assessing subjective well-being with the PANAS. In Study 2, we therefore decided

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to focus on the cognitive component of subjective well-being, namely life satisfaction (e.g., Diener & Diener, 1995).

Study 2 also examined a potential cause of pleasure and pressure based prosocial motivation. People with a strong interdependent self-construal perceive themselves primarily in relation to other people (e.g., Markus & Kitayama, 1991). Helping other people should be perceived as both a pleasure and a duty for people with an *interdependent* self-construal. On the one hand, they should regard helping as a pleasure because it fosters feelings of closeness to others. On the other hand, they should regard helping as a duty because people with an interdependent self-construal in general emphasize norms and duties as guiding principles for their behavior (e.g., Lee, Aaker, & Gardner, 2000; Triandis, 1995). In contrast, it is more difficult to predict a clear pattern of relations between pleasure and pressure based prosocial motivation and an *independent* self-construal, which is the tendency to perceive oneself primarily as an individual that is independent from or different to other people (e.g., Markus & Kitayama, 1991). The reason for this difficulty is that there are theoretical reasons to expect a negative as well as a positive relationship between pleasure and pressure based prosocial motivation and an independent self-construal. On the one hand, an independent self-construal is associated with a stronger concern for the self (i.e., self-promotion rather than other-promotion; e.g., Markus & Kitayama, 1991). Thus, people with a strong independent self-construal may neither gain pleasure from helping others, nor may they feel any duty to help others. On the other hand, given that helpfulness is at least in many cases associated with egoistic concerns (e.g., Cialdini et al., 1997), people with a strong independent self-construal may be motivated to help in situations where helping promotes the self. Following this rationale, a positive relationship between an independent self-construal and our prosocial motivations would be expected. Taken together, we did not formulate a specific hypothesis concerning the relationship between our prosocial motivations and an independent self-construal. However, our theoretical analysis makes it appear likely that the expected opposing effects result in null relations between the two prosocial motivations and an independent self-construal.

3.1. Method

3.1.1. Participants

One hundred and fifty-five (109 women and 46 men) participants completed this online-study (http://www.online-studies.org). The study was advertised on Ulf Reips's web portal for online-studies—"Web Experimental Psychology Lab" (http://www.psychologie.unizh.ch/sowi/Ulf/Lab/WebExpPsyLab.html). The mean age of the participants was 28.07 years ($SD = 8.82$). No data about nation of origin, education, and language were collected for this study.

3.1.2. Procedure

The language of the study was German. Participants completed questionnaires assessing life satisfaction, the prosocial personality, pleasure and pressure based prosocial motivation, and self-construal, in the listed order. Participants then read a feedback letter and were thanked for their participation. The measures of pleasure and pressure based prosocial motivation were the same as in Study 1. The remaining measures are described below. The descriptive statistics and internal consistencies of the measures are reported in Table 1.

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Inspection of the table reveals that most of the internal consistencies were satisfactory or good[3].

3.1.2.1. Life satisfaction. The Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985) contains 5 items. Example items are "In most ways my life is close to my ideal" and "If I could live my life over, I would change almost nothing." Participants responded to each item using a 7-point scale ranging from 1 (*applies not at all*) to 7 (*applies completely*).

3.1.2.2. Prosocial personality. The Prosocial Motivation Questionnaire (Claar, Boehnke, & Silbereisen, 1984) was designed and validated for assessing a prosocial orientation in German and Polish high school students.[4] We used a short form of the scale by deleting those items that can only be applied to high school students. Example items from the remaining 9-item short form are "I never give money to charity collections on the street" (reverse-scored) and "I refuse to help people I don't know" (reverse-scored). Participants responded to each item using a 7-point scale ranging from 1 (*applies not at all*) to 7 (*applies completely*).

3.1.2.3. Self-construal. The Independent-Interdependent Self-Construal Scale (Singelis, 1994) contains a 12-item Independent Self-Construal subscale and a 12-item Interdependent Self-Construal subscale. Example items for the Independent Self-Construal subscale are "I am comfortable with being singled out for praise or rewards" and "I act the same way no matter who I am with." Example items for the Interdependent Self-Construal subscale are "I have respect for the authority figures with whom I interact" and "My happiness depends on the happiness of those around me." Participants responded to each item using a 7-point scale ranging from 1 (*applies not at all*) to 7 (*applies completely*).

3.2. Results and discussion

3.2.1. Zero-order correlations

The zero-order correlations between all measures are reported in Table 3. The inter-correlations between the measures were small to moderate.

3.2.2. Independent effects of pleasure and pressure based prosocial motivation

We conducted a series of multiple regression analyses to examine the extent to which pleasure and pressure based prosocial motivation uniquely predict the following criterion variables: (a) the prosocial personality, (b) subjective well-being, and (c) self-construal. The results are shown in Table 4 and described below.

