

Sharghi, M. J. (2023). Predicting Prosocial Personality, Other-Oriented Empathy, Helpfulness, and Social Exchange Styles Based on Value System. *Journal of European Psychology Students*, *14*(1), 24–38. https://doi.org/10.59477/jeps.537

# RESEARCH ARTICLE

# Predicting Prosocial Personality, Other-Oriented Empathy, Helpfulness, and Social Exchange Styles Based on Value System

Mohammad Javad Sharghi<sup>1</sup>

A deeper understanding and promotion of moral personality is achieved by understanding egoism better. To this end, this study investigates the associations between prosocial personality and social exchange styles based on a range of egoistic and altruistic values. The study has a descriptive-correlational design. Sampling was conducted using multi-stage cluster sampling. Data were collected using the Protocol Personality Battery, Social Exchange Styles Questionnaire, and Portrait Values Questionnaire and analysed using stepwise multiple linear regression and multi-dimensional scaling. Our findings show that conflicting predictive values in some exchange styles, which are close to the prosocial personality, could represent an egoistic-altruistic spectrum in those styles that supported the research hypothesis.

**Keywords**: prosocial personality, other-oriented empathy, helpfulness, social exchange styles, value systems

The study of prosociality is at the heart of peaceful societies and is a key construct when dealing with global challenges (Böckler et al., 2018). Social psychologists have paid special attention to the interests and motivations of prosocial behaviour (Penner et al., 2005) to understand and predict it (Baron et al., 2006).

In psychology, the nature of humans' moral behaviours can be defined along a spectrum of egoistic to prosocial motivations (De Cremer & Van Lange, 2001). Generosity -without external reward or internal satisfaction- and morals in egoistic or altruistic forms, is a way to describe or define

Corresponding author: Mohammad Javad Sharghi (sharghi.mohammadjavad@gmail.com)

prosocial behaviour from a range of self-oriented and other-oriented approaches (Cutler & Campbell-Meiklejohn, 2018; Strickland, 2001). However, despite many explanations for moral behaviour in previous studies, there is still no consensus on how to explain the difference between prosocial and egoistic decision-making (Chen & Krajbich, 2018).

Since understanding prosocial behaviours requires understanding other concepts such as self-interest, reciprocity, and emotions (Schroeder & Graziano, 2015), studying prosocial personality along with the concepts related to conflicting theories would enrich the understanding of the concept of prosocial personality and its definition. For instance, based on the social exchange theory, concepts such as social exchange styles are established along a continuum of egoistic to altruistic styles. It may be

<sup>1</sup> Department of Psychology, Payame Noor University, Iran.

possible to predict factors of prosocial personality in terms of the value system along with a range of social exchange styles.

This study attempts to explain moral behaviour through simultaneous investigation of prosocial personality concepts and social interaction styles in terms of individuals' value systems. Many researchers have suggested that behaviour is a result of values and approaches (Fritzsche & Oz, 2007). In general, researchers have tried to improve individuals' performance in everyday life by examining their values (VandenBos, 2015). Considering the interaction between personality structures and values (Parks & Guay, 2009), it becomes necessary to examine the predictive effect of values.

Previous studies have investigated moral behaviour in relation to the prosocial personality concept based on values (e.g., Bond & Chi, 1997), but none of them have simultaneously studied prosocial personality and social exchange styles with an egoistaltruist spectrum based on the value system. This may be because the study of moral issues directs the researcher's mind just to an altruistic moral area with no relation to egoism. Therefore, it seems that it is required to further explore and understand the common infrastructures of altruistic and egoist characters to revise the partial delimitation of ethical definitions. To this end, the present study attempts to simultaneously examine the value infrastructure of prosocial personality and various types of exchange styles - with a range of egotistic and altruistic values.

# Definitions and Theoretical Background

**Prosocial personality.** The prosocial behaviour definition originated from the term *tender emotions* and was first introduced by McDougall (Penner et al., 2005). Prosociality refers to behaviours that are intended to benefit others (VandenBos, 2015). As stated by Penner, "Prosocial personality, which concerns personality traits associated with prosocial thoughts, feelings, and behaviours" (Penner, 2002, p. 462). The following factors are identified in prosocial personality (Penner et al., 1995, p. 7):

Other-Oriented Empathy factor. "People who score high on this factor are likely to be predisposed to experience both effective and cognitive empathy

and may feel responsible for or concerned about others' welfare. The Other-Oriented Empathy factor primarily concerns prosocial thoughts and feelings".

Helpfulness factor. "People who score high on the Helpfulness factor report a history of being helpful and are unlikely to experience self-oriented discomfort when another person is in extreme distress".

Social exchange styles. In economic models, it is assumed that an individual's material personal interests are the foundation of one's motivation and conduct. Accordingly, issues such as altruism, the need for justice, and aversion to inequality all come from every human being's personal interests. (Mancini et al., 2011).

