

ORIGINAL ARTICLE

# *Perceived significant others' values: Are they important in the relationship between personal values and self-reported prosociality?*

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## BACKGROUND

Personal values have been extensively found to be relevant variables linked to prosociality; they are desirable and trans-situational goals that serve as guiding principles in people's lives to select modes, means and actions, these reflecting what people consider relevant and worthy. Research has investigated how cultural background influences people's personal values and prosociality, but little is known about the influence of the perception of the values endorsed by significant others, namely the people belonging to the micro-relational context with whom daily interactions and exchanges are possible. Based on Schwartz's theory of basic human values, we analyzed the moderating role of the perceptions of significant others' values in the relationship between personal values and self-reported prosociality.

## PARTICIPANTS AND PROCEDURE

Two hundred and forty-five Italian young adults (66.9% women) aged between 18 and 30 years ( $M = 22.58$ ,  $SD = 2.53$ ) completed a self-report questionnaire.

## RESULTS

Specifically, openness to change values were a significant positive predictor of self-reported prosociality when respondents perceived low importance assigned both to openness to change and self-transcendence by significant others, whereas conservation values were a significant positive predictor of self-reported prosociality when respondents perceived low importance assigned to self-enhancement by significant others.

## CONCLUSIONS

Our findings show a complex interplay between personal values and perceived significant others' values in shaping young adults' self-reported prosociality.

## KEY WORDS

personal values; perceived significant others' values; prosociality; moderation; young adults

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## BACKGROUND

Prosociality, a key concept in social psychology, has attracted the attention of many scholars in recent decades. It is defined as the set of voluntary actions a person may adopt in order to help, take care of, assist, share with, or comfort others (Caprara et al., 2005). Interestingly, prosociality has been shown to hold a double advantage: As expected, the recipients of a prosocial action or behavior may profit from it, but those who adopt the kinds of voluntary actions described above may also have some benefits (Caprara et al., 2012). Previous studies have shown how being prosocial toward others positively affects people's happiness (Lyubomirsky et al., 2005), individual and social adjustment (Caprara et al., 2000), and the perception of meaning in life (Klein, 2017). Based on this, it becomes relevant to understand the possible predictors of prosociality, in order to promote and foster this desirable tendency.

Although most research has focused on prosociality during childhood (e.g., Toseeb & St Clair, 2020) and adolescence (e.g., Arslantürk & Harput, 2021), understanding prosociality during young adulthood may be particularly interesting. Establishing and maintaining positive social relationships, and being able to understand, share intimacy, and help loved ones are widely considered indicators of successful young adult development (e.g., Scales et al., 2016). Young adulthood is marked by a variety of developmental tasks, including identity formation and the establishment of more mature intimate and interpersonal relationships, including with people outside the family (e.g., partners, friends, colleagues; Scabini & Iafrate, 2019). Young adults are therefore likely to be significantly influenced by what they perceive the people around them to consider worthy, namely what we called "perceived significant others' values".

Among others, personal values have been found to be relevant variables linked to self-reported prosociality (e.g., Caprara et al., 2012; Danioni & Barni, 2019; Schwartz, 2010). Schwartz (1992) introduced the theory of basic human values, which is still considered the most "valuable" in the field of psychosocial sciences with regard to this research topic (e.g., Roccas & Sagiv, 2017; Vecchione et al., 2020). Personal values are desirable and trans-situational goals that serve as guiding principles in a person's life to select modes, means, and actions, these reflecting what people consider relevant and worthy. Specifically, it is the relative importance and the trade-off among relevant and competing values that contribute to guiding attitudes and behaviors (Schwartz, 1992, 2012). Schwartz (1996) reported that, for example, cooperation may be the expression of the importance given to self-transcendence values (in particular, benevolence) rather self-enhancement

ones. Schwartz (1992) postulated the existence of 10 value types, namely power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, tradition, conformity, and security. What distinguishes a value from another one is the type of goal or motivation that it expresses, namely the motivational goal underlying it. Moreover, these 10 values are organized in a circular pattern: Those characterized by similar motivational goals appear next to each other (e.g., benevolence and universalism), while those with different motivational goals are situated in opposing positions (e.g., power and universalism). In addition, values are systematized along two higher-order bipolar dimensions. The first dimension contrasts openness to change (hedonism, stimulation, and self-direction), which is characterized by an emphasis on change and independence, with conservation (tradition, conformity, and security), which is instead characterized by self-restraint, preserving traditional practices, and safeguarding stability. The second dimension contrasts self-enhancement (power and achievement), where people prioritize their personal interests even at the expense of others, with self-transcendence (benevolence and universalism), where people transcend selfish concerns to promote the welfare of others. More recently, Schwartz and colleagues (2012) have emphasized that openness to change and self-enhancement may be conceptualized as personally focused values, which primarily regulate how one expresses personal interests and characteristics, whereas conservation and self-transcendence are socially focused values, as they primarily regulate how one relates socially to others. The authors also attributed specific broader functions to values, considering them as promoting growth and self-expansion (openness to change and self-transcendence) or promoting self-protection and anxiety-avoidance (conservation and self-enhancement).

When considering the relationship between personal values and prosociality, it is worth noting that researchers have consistently found that self-transcendence values are positively related to this desirable behavior, whereas self-enhancement values tend to have a negative relationship with this variable (e.g., Alessandri et al., 2009; Daniel et al., 2015). The conservation vs. openness to change axis has been instead less investigated regarding its relationship with prosociality. Previous research has highlighted mixed results, generally suggesting a positive link between conservation values and self-report measures of prosociality (e.g., Benish-Weisman et al., 2019), while results about openness to change and self-reported prosociality appear to be substantially inconsistent, with some studies reporting a negative association (e.g., Espinosa et al., 2011) and others suggesting instead a positive relationship (e.g., Bayram, 2016; Schwartz, 2010).

However, the previous literature focused on the value–reported behavior relationship has emphasized that this link is far from stable. Indeed, micro-contextual (e.g., Padilla-Walker et al., 2012) and macro-contextual factors (e.g., Elster & Gelfand, 2021) may reinforce or reduce the effects of personal values on behaviors, this suggesting “the plasticity of the value-behavior relation” (Ponizovskiy et al., 2019, p. 1). In line with this, Boer and Fischer (2013) carried out a meta-analysis on the relationship between values and different kinds of behavior and tested how ecological, economic, and cultural factors may affect it. The results showed that these factors may inhibit or foster the above-mentioned link; therefore, the authors claimed that the values–behavior relationship cannot be considered context-free. With specific attention to the values–prosociality link, the authors reported that self-transcendence values are positively related to prosociality especially in individualistic contexts, which leave a great personal space in the adoption of social attitudes and behaviors compared to collectivistic contexts. Similarly, Bardi and Schwartz (2003) emphasized that, whenever people feel low external pressure, their personal values are more likely to affect their behaviors in the expected direction (e.g., self-transcendence values are expected to positively affect prosociality). Indeed, the lack of external pressure leads to a stronger correlation among values and corresponding behaviors as the effects of the values on attitudes and behaviors can be constrained in contexts with higher normative pressure on self-expression (e.g., Lönnqvist et al., 2009). However, according to Verplanken and Holland (2002) and their thesis of value activation, the temporary salience of values needs to be taken into account to understand their effect on behaviors. Indeed, the authors support the hypothesis that values drive congruent behaviors when they are cognitively activated, either fostered or threatened by the wider context in which a person lives.