[3] The internal consistency of the Pressure based Prosocial Motivation subscale of the 3PMS is rather low in this sample. However, it is adequate in Study 3, which uses the same German version of the 3PMS. Taken Studies 2 and 3 together, the internal consistency of the 3PMS is $\alpha = .65$, which is comparable to the internal reliability of the English version of the Pressure based Prosocial Motivation subscale of the 3PMS ($\alpha = .70$). Comparability of the internal consistencies is an important indicator of the similarity of the two translations of the 3PMS. Further, it speaks for the suitability of the 3PMS in both languages that the internal consistencies of the Pleasure based Prosocial Motivation subscales are similar (both $\alpha = .80$). Finally, the fact that we found similar relations between the 3PMS and the prosocial personality and subjective well-being across both languages gives further credence to the suitability of both translations of the 3PMS.

[4] Despite its title, none of the items actually pertain to motivation per se.

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3.2.2.1. Replication of relation with the prosocial personality. A multiple regression analysis examined the unique effects of pleasure and pressure based prosocial motivation on the prosocial personality. Consistent with Study 1, both motivations were significant independent predictors of the prosocial personality, despite the use of a different measure of the prosocial personality and the different cultural context (see Table 4).

3.2.2.2. Relation to subjective well-being. We used a similar regression analysis to examine the ability of pleasure and pressure based prosocial motivation to independently predict life satisfaction. Only pleasure but not pressure based prosocial motivation was positively related to life satisfaction (see Table 4). This result replicates Study 1 for a cognitive, rather than an affective, component of subjective well-being.

3.2.2.3. Relation to self-construal. As shown in Table 4, we found that both pleasure and pressure based prosocial motivation were positively related to an interdependent self-construal and unrelated to an independent self-construal.

4. Study 3

Study 3 further examines the role of significant others in the motivations underlying the prosocial personality. Recently, Mikulincer, Shaver, and colleagues (Gillath, Shaver, & Mikulincer, 2005; Gillath et al., 2005; Mikulincer, Shaver, Gillath, & Nitzberg, 2005; for a review see Mikulincer & Shaver, 2005) have repeatedly demonstrated that secure attachment increases helpfulness. Attachment theory (Bowlby, 1982/1969) assumes that early childhood interactions result in two types of mental representations, called working model of the self (or attachment anxiety; see Brennan et al., 1998) and working model of others (or attachment avoidance; see Brennan et al., 1998). Secure attachment is characterized by the simultaneous presence of low attachment anxiety and low attachment avoidance (i.e., positive working models of the self and others). As such, Mikulincer and Shaver (2005) have argued that securely attached people should have more resources available to help others than people who are insecurely attached. This should simply be the case because securely attached people are less anxious and avoidant and thus should be less concerned about their own security. In this vein, it is interesting to test whether secure attachment is associated with pleasure and pressure based prosocial motivation. Because securely attached people have positive emotions toward other people, securely attached people should gain pleasure from helping others. Therefore, we hypothesize a positive relationship between secure attachment and pleasure based prosocial motivation. However, there is no reason to assume that securely attached people should feel more or less duty to help others. Thus, we hypothesize no relationship between secure attachment and pressure based prosocial motivation.

4.1. Method

4.1.1. Participants

Eighty (57 women and 23 men) participants completed this online-study (http://www.online-studies.org). The study was also advertised on Ulf Reips's web portal for online-studies—''Web Experimental Psychology Lab''. The mean age of the participants was 27.93 years ($SD = 7.83$).

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4.1.2. Procedure

The language of the study was German. Participants completed questionnaires assessing attachment, the prosocial personality, and pleasure and pressure based prosocial motivation, in the listed order. Finally, participants read a feedback letter and were thanked for their participation. The measures of the prosocial personality, and pleasure and pressure based prosocial motivation were the same as in Study 2. The measure of attachment is described below. The descriptive statistics and internal consistencies of the measures are reported in Table 1. Most of the internal consistencies were satisfactory.

4.1.2.1. Attachment. The Experiences in Close Relationships Questionnaire (Brennan et al., 1998) contains an 18-item subscale assessing attachment anxiety and an 18-item subscale assessing attachment avoidance. Example items for the Attachment Anxiety subscale are "I worry about being abandoned" and "I worry a lot about my relationships". Example items for the Attachment Avoidance subscale are "I prefer not to be too close to romantic partners" and "I prefer not to show a partner how I feel deep down". Participants responded to each item using a 7-point scale ranging from 1 (*applies not at all*) to 7 (*applies completely*). Secure attachment is characterized by the simultaneous presence of low scores of attachment anxiety and attachment avoidance (Brennan et al., 1998).

4.2. Results and discussion

4.2.1. Zero-order correlations

The zero-order correlations between all measures are reported in Table 3. The inter-correlations between the measures were small to moderate.

4.2.2. Independent effects of pleasure and pressure based prosocial motivation

We conducted two multiple regression analyses to examine the extent to which pleasure and pressure based prosocial motivation uniquely predict the following criterion variables: (a) the prosocial personality, (b) secure attachment. The results are shown in Table 4 and described below.

4.2.2.1. Replication of relation with the prosocial personality. A multiple regression analysis examined the unique effects of pleasure and pressure based prosocial motivation on the prosocial personality. Consistent with Studies 1 and 2, both motives were significant independent predictors of the prosocial personality (see Table 3).

4.2.2.2. Relation to secure attachment. Using the same regression procedure as above, we found that pleasure but not pressure based prosocial motivation was negatively related to attachment anxiety and avoidance. These results are consistent with the claim that pleasure but not pressure based prosocial motivation is influenced by secure attachment.

5. Gender and age differences in pleasure and pressure based prosocial motivation across studies

The final goal of the present research was to explore gender and age differences in the two motivations to help. We decided to test gender and age differences in pleasure and pressure based prosocial motivation across all three studies because of the relatively small

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number of male participants in each study. Analyzing the data from our three studies together resulted in a sample size of 812 participants (596 women, 203 men, and 13 unknown). The mean age of the participants was $M = 26.22$ ($SD = 9.27$). We had no specific hypotheses concerning gender and age differences in the two motivations to help.

A MANOVA with gender as the sole factor and pleasure and pressure based prosocial motivation as the two dependent variables revealed that women scored significantly higher than men on pleasure, $F(2, 797) = 18.39$, $p < .001$, and pressure, $F(2, 797) = 6{,}43$, $p < .05$, based prosocial motivation. Age was unrelated to pleasure, $r(797) = -.03$, *ns*, and pressure, $r(797) = .00$, *ns*, based prosocial motivation.

The finding that women scored higher on pleasure as well as on pressure based prosocial motivation is consistent with the prior literature on gender differences in helping behavior. Eagly (1987) has shown that common gender stereotypes portray women as more altruistic than men. Indeed, an empirical review of the relation between gender and empathy found that women are more empathic then men (Eisenberg & Lennon, 1983; Lennon & Eisenberg, 1987). Empathy, in turn, has been shown to be a strong predictor of prosocial behavior (e.g., Batson, 1991; Cialdini et al., 1997). Moreover, Bybee (1998) reported evidence that women score higher on guilt feelings than men. Given that a feeling of duty might arise from a generalized feeling of guilt, Bybee's findings suggest that women may also score higher on pressure based prosocial motivation than men.

6. General discussion

Although there is considerable evidence for the prosocial personality (e.g., Bierhoff et al., 1991; Eisenberg et al., 2002; Penner & Finkelstein, 1998; Staub, 1974), there have been relatively few analyses of the motivational underpinnings of this trait. We have proposed that different motivations underlie the prosocial personality and that these different motivations, in turn, are associated with different personality variables. In this context, we derived two general motivations underlying the prosocial personality by reviewing the literature on the more specific motivations to help. As explained in the Introduction, pleasure and pressure based prosocial motivation fit with more general distinctions between two types of self-guides (Higgins, 1987, 1989), self-regulatory orientations (promotion vs. prevention, Higgins, 1997), the distinction between intrinsic and extrinsic motivation (Deci & Ryan, 1985), and the distinction between seeking pleasure and avoiding pain (Freud, 1920). In Study 1, we confirmed the postulated dimensionality of our new measure of these motives and provided evidence for internal consistency and convergent and discriminant validity of each subscale. Specifically, we found that people who reported a high pleasure based prosocial motivation exhibited higher levels of self-actualization, self-esteem, positive affect, and lower levels of negative affect, whereas pressure based prosocial motivation was unrelated to self-actualization, self-esteem, and positive affect and it was positively related to negative affect. This pattern is consistent with the assumption that pleasure based prosocial motivation is more of an intrinsic (vs. extrinsic) motivation than pressure based prosocial motivation. Study 1 also showed that the relations between pleasure based prosocial motivation and subjective well-being and self-esteem were completely mediated by self-actualization, a finding that supports our hypothesis that pleasure based prosocial motivation is related to intrinsic motivation. These findings qualify past evidence that a prosocial orientation is necessarily positively associated with higher subjective well-being (Kasser & Ryan, 1993, 1996, 2001; Kasser et al., 1995; Ryan et al., 1996; Schmuck,

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2001; Sheldon & Kasser, 1998; see Kasser, 2000, for a review). Our findings indicate that this relation is caused by those individuals who help for reasons of pleasure, rather than pressure.