Several studies have considered the role of cultural background and macro-context factors (cultural and work environment, etc.) in influencing and shaping people’s value priorities and subsequent behaviors. Interestingly, people tend to perceive their value priorities as different from those of their fellow citizens, which are often perceived as more self-enhanced (Bernard et al., 2006; Lönnqvist et al., 2012), even if these perceptions are disconfirmed by national data (e.g., Dobewall & Strack, 2011). A recent study carried out with large nationally representative samples in the United Kingdom and in the United States showed that it is not only the widespread national value (e.g., value perceived as relevant in a specific culture) of self-transcendence that encourages people’s civic engagement in terms of voting (whereas self-enhancement discourages it), but also the perceptions that this same value is

considered relevant by a person who is perceived as a typical fellow citizen (Sanderson et al., 2019). Another study carried out in the field of organizational context with 202 salespersons working in different stores in the United States demonstrated how the so-called “corporate ethical values”, the perceived degree of congruity between employees’ and an organization’s ethical values, promote organizational citizenship behaviors (i.e., individual, voluntary, and chosen behaviors not imposed by the wider organizational context that promotes its positive functioning; Sharma, 2018). Moreover, other studies have similarly highlighted how a perception of incongruity between the employees’ own ethical values and those promoted by their working organization may negatively affect the employees’ working experience, thus lowering their organizational commitment and job performance (e.g., Sharma et al., 2009; Valentine & Barnett, 2003).

Very little is known about the influence of the so-called microsystem that, according to Bronfenbrenner’s (1979) ecological system theory, is the most immediate environment that surrounds and influences the person. Nevertheless, according to the interdependence theory (Kelley & Thibaut, 1978; Kelley et al., 2003), in order to comprehend human behavior, it is essential to understand the way and the extent to which other people influence the individual’s experience. All this makes the perceptions of what the other people consider relevant and worthy likely to influence one’s own beliefs, attitudes, behaviors, etc. Unfortunately, values of those who are close to us – that is, the people belonging to the micro-relational context (e.g., family, colleagues, partners, classmates, friends) and with whom daily interactions and exchanges are possible – are an under-investigated topic. From now on, we will refer to this as “perceived significant others’ values”. Contrary to what has been happening with values, there is an extensive psychosocial literature on other domains showing that attitudes, judgements, decision processes, behaviors, self-reported behaviors, etc. are largely influenced by the perception of significant/relevant others (see, for example, the cornerstone literature on individuals’ behavioral intentions and social perceptions). Moreover, perceived similarity (i.e., a positive association between self-descriptions and descriptions of others) generally has positive implications for individual wellbeing and relationship quality (e.g., Locke et al., 2021). When focusing instead on values, a study carried out with 677 Italian adolescents showed that the perception of one’s own classmates as characterized by giving importance to conservation values was relevant for adolescents in order to endorse these same values when enhanced by the mother (Barni et al., 2014). However, most of the literature has focused on the role of a specific micro-relational context, namely the family where the

perceptions of family members' values are related to one's own priorities and behaviors. A recent study carried out by Oh and colleagues (2021) on a wide sample of adults in Singapore showed that perceiving one's own family as characterized by altruistic values had a positive effect on the respondents' connection to nature. Studies have also shown that adolescents' and parents' personal values tend to be positively correlated (e.g., Barni, 2009; Grønhoj & Thøgersen, 2009), and that children's perceptions of parental personal values are relevant in driving the younger generation's interests and behaviors (e.g., Frenzel et al., 2010; Šimunović et al., 2018). The literature on this topic is mainly focused on the process of family transmission of values and has therefore studied children's perceptions of parents' socialization rather than personal values, because these are the values that children believe their parents would like them to endorse (e.g., Barni et al., 2011; Danioni & Barni, 2018; Knafo & Schwartz, 2003). This perception is what contributes to the children's accuracy and acceptance of those enhanced values (Grusec & Goodnow, 1994). It would be however necessary to extend the attention outside the family, especially when involving young adults, who are asked to shift their primary involvements away from contexts that supported dependence (e.g., families) to contexts of adulthood, which nourish adult interdependence (e.g., intimate relationships) (Tanner & Arnett, 2011). They are indeed embedded in multiple social contexts other than the family, whose perceived values may affect their own value priorities, including in relation to behaviors.

## THE PRESENT STUDY

Based on the above considerations, the aim of the current study was to investigate the moderating role of the perceptions of significant others' values in the personal values–self-reported prosociality relationship in a sample of Italian young adults. Although some studies have supported the relevance of others' values in shaping personal value priorities (e.g., Barni et al., 2014) and attitudes/behaviors (e.g., Oh et al., 2021; Sharma et al., 2009), to our knowledge no studies have focused on the perceptions with regard to significant others as a whole and examined the role of this relationship in the relevant values–self-reported prosociality link. This was done in line with previous research suggesting that contextual factors may shape the relation between values and behaviors (e.g., Ponizovskiy et al., 2019). Additionally, most research on this topic has only focused on adolescence, leaving out the subsequent phase of the life cycle, which is extremely relevant in terms of value identity establishment (e.g., Russo et al., 2021) and in the expression of prosociality (Streit et al., 2020).

On the one hand, based on the previous literature (e.g., Bardi & Schwartz, 2003; Boer & Fischer, 2013) and considering value importance levels, we hypothesized that the lower the perception of external pressure is, that is in our case perceiving significant others as assigning little importance to values, the more strongly personal values may affect self-reported prosociality (H1). Our hypothesis is that perceived significant others' value priorities could exert an important situational pressure. Bardi and Schwartz (2003) found that the less important a value domain in a relevant group is, the stronger is the relation between the personal importance of the value and the self-reported frequency of behaviors that express it. Similarly, other researchers have supported the idea that the effects of the values on attitudes and behaviors can be constrained in contexts with higher normative pressure on self-expression (e.g., Lönnqvist et al., 2009).

On the other hand, considering value contents two hypotheses can be formulated, both based on the extensive research literature on value congruity, activation and salience (e.g., Sharma, 2018; Verplanken & Holland, 2002). Thus, we expected that the values (e.g., self-transcendence)–reported prosociality link (positive in the case of self-transcendence and conservation, and negative in the case of self-enhancement)<sup>1</sup> would be reinforced by the perceptions of significant others as enhancing that same specific value (e.g., self-transcendence) (H2). For the same reason and based on the structure of Schwartz's (1992) model of basic human values, we expected that a value (e.g., self-transcendence)–self-reported prosociality relationship would be reinforced by the perceptions of significant others as discouraging the motivational opposed value (e.g., self-enhancement) (H3).