Crucially, our finding that only pleasure but not pressure based prosocial motivation was positively related to subjective well-being may explain why some researchers failed to find a relation between a prosocial orientation and high subjective well-being. For example, Sagiv and Schwartz (2000) did not find a positive relationship between an interpersonal social value orientation (e.g., helpfulness) and subjective well-being. One reason for the inconsistencies between the findings on the relations between *prosocial goals* (Kasser & Ryan, 1993, 1996, 2001; Kasser et al., 1995; Ryan et al., 1996; Schmuck, 2001; Sheldon & Kasser, 1998; see Kasser, 2000, for a review) and *prosocial values* (Sagiv & Schwartz, 2000) may be that prosocial goals are more intrinsically-driven ideals, whereas prosocial values are more extrinsically-driven oughts. Indeed, Rees and Maio (2006) asked participants to rate the extent to which they hold diverse social values as oughts and ideals. Results indicated that values emphasizing openness to novelty (e.g., freedom) were more strongly held as ideals than as oughts, whereas this was not true for values emphasizing benevolence (e.g., helpfulness), despite being rated as similar in importance. The studies by Rees and Maio suggest that benevolence values functioned more as ideals only when they were held as *the most important* values, which was true only for the minority of participants.

Studies 2 and 3 shed some light on possible determinants of pleasure and pressure based prosocial motivation. As expected, we found that people high in pleasure and pressure based prosocial motivation were more likely to possess an interdependent self-construal. Further, we found that more securely attached participants scored higher on pleasure but not on pressure based prosocial motivation. We expected this pattern of findings because of the more general principle that people tend to derive more satisfaction from being with others when they feel *connected* to them and *like* them. This principle is evident in abundant research on effects of commitment and satisfaction in close relationships (for a review see Fletcher, 2002) and effects of identification and cohesion in groups (e.g., Shah, Kruglanski, & Thompson, 1998).

We understand the current studies as a mere start in exploring pleasure and pressure based prosocial motivation. Thus, they leave a number of questions unanswered, which suggest themselves as topics for future research. For example, we proposed above that empathy is a precondition for pleasure based prosocial motivation, but that empathy is unrelated to pressure based prosocial motivation. This hypothesis has not been tested yet, although the gender difference we obtained is consistent with this hypothesis. Further, more research is needed to better connect pleasure and pressure based prosocial motivation to existing constructs in the more specific helpfulness literature and to the well-established research in the broader motivation literature. That is, on the one hand, in the Introduction we have proposed that our measure does not only assess the motivation underlying very specific types of helpfulness behavior (e.g., volunteerism) but that it is broader in a sense and thus assesses prosocial motivation more generally. On the other hand, we have proposed above that our measure is conceptually related to broader motivational distinctions such as intrinsic vs. extrinsic motivation (Deci & Ryan, 1985), ideal vs. ought self-guides (Higgins, 1987, 1989), promotion vs. prevention foci (Higgins, 1997), and pleasure seeking vs. pain avoidance (Freud, 1920). Thus, research is needed that tests the relations between the 3PMS and more specific helpfulness measures like the Volunteer

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Functions Inventory (Clary et al., 1998) as well as more global measures of motivation such as intrinsic vs. extrinsic motivation (Deci & Ryan, 1985), ideal vs. ought self-guides (Higgins, 1987, 1989), promotion vs. prevention foci (Higgins, 1997), and the Motivation Sources Inventory (Barbuto & Scholl, 1998).

Another shortcoming of the present research is that it is entirely correlational in nature. Therefore, our causal interpretation of self-construal and attachment style as origins of pleasure and pressure based prosocial motivation is tentative. Although our interpretation is made plausible by the fact that self-construal and attachment styles are broader traits, which should be shaped by numerous variables other than a prosocial motivation (e.g., context of child development), future research should employ experimental or longitudinal designs to examine the causal relations between pleasure and pressure based prosocial motivation and their anticipated origins. Of course, we do not perceive self-construal and attachment style as the only two origins of pleasure and pressure based prosocial motivation. In fact, other potential origins for pleasure and pressure based prosocial motivation may be for example feelings of guilt, loyalty, or relational self-esteem. Further, in Study 1 we provided evidence against a possible alternative explanation of the relations between pleasure based prosocial motivation and self-actualization, self-esteem, and study enjoyment. Whereas we believe that these relations are due to an effect of pleasure based prosocial motivation on self-actualization, self-esteem, and study enjoyment, it is also theoretically sound to assume that these relations are spurious ones, which are due to positive affect affecting all four variables (cf. Schwarz & Clore, 1983). Although we provided evidence against this particular alternative explanation, there are other variables that may account for the obtained correlations. For example, people high in agreeableness have been found to obtain more pleasure from a variety of activities, including helpful behavior (e.g., Habashi & Graziano, 2005). There are at least two reasons to assume that agreeableness cannot completely account for the relations we obtained. First, according to Baron and Kenny (1986) a variable can only account fully for the relationship between two other variables if these two other variables correlate more strongly with the variable that accounts for their relation than with each other. However, there do not seem to be strong reasons to assume that the relation of agreeableness to subjective well-being and self-esteem is higher than the relation of pleasure based prosocial motivation to subjective well-being and self-esteem. The opposite seems more likely. For example, DeNeve and Cooper (1998) reviewed the relation between the Big Five personality factors and subjective well-being and found only a small to medium relation between agreeableness and subjective well-being ($r = .17$). Interestingly, the relations we obtained between pleasure based prosocial motivation and subjective well-being were consistently higher ($.18 < r < .37$). Furthermore, Robins, Tracy, Trzesniewski, Gosling, and Potter (2001) examined the relationship between agreeableness and self-esteem using a sample of $N = 326{,}641$ participants ranging in age from 9 to 90 years. In this large-scale study, Robins et al. (2001) found that the correlation between agreeableness and self-esteem was only small ($r = .13$), whereas the relation between pleasure based prosocial motivation and self-esteem in our Study 1 was twice as high ($r = .27$). Nonetheless, the above reasoning relies on a comparison across rather than within studies. Therefore, it is important that future research on pleasure and pressure based prosocial motivation tests whether agreeableness completely accounts for observed correlations of pleasure based prosocial motivation.

Furthermore, the current research did not provide evidence for the predictive validity of pleasure and pressure based prosocial motivation using actual, real-life behavior. Instead,

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in Study 1 we used the RAS, which is a self-report scale of past behavior. Self-report scales of behavior possess several advantages over measures of attitudes but can nonetheless diverge from actual, real-life behavior (Schwarz & Oyserman, 2001). We argue that the RAS is a suitable measure of behavior because it has been extensively validated using actual, real-life behavior and peer-report (e.g., Chou, 1996; Rushton et al., 1981). Nonetheless, future research should aim to directly test the predictive validity of the 3PMS using actual, real-life behavior as validation criteria. Furthermore, it is interesting to see whether pleasure and pressure based prosocial motivation differ in their predictive power of certain behaviors. For example, it is possible that pressure based prosocial motivation is especially predictive of behavior when values and norms are salient, whereas pleasure based prosocial motivation may predict spontaneous behavior best. An additional way to gain confidence in the predictive validity of the 3PMS would be to test its relations to other, well validated measures of trans-situational helping. In the current research, we have used two very different self-report measures of the prosocial personality (Claar et al., 1984; Rushton et al., 1981) and gained similar effects for both of them. Nonetheless, future research may include additional measures of the prosocial personality such as the Prosocial Personality Battery (Penner, Fritzsche, Craiger, & Freifeld, 1995). Such data would also provide more evidence for the trait character of the 3PMS. Further, in the three studies presented in this paper we have always assessed the prosocial personality prior to the 3PMS. To ensure that the relations we obtained are not due to order effects, future research that tests for the relations between the prosocial personality and pleasure and pressure based prosocial motivation should vary the order of the 3PMS and the respective prosocial personality measure.

Finally, at the outset of the paper we have already mentioned that the most prominent discussion concerning prosocial behaviour in the literature may be whether helping behaviour can underlie a truly selfless motive or whether helping behaviour inevitably underlies selfish motives (e.g., making others indebted to you, living up to the cultural value of helpfulness to self-enhance). Thus, it is interesting to ask whether pleasure and pressure based prosocial motivation are selfless or selfish motives. Whereas the motivation to gain pleasure from helping is by definition selfish (i.e., promotion of one's subjective well-being), pressure based prosocial motivation is not necessarily a selfish motive. The reason therefore is that fulfilling a duty may or may not be related to benefits for the self. On the one hand, duty fulfilment can reduce guilt and may help to avoid punishment and thus may be selfish. On the other hand, the fulfilment of one's perceived duty may be more costly than the violation of the duty. The answer of the question whether pleasure and pressure based prosocial motivation are both selfish motives has to await empirical testing.

To conclude, our data suggest that it is not enough to look at the correlates of the prosocial personality when we want to understand why some people are generally more helpful than others. We also have to take into account the different motivations underlying these individual differences. As this research has shown, such a differentiated perspective can provide important insights into the nature, causes, and consequences of trans-situational helping.

References

Archer, R. L., Diaz-Loving, R., Gollwitzer, P. M., Davis, M. H., & Foushee, H. C. (1981). The role of dispositional empathy and social evaluation in the empathic mediation of helping. *Journal of Personality and Social Psychology, 40*, 786–796.

Author's personal copy

Barbuto, J. E., & Scholl, R. W. (1998). Motivation sources inventory: Development and validation of new scales to measure an integrative taxonomy of motivation. *Psychological Reports, 82*, 1011–1022.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173–1182.

Batson, C. D. (1987). Prosocial motivation: Is it ever truly altruistic? In L. Berkowitz (Ed.). *Advances in experimental social psychology* (Vol. 20, pp. 65–122). New York: Academic Press.

Batson, C. D. (1991). The altruism question. Hillsdale, NJ: Erlbaum.

Batson, C. D. (1998). Prosocial behavior and altruism. In D. Gilbert, S. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (4th ed.). New York: McGraw-Hill.

Baumann, D. J., Cialdini, R. B., & Kenrick, D. T. (1981). Altruism as hedonism: Helping and self-gratification as equivalent responses. *Journal of Personality and Social Psychology, 40*, 1039–1046.