## PARTICIPANTS AND PROCEDURE

### PARTICIPANTS

The participants were 245<sup>2</sup> Italian young adults (66.9% women) whose age ranged from 18 to 30 years ( $M = 22.58$ ,  $SD = 2.53$ ). They were born in Italy and were residents in Italy at the time of data collection. Most of the participants were students (82%); others were part-time (4.9%) or full time (11%) workers, 0.5% were in search of employment, and 1.6% selected "other" as a response. In addition, 95.1% of them were unmarried, 3.3% had a cohabitating partner, and 1.6% were married. Almost all of the participants (99.2%) did not have children. Considering the participants' education level, 0.8% had completed middle school, 62% had completed high school, 24.1% had a three-year degree, 10.2% had a five-year degree, and the remaining 2.9% had achieved a Ph.D. or a master's degree.

## PROCEDURE

Participants were recruited by sending an email to students enrolled in various universities in northern and central Italy to take part in the study. They were informed about the main aims of the study and that their participation was free and voluntary. Participants who provided their informed consent were asked to complete an anonymous online self-report questionnaire that included the scales presented below in order to measure the constructs of interest. The study was approved by the Ethical Committee of the Catholic University of Milan, Department of Psychology (approval number 7-17), and followed the American Psychological Association standard ethical guidelines for research. The main investigator of this study had previously completed the National Institutes of Health training course “Protecting Human Research Participants” (certification number: 2107256).

## MEASURES

*Sociodemographic information.* Participants provided sociodemographic data (age, sex, educational level, occupation) and information about family characteristics (marital status, presence of children).

*Personal values.* We used the Portrait Values Questionnaire (PVQ; Schwartz et al., 2001), which was validated in Italian by Capanna and colleagues (2005), to measure the importance respondents gave to the four higher order value dimensions (conservation, openness to change, self-enhancement, and self-transcendence). The PVQ is composed of 40 verbal portraits of a person and his/her objectives or aspirations, which reflect the importance of a value. For example, “Thinking up new ideas and being creative is important to him/her. He/she likes to do things in his/her own original way” describes a person for whom openness to change is important. Each respondent’s values were inferred from his/her self-reported similarity (from 1 – *not like me at all* to 6 – *very much like me*) to people described. The scores of each value dimension were calculated by averaging the items for each value type. Cronbach’s  $\alpha$  coefficients were .83 for conservation, .80 for openness to change, .86 for self-enhancement, and .82 for self-transcendence.

*Perceived significant others’ values.* We used the Short Schwartz’s Value Survey (SSVS; Lindeman & Verkasalo, 2005) to measure the respondents’ perceptions of significant others’ values. The participants were presented with the names of the 10 basic values followed by a brief explanation of their meaning. For example, the participants were asked to rate the importance of “POWER, that is, social power, authority, wealth” and “ACHIEVEMENT, that is, suc-

cess, capability, ambition, and influence on people and events” to measure self-enhancement values. The scale was adapted with the aim of measuring the perceptions of significant others’ values by asking the participants to rate the importance of each value according to the most relevant people around them. For the current study, the respondents were asked to rate each value on a nine-point Likert scale from –1 (*opposite to their values*) to 7 (*of supreme importance for them*). Internal consistency of all dimensions is as follows: openness to change,  $\alpha = .66$ ; conservation,  $\alpha = .76$ ; self-enhancement,  $r = .58$ ,  $p < .001$ ; and self-transcendence,  $r = .64$ ,  $p < .001$ .

*Prosociality.* We used the Prosocialness Scale for Adults proposed in Italian by Caprara and colleagues (2005) to measure how respondents reported themselves to be prosocial. The instrument is a self-report, unidimensional 16-item scale for assessing individual differences in adult self-reported prosociality and reflects behaviors and feelings related to four areas: sharing, helping, care-taking, and supporting others. Prosociality is conceptualized as the individual tendency to undertake voluntary actions aimed at benefiting others. An item example is: “I share the things that I have with my friends” and respondents used a five-point Likert scale, from 1 (*never/almost never*) to 5 (*always/almost always*). The scale showed good internal consistency ( $\alpha = .88$ ).

## DATA ANALYSIS

First, we checked whether the variables were normally distributed, considering that skewness and kurtosis should always be within the required range of –1.00 to +1.00. Second, we reported descriptive statistics (means, ranges, and standard deviations) and Pearson correlations between the study variables (i.e., personal values, perceived significant others’ values, and self-reported prosociality). Third, we tested the moderation hypotheses (H1-H3) through a series of hierarchical regression models with personal values, perceived significant others’ values, and their interaction as predictors, and young adults’ self-reported prosociality as the criterion variable. We carried out four different regression models, one for each moderating variable (significant others’ conservation, openness to change, self-enhancement, and self-transcendence). The predictors were grand-mean centered to reduce multicollinearity (Frazier et al., 2004). For additional interpretation of the significant interactions, we performed simple slope analysis (Aiken & West, 1991), which we tested at  $\pm 1$  SD of the moderating variable. We used SPSS 23.0 (IBM Corp.) to carry out the moderation analyses and Interaction! (Soper, 2013) to conduct the slope analysis.

RESULTS

Table 1 shows the descriptive statistics of the study variables and the Pearson correlations between them.

On average, respondents reported that self-transcendence values were the most personally important values ( $M = 4.31$ ), followed by openness to change ( $M = 3.84$ ), conservation ( $M = 3.69$ ), and finally self-enhancement ( $M = 3.20$ ). With regard to the perceptions of significant others' values, it is important to note a different value hierarchy, where openness to change values ( $M = 4.27$ ) were at the top, followed by self-enhancement ( $M = 4.21$ ), conservation ( $M = 3.77$ ), and finally self-transcendence ( $M = 3.71$ ). Personal and perceived significant others' values showed several significant correlations. Correlations ranged from  $r = -.43$ ,  $p < .001$  between perceived significant others' self-enhancement and self-transcendence to  $r = .55$ ,  $p < .001$  for perceived significant others' self-transcendence and conservation and for personal self-transcendence and self-reported prosociality. All personal values, except for self-enhancement, were significantly and positively correlated with respondents' reports of prosociality (from  $r = .20$ ,  $p = .002$  for conservation and openness to change to  $r = .55$ ,  $p < .001$  for self-transcendence), while only significant others' conservation was slightly positively related to self-reported prosociality ( $r = .16$ ,  $p = .014$ ).

Table 2 shows the results of the moderation analyses.

Overall, a significant direct and positive relationship between personal self-transcendence values and self-reported prosociality emerged. When considering the moderating role of perceived significant others' values in the relationship between personal values and prosociality, three different statistically significant relations emerged. Specifically, perceived significant others' openness to change and self-transcendence moderated the relationship between personal openness to change and self-reported prosociality. Simple slope analysis revealed that personal openness to change was a significant positive predictor of self-reported prosociality when respondents perceived a lower importance assigned by significant others to openness to change ( $\beta = .19$ ,  $SE = .07$ , 95% CI [0.05, 0.32],  $p = .006$ ; Figure 1) or self-transcendence ( $\beta = .22$ ,  $SE = .07$ , 95% CI [0.07, 0.36],  $p = .004$ ; Figure 2). In contrast, when they perceived higher levels of importance of these values assigned by significant others, openness to change did not significantly predict their self-reported prosociality ( $\beta = .01$ ,  $SE = .07$ , 95% CI [-0.12, 0.14],  $p = .864$  for openness to change; Figure 1;  $\beta = .01$ ,  $SE = .06$ , 95% CI [-0.12, 0.14],  $p = .910$  for self-transcendence; Figure 2).

Moreover, perceived significant others' self-enhancement moderated the relationship between personal conservation values and self-reported prosociality. In this case, simple slope analysis showed that

**Table 1**

*Descriptive statistics and Pearson correlations among variables*

Variable	1	2	3	4	5	6	7	8	9	M	SD	Range
1. Conservation – Personal	1									3.69	0.75	1.92-5.77
2. Openness to change – Personal	.17**	1								3.84	0.75	1.70-5.70
3. Self-enhancement – Personal	.06	.40**	1							3.20	0.96	1.14-5.86
4. Self-transcendence – Personal	.45**	.36**	-.05	1						4.31	0.75	2.60-5.90
5. Conservation – Significant others	.39**	.08	-.08	.22**	1					3.77	1.72	-.067-7.00
6. Openness to change – Significant others	.10	.15*	.10	.15*	.19**	1				4.27	1.48	-.100-7.00
7. Self-enhancement – Significant others	.00	.08	.36**	-.02	-.17**	.19**	1			4.21	1.80	0.00-7.00
8. Self-transcendence – Significant others	.12	.06	-.12	.19**	.55**	.36**	-.43**	1		3.71	2.01	-.050-7.00
9. Self-reported prosociality	.20**	.20**	-.10	.55**	.16*	.07	.00	.11	1	3.75	0.54	2.31-5.00

Note. \*  $p < .05$ , \*\*  $p < .01$ .

**Table 2**

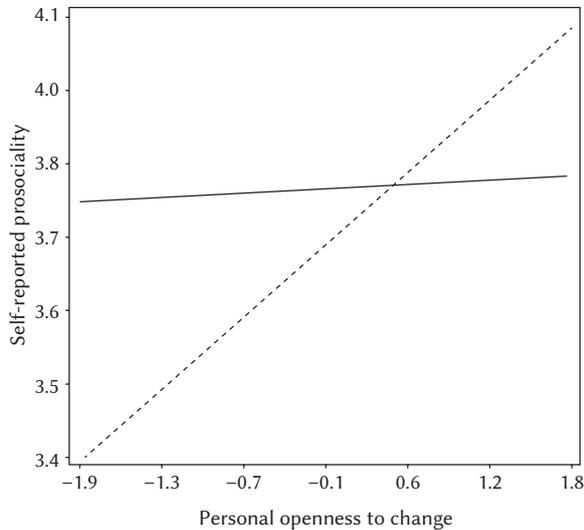
*Moderation analyses results*

	Moderator: Others' conservation			Moderator: Others' openness to change			Moderator: Others' self-enhancement			Moderator: Others' self-transcendence		
	B	$\beta$	95% CI	B	$\beta$	95% CI	B	$\beta$	95% CI	B	$\beta$	95% CI
	STEP 1 $R^2 = .31^{**}$			STEP 1 $R^2 = .31^{**}$			STEP 1 $R^2 = .31^{**}$			STEP 1 $R^2 = .31^{**}$		
Conservation	-.09	-.12	-0.18, 0.01	-.06	-.09	-0.15, 0.03	-.06	-.09	-0.15, 0.03	-.06	-.09	-0.15, 0.03
Openness to change	-.01	-.02	-0.11, 0.08	-.01	-.01	-0.10, 0.09	-.01	-.01	-0.10, 0.09	-.01	-.01	-0.10, 0.09
Self-enhancement	-.05	-.09	-0.12, 0.02	-.05	-.10	-0.12, 0.01	-.07	-.12	-0.14, 0.01	-.05	-.10	-0.12, 0.01
Self-transcendence	.42**	.58**	0.32, 0.52	.42**	.59**	0.32, 0.52	.42**	.58**	0.32, 0.52	.42**	.59**	0.32, 0.52
Moderator	.03	.08	-0.01, 0.06	-.00	-.00	-0.04, 0.04	.02	.05	-0.02, 0.05	.00	-.00	-0.03, 0.03
	STEP 2 $R^2 = .32^{**}$			STEP 2 $R^2 = .34^{**}$			STEP 2 $R^2 = .36^{**}$			STEP 2 $R^2 = .34^{**}$		
Conservation * Moderator	.02	.06	-0.02, 0.07	.05	.10	-0.02, 0.11	-.08**	-.20**	-0.13, -0.03	.04	.12	-0.00, 0.08
Openness to change * Moderator	.00	-.00	-0.05, 0.05	-.08*	-.16*	-0.15, -0.01	.05	.12	-0.01, 0.11	-.06*	-.15*	-0.11, -0.01
Self-enhancement * Moderator	-.00	-.00	-0.04, 0.04	-.00	-.01	-0.05, 0.05	-.02	-.08	-0.06, 0.02	-.01	-.03	-0.04, 0.03
Self-transcendence * Moderator	.01	.02	-0.05, 0.07	.03	.06	-0.04, 0.10	.02	.05	-0.03, 0.07	-.00	-.00	-0.05, 0.05

Note. Predictors: personal values; Moderators: perceived significant others' values; Criterion variable: self-reported prosociality, \*  $p < .05$ , \*\*  $p < .01$ .

**Figure 1**

*The moderating role of significant others' openness to change in the personal openness to change-reported prosociality relationship*

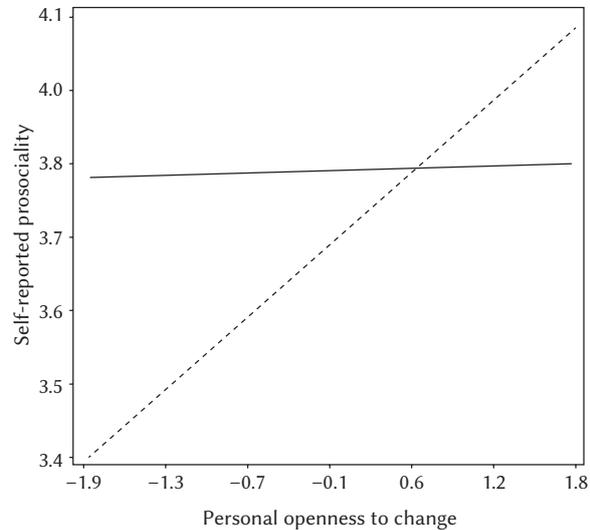


SOs' openness to change  
 — +1 SD  
 - - - -1 SD

Note. SO – significant others.