Bem, D. J. (1967). Self-perception: An alternative interpretation of cognitive dissonance phenomena. *Psychological Review, 74*, 183–200.

Bem, D. J. (1972). Self-perception theory. In L. Berkowitz (Ed.). *Advances in experimental social psychology* (Vol. 6, pp. 1–62). New York: Academic Press.

Bernard, M., Gebauer, J. E., & Maio, G. R. (2006). Cultural estrangement: The role of personal and societal value discrepancies. *Personality and Social Psychology Bulletin, 32*, 78–92.

Bierhoff, H.-W., Klein, R., & Kramp, P. (1991). Evidence for the altruistic personality from data on accident research. *Journal of Personality, 59*, 263–280.

Bowlby, J. (1982/1969). *Attachment and loss. Attachment* (Vol. 1). New York: Basic Books.

Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult romantic attachment: An integrative overview. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 46–76). New York: Guilford Press.

Bybee, J. (1998). The emergence of gender. Differences in guilt during adolescence. In J. Bybee (Ed.), *Guilt and children* (pp. 113–125). San Diego, CA: Academic Press.

Campbell, D. T. (1975). On the conflicts between biological and social evolution and between psychology and moral tradition. *American Psychologist, 30*, 1103–1126.

Chou, K.-L. (1996). The Rushton, Chrisjohn and Fekken Self-Report Altruism Scale: A Chinese translation. *Personality and Individual Differences, 21*, 297–298.

Cialdini, R. B., Brown, S. L., Lewis, B. P., Luce, C., & Neuberg, S. L. (1997). Reinterpreting the empathy-altruism relationship: When one into one equals oneness. *Journal of Personality and Social Psychology, 73*, 481–494.

Cialdini, R. B., Trost, M. R., & Newsom, J. T. (1995). Preference for consistency: The development of a valid measure and the discovery of surprising behavioral implications. *Journal of Personality and Social Psychology, 69*, 318–328.

Claar, A., Boehnke, K., & Silbereisen, R. K. (1984). Zur Entwicklung von Motiven prosozialen Handelns bei 12 bis 18-jährigen deutschen und polnischen Schülern [On the development of motives for prosocial behavior in German and Polish students aged 12 to 18]. In A. Stiksrud (Ed.), *Jugend und Werte: Aspekte einer politischen Psychologie des Jugendalters* (pp. 166–183). Beltz: Weinheim.

Clary, E. G., Snyder, M., Ridge, R. D., Copeland, J., Stukas, A. A., Haugen, J., & Miene, P. (1998). Understanding and assessing the motivations of volunteers: A functional approach. *Journal of Personality and Social Psychology, 74*, 1516–1530.

Cross, S. E., Gore, J. S., & Morris, M. L. (2003). The relational-interdependent self-construal, self-concept consistency, and well-being. *Journal of Personality and Social Psychology, 85*, 933–944.

Deci, E. L. (1980). *The psychology of self-determination*. Lexington, MA: Health.

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum Press.

Deci, E. L., & Ryan, R. M. (1995). Human autonomy: The basis for true self-esteem. In M. Kernis (Ed.). *Efficacy, agency, and self-esteem* (pp. 31–49). New York: Plenum.

DeNeve, K., & Cooper, H. (1998). The happy personality: A meta-analysis of 137 personality traits and subjective well-being. *Psychological Bulletin, 124*, 197–229.

Diener, E. (1984). Subjective well-being. *Psychological Bulletin, 95*, 542–575.

Diener, E., & Diener, M. (1995). Cross-cultural correlates of life satisfaction and self-esteem. *Journal of Personality and Social Psychology, 68*, 653–663.

Author's personal copy

Diener, E., Emmons, R. J., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment, 49*, 71–75.

Eagly, A. H. (1987). *Sex differences in social behavior: A social role interpretation*. Hillsdale, NJ: Lawrence Erlbaum Associates Inc.

Eisenberg, N., Guthrie, I. K., Cumberland, A., Murphy, B. C., Shepard, S. A., Zhou, Q., & Carlo, G. (2002). Prosocial development in early adulthood: A longitudinal study. *Journal of Personality and Social Psychology, 82*, 993–1006.

Eisenberg, N., & Lennon, R. (1983). Sex differences in empathy and related capacities. *Psychological Bulletin, 94*, 100–131.

Fletcher, G. J. O. (2002). *The new science of intimate relationships*. Oxford: Blackwell.

Freud, S. (1920). *Beyond the pleasure principle (Standard Edition)*. London: Hogarth.

Fromm, E. (1976). *To have or to be?* New York: Harper & Row.

Gillath, O., Shaver, P. R., & Mikulincer, M. (2005). An attachment-theoretical approach to compassion and altruism. In P. Gilbert (Ed.), *Compassion: Its nature and use in psychotherapy* (pp. 121–147). London: Brunner-Routledge.