**Figure 2**

*The moderating role of significant others' self-transcendence in the personal openness to change-reported prosociality relationship*

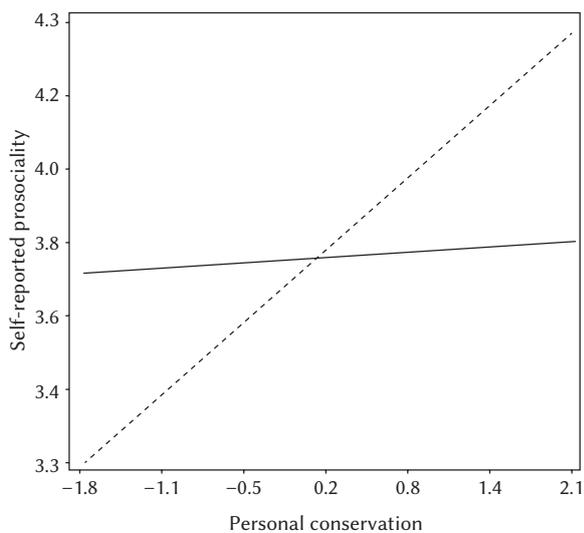


SOs' self-transcendence  
 — +1 SD  
 - - - -1 SD

Note. SO – significant others.

**Figure 3**

*The moderating role of significant others' self-enhancement in the personal conservation–reported prosociality relationship*



SOs' self-enhancement  
 — +1 SD  
 - - - -1 SD

Note. SO – significant others.

personal conservation was a significant positive predictor of self-reported prosociality when respondents perceived lower levels of importance assigned to self-enhancement by significant others ( $\beta = .28, SE = .07, 95\% \text{ CI } [0.13, 0.42], p < .001$ ; Figure 3). By contrast, when they perceived significant others as assigning higher importance to self-enhancement values, personal conservation values no longer predicted self-reported prosociality ( $\beta = .02, SE = .06, 95\% \text{ CI } [-0.10, 0.14], p = .732$ ; Figure 3).

## DISCUSSION AND CONCLUSIONS

The aim of the current study was to analyze the perceptions of significant others' values and to investigate their moderating role in the personal values–prosociality relationship as reported by a sample of Italian young adults. Indeed, research has consistently shown the role of the macro-cultural context in shaping the value–behaviors relationship (e.g., Boer & Fischer, 2013; Roccas & Sagiv, 2010). However, less attention has been paid to the influence of values prioritized by the microsystem in which people live (Bronfenbrenner, 1979), that is, by the people with whom interactions happen often in daily life (e.g., family members, colleagues, partners, classmates, friends).

First, we have highlighted a quite different value hierarchy between personal values and perceptions of significant others' values. Indeed, at the top of the value hierarchy presenting personal values we found the more socially focused ones (self-transcendence) – that is, values that enhance the importance of prosociality (Caprara et al., 2012; Daniel et al., 2015; Schwartz, 2010) – while significant others were perceived as reinforcing the relevance of self-focused values, namely openness to change and self-enhancement. This result is in line with previous research on the perceptions of values of a typical fellow citizen; others, more or less close to us (family, colleagues, and friends), are usually perceived as more oriented toward personally focused values (Bernard et al., 2006; Dobewall & Strack, 2011; Lönnqvist et al., 2012). Indeed, the value discrepancy between the self and others is mainly due to the basic motivation of the need for uniqueness (Bernard et al., 2006), also accompanied by the need to hold the most positive image of the self (e.g., Danioni & Barni, 2021).

When considering the results of the regression models, it is interesting to note that self-transcendence values were directly and positively correlated with self-reported prosociality, as already found in the wider literature on the topic (e.g., Caprara et al., 2012; Daniel et al., 2015). The most innovative result concerns the interplay between personal values and perceived significant others' values, but only in the case of the conservation vs openness to change axis. Interestingly, conservation and openness to change are the values whose relationship with prosociality appears to be more inconsistent and less clear compared to the one that emerged when considering self-enhancement vs. self-transcendence values (see, for example, Bayram, 2016; Benish-Weisman et al., 2019; Schwartz, 2010). This seems to suggest that perceived significant others' values are more relevant in the case of the less stable and defined personal values–reported prosociality link. In particular, we found that perceiving significant others as assigning low importance to openness to change on the one hand and self-transcendence values on the other strengthened the relationship between young adults' personal openness to change and self-reported prosociality. Indeed, there was a positive relationship between these variables when respondents perceived their close environment as not enhancing these specific values. Moreover, the positive relationship between young adults' conservation values and self-reported prosociality was stronger when respondents perceived their relational environment as assigning little importance to self-enhancement.

These results partly confirmed H1: The weakness of external pressure in terms of enhanced values strengthened the personal values–reported prosociality link, but not for all the value dimensions, thus suggesting the importance of considering

both importance level and content of values. In line with the previous literature on the topic (e.g., Bardi & Schwartz, 2003), we may suppose that where the relational context does not enhance the relevance of openness to change values, by avoiding “overexposure” to this value, and of self-transcendence values, that push towards the welfare of others, transcending selfish concerns, it leads to a truer personal endorsement of prosociality, free from social pressure. It is in this case that the personal importance assigned to openness to change values may induce one to adopt other-focused behaviors such as prosocial ones. In its essence, openness to change, even if characterized by a personal focus, is a growth value able to promote self-expansion in the form of prosociality (Schwartz et al., 2012).

Regarding instead the moderation effect of self-enhancement on the conservation–reported prosociality link, perceiving a weak external pressure in terms of self-enhancement values can leave more room for personal conservation values, which usually enhance prosociality because of the relevance assigned to the groups to which people belong (e.g., Daniel et al., 2015; Sanderson & McQuilkin, 2017). This may be fostered whenever the relational environment is perceived as not prioritizing the personal interests even at the expense of others.

Our results did not support H2, according to which we expected value congruity in terms of conservation and self-transcendence to promote prosociality and in terms of self-enhancement to discourage it. However, they confirmed H3 to some extent. The relation between openness to change, which is a personal focused growth value, and prosociality is reinforced by the perceptions of significant others as discouraging a social focused growth value, namely self-transcendence. On the other hand, the relation between conservation, which is a self-protective value characterized by a social focus, and self-reported prosociality is reinforced by the perceptions of significant others as discouraging a self-protective value which is instead characterized by a personal focus, namely self-enhancement. This highlights that the external pressure mechanism operates in a more complex way than we hypothesized. Based on our preliminary results, it is the weakness of external pressure with respect to the same value (as in the case of openness to change) or to values sharing some motivational goals (i.e., self-expansion and growth or self-protection against threats), but diverging in terms of focus (i.e., personal vs. social focus), that can activate and make more salient an individual's values.

Previous research has demonstrated how the relationships between values and behavior may differ across cultural groups. Indeed, culture is a moderator between values and behavior (for a review on this topic, see for example Roccas & Sagiv, 2010). In the present study, we have emphasized that the

micro-relational context may also moderate this relationship. In doing so, we expanded previous research by considering the specificity of the perceptions of significant others' values, namely a group of people with whom interdependence is highly relevant. Overall, our results confirmed that the weaker the external pressure is, the greater is the importance of internal factors as personal values (Shoda, 1999). Generally speaking, being surrounded by a relational context that assigns little importance to value priorities contributes to activation of one's own personal values.

Even though previous research has indicated that people show higher levels of subjective well-being and positive functioning when their value priorities are congruent with those prevailing in their environment (Caplan, 1987; Locke et al., 2021; Sagiv & Schwartz, 2000; Sharma, 2018), our results highlighted that the congruity between personal values and the perceptions of significant others' values is not relevant in fostering young adults' reported prosocial behaviors. In other words, value congruity, when referring to the perceptions of significant others' values, does not work as reinforcement in activating personal values. We may here speculate that what activates them, instead, is perceiving growth self-expansion vs self-protection goals underlying personal values to some extent as threatened by the context. This is an intriguing speculation that deserves further investigation.

All studies have weaknesses, and our study is of course no exception. First, we used a cross-sectional design, and thus it was not possible either to draw causal inferences from the results or to catch age-related specificities and changes over time; comparative or better longitudinal approaches could help in addressing this issue. Second, young adults were our only informants, reporting their perceptions of significant others' values. Despite perceptions of others' values being relevant in guiding behaviors (e.g., Šimunović et al., 2018), they may be highly different from significant others' actual values (e.g., Grusec & Goodnow, 1994). Third, we used only a self-report measure of prosociality. As is known, prosociality is especially susceptible to social desirability bias, with respondents tending to overestimate their own prosocial behavior (Luengo Kanacri et al., 2021). It would therefore be worthwhile that future studies on this construct include a measure of, and control for, social desirability.

Overall, this study paves the way for the study of values in the close relationship process, which is a mostly neglected area in the available literature (Gaines, 2016); this despite positive interdependence, including appreciation of the other's differences and conflict resolution, has proved to be a useful instrument to support the effectiveness of values education programs at school and within the broader com-

munity (e.g., Johnson & Johnson, 2010). The present study has clearly shown that it is not only the trade-off between values that needs to be taken into account to better comprehend the value-behavior link (Schwartz, 1992, 2012), but also the micro-relational context to which people belong, and in particular their perceptions of significant others' values. Indeed, these perceptions may be so relevant as to significantly moderate the personal values-self-reported prosociality link.

#### ENDNOTES

- 1 Given the inconsistent previous results (e.g., Bayram, 2016; Benish-Weisman et al., 2019; Espinosa et al., 2011; Schwartz, 2010), we did not develop any specific hypothesis about the direction (positive or negative) of the relationship between openness to change and self-reported prosociality.
- 2 Part of this dataset was used in a study by Danioni and Barni (2021).

#### REFERENCES

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Sage.
- Alessandri, G., Caprara, G. V., Eisenberg, N., & Steca, P. (2009). Reciprocal relations among self-efficacy beliefs and prosociality across time. *Journal of Personality*, 77, 1229–1259. <https://doi.org/10.1111/j.1467-6494.2009.00580.x>
- Arslantürk, G., & Harput, D. (2021). Prosociality, religiosity and values in adolescence: Comparing the impact of religious and general schooling in Turkey. *Journal of Beliefs & Values*, 42, 348–362. <https://doi.org/10.1080/13617672.2020.1848150>
- Bardi, A., & Schwartz, S. H. (2003). Values and behavior: Strength and structure of relations. *Personality and Social Psychology Bulletin*, 29, 1207–1220. <https://doi.org/10.1177/0146167203254602>
- Barni, D. (2009). *Trasmettere valori. Tre generazioni familiari a confronto* [Transmitting values. A comparison among three family generations]. Unicopli.
- Barni, D., Ranieri, S., Scabini, E., & Rosnati, R. (2011). Value transmission in the family: Do adolescents accept the values their parents want to transmit? *Journal of Moral Education*, 40, 105–121. <https://doi.org/10.1080/03057240.2011.553797>
- Barni, D., Vieno, A., Rosnati, R., Roccato, M., & Scabini, E. (2014). Multiple sources of adolescents' conservative values: a multilevel study. *European Journal of Developmental Psychology*, 11, 433–446. <https://doi.org/10.1080/17405629.2013.857307>
- Bayram, A. B. (2016). Values and prosocial behaviour in the global context: Why values predict public support for foreign development assistance to de-