Gillath, O., Shaver, P. R., Mikulincer, M., Nitzberg, R. E., Erez, A., & van Ijzendoorn, M. H. (2005). Attachment, caregiving, and volunteering: Placing volunteerism in an attachment-theoretical framework. *Personal Relationships, 12*, 425–446.

Habashi, M. M., & Graziano, W. G. (2005 April). The effect of priming agreeableness on helping behavior. Paper presented at the biennial meeting of Social Psychologists in Indiana, Bloomington, Indiana.

Harris, M. B. (1977). The effects of altruism on mood. *Journal of Social Psychology, 102*, 197–208.

Heine, S. J., Proulx, T., & Vohs, K. D. (2006). Meaning maintenance model: On the coherence of human motivations. *Personality and Social Psychology Review, 10*, 88–110.

Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review, 94*, 319–340.

Higgins, E. T. (1989). Self-discrepancy theory: What patterns of self-beliefs cause people to suffer? In L. Berkowitz (Ed.), *Advances in experimental social psychology* (pp. 93–136). San Diego, CA: Academic Press.

Higgins, E. T. (1997). Beyond pleasure and pain. *American Psychologist, 52*, 1280–1300.

Jones, A., & Crandall, R. (1986). Validation of a short index of self-actualization. *Personality and Social Psychology Bulletin, 12*, 63–73.

Kasser, T. (2000). Two versions of the American dream: Which goals and values make for a high quality of life? In E. Diener & D. R. Rahtz (Eds.), *Advances in quality of life research* (pp. 3–12). London: Kluwer.

Kasser, T., & Ryan, R. M. (1993). A dark side of the American Dream: Correlates of financial success as a central life aspiration. *Journal of Personality and Social Psychology, 65*, 410–422.

Kasser, T., & Ryan, R. M. (1996). Further examining the American dream: Differential correlates of intrinsic and extrinsic goals. *Personality and Social Psychology Bulletin, 22*, 280–287.

Kasser, T., & Ryan, R. M. (2001). Be careful what you wish for: Optimal functioning and relative attainment of intrinsic and extrinsic goals. In P. Schmuck & K. M. Sheldon (Eds.). *Life goals and well-being. Towards a positive psychology of human striving* (pp. 116–131). Göttingen: Hogrefe & Huber Publishers.

Kasser, T., Ryan, R. M., Zax, M., & Sameroff, A. J. (1995). The relations of maternal and social environments to late adolescents' materialistic and prosocial aspirations. *Developmental Psychology, 31*, 907–914.

Latané, B., & Darley, J. M. (1970). *The unresponsive bystander: Why doesn't he help?* New York: Appleton.

Lee, A. Y., Aaker, J. L., & Gardner, W. L. (2000). The pleasures and pains of distinct self-construals: The role of interdependence in regulatory focus. *Journal of Personality and Social Psychology, 78*, 1122–1134.

Lennon, R., & Eisenberg, N. (1987). Gender and age differences in empathy and sympathy. In N. Eisenberg & J. Strayer (Eds.), *Empathy and its development* (pp. 195–217). Cambridge: Cambridge University Press.

Markus, H., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review, 98*, 224–253.

Marsh, H. W. (1996). Positive and negative global self-esteem: A substantively meaningful distinction or artifacts? *Journal of Personality and Social Psychology, 70*, 810–819.

Maslow, A. H. (1954). *Motivation and personality*. New York: Harper & Row.

Maslow, A. H. (1962). *Toward a psychology of being*. Princeton, NJ: Van Nostrand.

Maslow, A. H. (1970). *Motivation and personality* (2nd ed.). New York: Harpner & Row.

Mikulincer, M., & Shaver, P. R. (2005). Attachment security, compassion, and altruism. *Current Directions in Psychological Science, 14*, 34–38.

Author's personal copy

Mikulincer, M., Shaver, P. R., Gillath, O., & Nitzberg, R. E. (2005). Attachment, caregiving, and altruism: Boosting attachment security increases compassion and helping. *Journal of Personality and Social Psychology, 89*, 817–839.

Neuberg, S. L., & Newsom, J. T. (1993). Personal need for structure: Individual differences in the desire for simple structure. *Journal of Personality and Social Psychology, 65*, 113–131.

Penner, L. A., & Finkelstein, M. A. (1998). Dispositional and structural determinants of volunteerism. *Journal of Personality and Social Psychology, 74*, 525–537.

Penner, L. A., Fritzsche, B. A., Craiger, J. P., & Freifeld, T. R. (1995). Measuring the prosocial personality. In J. Butcher & C. D. Spielberger (Eds.). *Advances in personality assessment* (Vol. 10, pp. 147–164). Hillsdale, NJ: Erlbaum.

Piliavin, J. A., Dovidio, J. F., Gaertner, S. L., & Clark, R. D. III, (1981). *Emergency intervention*. New York: Academic Press.

Rees, K. J., & Maio, G. R. (2006). Social values as self-guides: Value centrality, influences regulatory focus and experienced emotion. Unpublished manuscript. Cardiff University.

Robins, R. W., Tracy, J. L., Trzesniewski, K. H., Gosling, S. D., & Potter, J. (2001). Personality correlates of self-esteem. *Journal of Research in Personality, 35*, 463–482.

Rogers, C. R. (1961). *On becoming a person*. Boston: Houghton Mifflin.

Rosenhan, D. L. (1970). The natural socialization of altruistic autonomy. In J. Macauley & L. Berkowitz (Eds.), *Altruism and helping behavior* (pp. 251–268). New York: Academic Press.

Rushton, J. P., Chrisjohn, R. D., & Fekken, G. C. (1981). The altruistic personality and the self-report altruism scale. *Personality and Individual Differences, 2*, 292–302.

Ryan, R. M., Deci, E. L., & Grolnick, W. S. (1995). Autonomy, relatedness, and the self: Their relation to development and psychopathology. In D. Cicchetti & D. J. Cohen (Eds.), *Developmental psychopathology: Theory and methods* (pp. 618–655). New York: Wiley.

Ryan, R. M., Sheldon, K. M., Kasser, T., & Deci, E. L. (1996). All goals are not created equal: An organismic perspective on the nature of goals and their regulation. In P. M. Gollwitzer & J. A. Bargh (Eds.), *The psychology of action: Linking cognition and motivation to behavior* (pp. 7–26). New York: Guilford.

Sagiv, L., & Schwartz, S. H. (2000). Value priorities and subjective well-being: Direct relations and congruity effects. *European Journal of Social Psychology, 30*, 177–198.

Schaller, M., & Cialdini, R. B. (1988). The economics of empathic helping: Support for a mood management motive. *Journal of Experimental Social Psychology, 24*, 163–181.

Schmuck, P. (2001). Intrinsic and extrinsic life goals preferences as measured via inventories and via priming methodologies: Mean differences and relations with well-being. In P. Schmuck & K. M. Sheldon (Eds.), *Life goals and well-being. Towards a positive psychology of human striving* (pp. 132–147). Göttingen: Hogrefe & Huber Publishers.

Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. In M. Zanna (Ed.). *Advances in experimental social psychology* (Vol. 25, pp. 1–65). NY: Academic Press.

Schwarz, N., & Clore, G. I. (1983). Mood, misattribution, and judgments of well-being: Informative and directive functions of affective states. *Journal of Personality and Social Psychology, 45*, 513–523.

Schwarz, N., & Oyserman, D. (2001). Asking questions about behavior: Cognition, communication and questionnaire construction. *American Journal of Evaluation, 22*, 127–160.

Shah, J. Y., Kruglanski, A. W., & Thompson, E. P. (1998). Membership has its (epistemic) rewards: Need for closure effects on in-group bias. *Journal of Personality and Social Psychology, 75*, 383–393.

Sheldon, K. M., & Kasser, T. (1998). Pursuing personal goals: Skills enable progress, but not all progress is beneficial. *Personality and Social Psychology Bulletin, 24*, 1319–1331.

Singelis, T. (1994). The measurement of independent and interdependent self-construals. *Personality & Social Psychology Bulletin, 20*, 580–591.

Smith, K. D., Keating, J. P., & Stotland, E. (1989). Altruism reconsidered: The effect of denying feedback on a victim's status to empathic witnesses. *Journal of Personality and Social Psychology, 57*, 641–650.

Sobel, M. E. (1982). Asymptotic intervals for indirect effects in structural equations models. In S. Leinhart (Ed.), *Sociological methodology 1982* (pp. 290–312). San Francisco: Jossey-Bass.

Staub, E. (1974). Helping a distressed person: Social, personality, and stimulus determinants. In L. Berkowitz (Ed.). *Advances in experimental social psychology* (Vol. 7, pp. 293–341). New York: Academic Press.

Tafarodi, R. W., & Swann, W. B. Jr., (2001). Two-dimensional self-esteem: Theory and measurement. *Personality and Individual Differences, 31*, 653–673.

Author's personal copy

Trafimow, D., & Trafimow, D. (1999). Mapping perfect and imperfect duties onto hierarchically and partially restrictive trait dimensions. *Personality and Social Psychology Bulletin, 25*, 686–695.

Triandis, H. C. (1995). *Individualism and collectivism*. Boulder, CO: Westview.

Verplanken, B., Friborg, O., Wang, C. E., Trafimow, D., & Woolf, K. (2007). Mental habits: Metacognitive reflection on negative self-thinking. *Journal of Personality and Social Psychology, 92*, 526–541.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54*, 1063–1070.

Weiss, R. F., Buchanan, W., Alstatt, L., & Lombardo, J. P. (1971). Altruism is rewarding. *Science, 171*, 1262–1263.

Williamson, G. M., & Clark, M. S. (1989). Providing help and desired relationship type as determinants of changes in moods and self-evaluations. *Journal of Personality and Social Psychology, 56*, 722–734.