- veloping countries. *Journal of Human Values*, 22, 93–106. <https://doi.org/10.1177/0971685815627749>
- Benish-Weisman, M., Daniel, E., Sneddon, J., & Lee, J. (2019). The relations between values and prosocial behavior among children: The moderating role of age. *Personality and Individual Differences*, 141, 241–247. <https://doi.org/10.1016/j.paid.2019.01.019>
- Bernard, M. 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. <https://doi.org/10.1177/0146167205279908>
- Boer, D., & Fischer, R. (2013). How and when do personal values guide our attitudes and sociality? Explaining cross-cultural variability in attitude–value linkages. *Psychological Bulletin*, 139, 1113–1147. <https://doi.org/10.1037/a0031347>
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.
- Capanna, C., Vecchione, M., & Schwartz, S. H. (2005). La misura dei valori. Un contributo alla validazione del Portrait Values Questionnaire su un campione italiano [Measurement of values: a contribution to the validation of the Portrait Values Questionnaire in an Italian Sample]. *Bollettino di Psicologia Applicata*, 246, 29–41.
- Caplan, R. D. (1987). Person-environment fit theory and organizations: Commensurate dimensions, time perspectives, and mechanisms. *Journal of Vocational Behavior*, 31, 248–267. [https://doi.org/10.1016/0001-8791\(87\)90042-X](https://doi.org/10.1016/0001-8791(87)90042-X)
- Caprara, G. V., Alessandri, G., & Eisenberg, N. (2012). Prosociality: The contribution of traits, values, and self-efficacy beliefs. *Journal of Personality and Social Psychology*, 102, 1289–1303. <https://doi.org/10.1037/a0025626>
- Caprara, G. V., Barbaranelli, C., Pastorelli, C., Bandura, A., & Zimbardo, P. G. (2000). Prosocial foundations of children’s academic achievement. *Psychological Science*, 11, 302–306. <https://doi.org/10.1111/1467-9280.00260>
- Caprara, G. V., Steca, P., Zelli, A., & Capanna, C. (2005). A new scale for measuring adults’ prosocialness. *European Journal of Psychological Assessment*, 21, 77–89. <https://doi.org/10.1027/1015-5759.21.2.77>
- Daniel, E., Bilgin, A. S., Brezina, I., Strohmeier, C. E., & Vainre, M. (2015). Values and helping behavior: a study in four cultures. *International Journal of Psychology*, 50, 186–192. <https://doi.org/10.1002/ijop.12086>
- Danioni, F., & Barni, D. (2018). Using the Portrait Values Questionnaire to assess children’s perceptions of parental socialization values. TPM: Testing, Psychometrics, Methodology in Applied Psychology, 25, 447–467. <https://doi.org/10.4473/TPM25.3.8>
- Danioni, F., & Barni, D. (2019). The relations between adolescents’ personal values and prosocial and antisocial behaviours in team sports. *International Journal of Sport and Exercise Psychology*, 17, 459–476. <https://doi.org/10.1080/1612197X.2017.1367951>
- Danioni, F., & Barni, D. (2021). Value priorities, impression management and self-deceptive enhancement: Once again, much substance and a little bit of style. *The Journal of Social Psychology*, 161, 146–159. <https://doi.org/10.1080/00224545.2020.1778619>
- Dobewall, H., & Strack, M. (2011). Cultural value differences, value stereotypes, and diverging identities in intergroup conflicts: The Estonian example. *International Journal of Conflict and Violence*, 5, 211–223. <https://doi.org/10.4119/ijcv-2856>
- Elster, A., & Gelfand, M. J. (2021). When guiding principles do not guide: The moderating effects of cultural tightness on value-behavior links. *Journal of Personality*, 89, 325–337. <https://doi.org/10.1111/jopy.12584>
- Espinosa, A., Salazar, J. F., & Rottenbacher de Rojas, J. M. (2011). Values, pro-social behavior and personal growth in university students after the August 15th, 2007 earthquake. *Liberabit*, 17, 49–58.
- Frazier, P. A., Tix, A. P., & Barron, K. E. (2004). Testing moderator and mediator effects in counseling psychology research. *Journal of Counseling Psychology*, 51, 115–134. <https://doi.org/10.1037/0022-0167.51.1.115>
- Frenzel, A. C., Goetz, T., Pekrun, R., & Watt, H. M. (2010). Development of mathematics interest in adolescence: Influences of gender, family, and school context. *Journal of Research on Adolescence*, 20, 507–537. <https://doi.org/10.1111/j.1532-7795.2010.00645.x>
- Gaines, S. O. Jr (2016). *Personality and close relationship processes*. Cambridge University Press.
- Grønhoj, A., & Thøgersen, J. (2009). Like father, like son? Intergenerational transmission of values, attitudes, and behaviours in the environmental domain. *Journal of Environmental Psychology*, 29, 414–421. <https://doi.org/10.1016/j.jenvp.2009.05.002>
- Grusec, J. E., & Goodnow, J. J. (1994). Impact of parental discipline methods on the child’s internalization of values: a reconceptualization of current points of view. *Developmental Psychology*, 30, 4–19. <https://doi.org/10.1037/0012-1649.30.1.4>
- Johnson, D. W., & Johnson, R. T. (2010). The impact of social interdependence on values education and student wellbeing. In T. Lovat, R. Toomey, & N. Clement (Eds.), *International research handbook on values education and student wellbeing* (pp. 825–847). Springer.
- Kelley, H. H., & Thibaut, J. W. (1978). *Interpersonal relations: a theory of interdependence*. Wiley.
- Kelley, H. H., Holmes, J. G., Kerr, N. L., Reis, H. T., Rusbult, C. E., & Van Lange, P. A. M. (2003). *An atlas of interpersonal situations*. Cambridge University Press.

- Klein, N. (2017). Prosocial behavior increases perceptions of meaning in life. *The Journal of Positive Psychology, 12*, 354–361. <https://doi.org/10.1080/17439760.2016.1209541>
- Knafo, A., & Schwartz, S. H. (2003). Parenting and adolescents' accuracy in perceiving parental values. *Child Development, 74*, 595–611. <https://doi.org/10.1111/1467-8624.7402018>
- Lindeman, M., & Verkasalo, M. (2005). Measuring values with the Short Schwartz's Value Survey. *Journal of Personality Assessment, 85*, 170–178. [https://doi.org/10.1207/s15327752jpa8502\\_09](https://doi.org/10.1207/s15327752jpa8502_09)
- Locke, K. D., MacDonald, G., Barni, D., Reyes, J. A. S., Morio, H., Vargas-Flores, J. D. J., Ibáñez-Reyes, J., Mastor, K. A., & Kamble, S. (2021). Communal motives towards parents and perceived self-parent agreement. *Collabra: Psychology, 7*, 22165. <https://doi.org/10.1525/collabra.22165>
- Lönnqvist, J. E., Walkowitz, G., Wichardt, P., Lindeman, M., & Verkasalo, M. (2009). The moderating effect of conformism values on the relations between other personal values, social norms, moral obligation, and single altruistic behaviours. *British Journal of Social Psychology, 48*, 525–546. <https://doi.org/10.1348/014466608X377396>
- Lönnqvist, J. E., Yijälä, A., Jasinskaja-Lahti, I., & Verkasalo, M. (2012). Accuracy and contrast in national value stereotypes: a case study using Ingrian-Finns as bi-cultural experts. *International Journal of Intercultural Relations, 36*, 271–278. <https://doi.org/10.1016/j.ijintrel.2011.08.002>
- Luengo Kanacri, B. P., Eisenberg, N., Tramontano, C., Zuffianò, A., Caprara, M. G., Regner, E., Zhu, L., Pastorelli, C., & Caprara, G. V. (2021). Measuring prosocial behaviors: Psychometric properties and cross-national validation of the prosociality scale in five countries. *Frontiers in Psychology, 12*, 693174. <https://doi.org/10.3389/fpsyg.2021.693174>
- Lyubomirsky, S., Sheldon, K. M., & Schkade, D. (2005). Pursuing happiness: The architecture of sustainable change. *Review of General Psychology, 9*, 111–131. <https://doi.org/10.1037/1089-2680.9.2.111>
- Oh, R. R. Y., Fielding, K. S., Nghiem, L. T. P., Chang, C. C., Carrasco, L. R., & Fuller, R. A. (2021). Connection to nature is predicted by family values, social norms and personal experiences of nature. *Global Ecology and Conservation, 28*, e01632. <https://doi.org/10.1016/j.gecco.2021.e01632>
- Padilla-Walker, L. M., Fraser, A. M., & Harper, J. M. (2012). Walking the walk: The moderating role of proactive parenting on adolescents' value-congruent behaviors. *Journal of Adolescence, 35*, 1141–1152. <https://doi.org/10.1016/j.adolescence.2012.03.003>
- Ponizovskiy, V., Grigoryan, L., Kühnen, U., & Boehnke, K. (2019). Social construction of the value-behavior relation. *Frontiers in Psychology, 10*, 934. <https://doi.org/10.3389/fpsyg.2019.00934>
- Roccas, S., & Sagiv, L. (2010). Personal values and behavior: Taking the cultural context into account. *Social and Personality Psychology Compass, 4*, 30–41. <https://doi.org/10.1111/j.1751-9004.2009.00234.x>
- Roccas, S., & Sagiv, L. (2017). *Values and behavior: Taking a cross-cultural perspective*. Springer.
- Russo, C., Barni, D., Zagrean, I., & Danioni, F. (2021). Value consistency across relational roles and basic psychological needs satisfaction: The mediating role of self-concept clarity. *Social Sciences, 10*, 291. <https://doi.org/10.3390/socsci10080291>
- 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. [https://doi.org/10.1002/\(SICI\)1099-0992\(200003/04\)30:2<177::AID-EJSP982>3.0.CO;2-Z](https://doi.org/10.1002/(SICI)1099-0992(200003/04)30:2<177::AID-EJSP982>3.0.CO;2-Z)
- Sanderson, R., & McQuilkin, J. (2017). Many kinds of kindness: The relationship between values and prosocial behaviour. In S. Roccas & L. Sagiv (Eds.), *Values and behavior: Taking a cross-cultural perspective* (pp. 75–96). Springer.
- Sanderson, R., Prentice, M., Wolf, L., Weinstein, N., Kasser, T., & Crompton, T. (2019). Strangers in a strange land: Relations between perceptions of others' values and both civic engagement and cultural estrangement. *Frontiers in Psychology, 10*, 559. <https://doi.org/10.3389/fpsyg.2019.00559>
- Scabini, E., & Iafra, R. (2019). Psicologia dei legami familiari [Psychology of family relations]. Il Mulino.
- Scales, P. C., Benson, P. L., Oesterle, S., Hill, K. G., Hawkins, J. D., & Pashak, T. J. (2016). The dimensions of successful young adult development: a conceptual and measurement framework. *Applied Developmental Science, 20*, 150–174. <https://doi.org/10.1080/10888691.2015.1082429>
- 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). Academic Press.
- Schwartz, S. H. (1996). Value priorities and behavior: Applying a theory of integrated value systems. In C. Seligman, J. M. Olson, & M. P. Zanna (Eds.), *The psychology of values: The Ontario Symposium* (Vol. 8, pp. 1–24). Erlbaum.
- Schwartz, S. H. (2010). Basic values: How they motivate and inhibit prosocial behavior. In M. Mikulincer & P. R. Shaver (Eds.), *Prosocial motives, emotions, and behavior: The better angels of our nature* (pp. 221–241). American Psychological Association.
- Schwartz, S. H. (2012). An overview of the Schwartz theory of basic values. *Online Readings in Psychology and Culture, 2*, 11. <https://doi.org/10.9707/2307-0919.1116>
- Schwartz, S. H., Melech, G., Lehmann, A., Burgess, S., Harris, M., & Owens, V. (2001). Extending the cross-cultural validity of the theory of basic human

- values with a different method of measurement. *Journal of Cross-Cultural Psychology*, 32, 519–542. <https://doi.org/10.1177/0022022101032005001>
- Schwartz, S. H., Cieciuch, J., Vecchione, M., Davidov, E., Fischer, R., Beierlein, C., Ramos, A., Verkasalo, M., Lönnqvist, J. E., Demirutku, K., Dirilen-Gumus, O., & Konty, M. (2012). Refining the theory of basic individual values. *Journal of Personality and Social Psychology*, 103, 663–688. <https://doi.org/10.1037/a0029393>
- Sharma, D. (2018). When fairness is not enough: Impact of corporate ethical values on organizational citizenship behaviors and worker alienation. *Journal of Business Ethics*, 150, 57–68. <https://doi.org/10.1007/s10551-016-3107-9>
- Sharma, D., Borna, S., & Steams, J. M. (2009). An investigation of the effects of corporate ethical values on employee commitment and performance: Examining the moderating role of perceived fairness. *Journal of Business Ethics*, 89, 251–260. <https://doi.org/10.1007/s10551-008-9997-4>
- Shoda, Y. (1999). A unified framework for the study of behavioral consistency: Bridging person×situation interaction and the consistency paradox. *European Journal of Personality*, 13, 361–387. [https://doi.org/10.1002/\(SICI\)1099-0984\(199909/10\)13:5<361::AID-PER362>3.0.CO;2-X](https://doi.org/10.1002/(SICI)1099-0984(199909/10)13:5<361::AID-PER362>3.0.CO;2-X)
- Šimunović, M., Reić Ercegovac, I., & Burušić, J. (2018). How important is it to my parents? Transmission of STEM academic values: The role of parents' values and practices and children's perceptions of parental influences. *International Journal of Science Education*, 40, 977–995. <https://doi.org/10.1080/09500693.2018.1460696>
- Soper, D. (2013). Interaction (Version 1.7.2211) [computer software]. Retrieved from <http://www.danielsoper.com/interaction/default.aspx>
- Streit, C., Carlo, G., & Killoren, S. E. (2020). Ethnic socialization, identity, and values associated with US Latino/a young adults' prosocial behaviors. *Cultural Diversity and Ethnic Minority Psychology*, 26, 102–111. <https://doi.org/10.1037/cdp0000280>
- Tanner, J. L., & Arnett, J. J. (2011). Presenting “emerging adulthood”: What makes it developmentally distinctive? In J. J. Arnett, M. Kloep, L. B. Hendry, & J. L. Tanner (Eds.), *Debating emerging adulthood: Stage or process?* (pp. 13–30). Oxford University Press.
- Toseeb, U., & St Clair, M. C. (2020). Trajectories of prosociality from early to middle childhood in children at risk of developmental language disorder. *Journal of Communication Disorders*, 85, 105984. <https://doi.org/10.1016/j.jcomdis.2020.105984>
- Valentine, S., & Barnett, T. (2003). Ethics code awareness, perceived ethical values, and organizational commitment. *Journal of Personal Selling and Sales Management*, 23, 359–367. <https://doi.org/10.1080/08853134.2003.10749009>
- Vecchione, M., Schwartz, S. H., Davidov, E., Cieciuch, J., Alessandri, G., & Marsicano, G. (2020). Stability and change of basic personal values in early adolescence: a 2-year longitudinal study. *Journal of Personality*, 88, 447–463. <https://doi.org/10.1111/jopy.12502>
- Verplanken, B., & Holland, R. W. (2002). Motivated decision making: Effects of activation and self-centrality of values on choices and behavior. *Journal of Personality and Social Psychology*, 82, 434–447. <https://doi.org/10.1037/0022-3514.82.3.434>