According to social exchange theory, social relations are considered as exchanges between partners - in which they seek to fairly maximise their profits (received rewards minus paid costs). The hypothesis is based on the reciprocity norm (VandenBos, 2015). In the above theory, altruistic behaviour has benefits, and both helper and recipient exchange benefits, and altruism is expected (Atkinson et al., 2000). Unlike the concept of prosociality, this theory is based on self-interest and profit-making in personal relations.

In the opinion of Leybman et al. (2011), social exchange styles are classified into the following five groups:

*Overinvestment.* Investing in exchange relationships without requiring equal investments from others.

Fairness. Favouring equity and fairness.

*Tracking.* Consistently and accurately monitoring costs and profits.

*Individualism.* Preference for self-reliance and low investment.

**Benefit-seeking.** Desire to benefit as much as possible.

Semantically, some of these styles, like overinvestment, are in line with prosocial personality, and some, such as benefit-seeking, differ from it.

Definitions and explanations in an egoist-altruist spectrum. In the opinion of Batson and Thompson (2001), in dealing with a moral problem, three main motivations interact with each other and

consequently influence ethical behaviour: personal self-interest, moral integrity, and moral hypocrisy. According to Simpson and Willer (2008), prosocial behaviour is also triggered by both altruism (selfless behaviour) and egoism (selfish behaviour). Thus, the prosocial motivations are apparently established on two sides of the same axis (egoism and altruism); in other words, as Schwartz (2012) stated, the aforementioned motivations can be explained and discussed in terms of two opposing poles: self-enhancement or self-transcendence pole.

The causes and mechanisms of prosocial behaviours, such as the act of volunteering, can represent a range of values associated with personal needs to important values of humanity (Bekkers & Wiepking, 2007; Clary & Snyder, 1999). Davis et al. (2003) have reported that criteria related to self-interested needs, along with motivations such as personal growth, better predict volunteer persistence than criteria associated with seemingly selfless needs along with humanistic motivations. In volunteering, altruism seems to be already with a degree of egoism and self-interest, along with cognitive algebra that is on the other end of this spectrum.

Research-based evidence may indicate a kind of wisdom, moral, developed or prosocial egoism. For example, egoist factors providing the context for prosocial behaviour (Maner & Gailliot, 2007) confirm

**Table 1.**Motivational types of values

Definition	Exemplary values				
Power. Social status and prestige, control or dominance over	Social power, authority, wealth				
people and resources					
Achievement. Personal success through demonstrating	Successful, capable				
competence according to social standards.					
Hedonism. Pleasure and sensuous gratification for oneself.	Ambitious, pleasure, enjoying life				
Stimulation. Excitement, novelty, and challenge in life.	Daring, varied life, exciting life				
Self-direction. Independent thought and action-choosing,	Creativity, curious, freedom				
creating, exploring.					
Universalism. Understanding, appreciation, tolerance, and	Broad-minded, social justice, equality,				
protection for the welfare of all people and for nature.	protecting the environment				
Benevolence. Preservation and enhancement of the welfare of	Helpful, honest, forgiving				
people with whom one is infrequent personal contact.					
Tradition. Respect, commitment, and acceptance of the	Humble, devout, accepting my portion in				
customs and ideas that traditional culture or religion provide.	life				
Conformity. Restraint of actions, inclinations, and impulses	Politeness, obedient, honouring parents				
likely to upset or harm others and violate social expectations	and elders				
or norms.					
Security. Safety, harmony, and stability of society, of	National security, social order, clean				
relationships, and of self.					
C					

Source. Schwartz, 1994

the practice of prosocial behaviour under egoistic conditions as underlying factors. In addition, greater happiness due to showing generosity to relatives compared to strangers (Aknin et al., 2011), and its psychological benefits (Klein, 2016; Schacter & Margolin, 2019; Vanelli, 2018), could be considered as evidence for the wisdom aspect or developed aspect of egoism. Moreover, this can be supported by the psychological benefits of happiness from the perspective of eudaemonism (the desire to achieve happiness through the happiness of others as superior goodness), the evolutionary patterns of cooperation and the term -warm glow, the importance of experiencing positive emotions during generosity (Aknin et al., 2012; Long & Krause, 2017), and finally strategic prosociality in childhood (Leimgruber et al., 2012). Accordingly, developed and community-oriented hedonism can emerge in the sense of the exchange style of fairness, which is associated with a combination of benevolent and hedonistic values. This subject could be followed in terms of the relationship between social exchange styles such as fairness and benevolence besides hedonism values.

In social exchange styles, achieving a superior reward with an altruistic motivation could be formed as a benefit-seeking style and suggest egoistic helping based on self-interest. However, in the confrontation between egoism and altruism, there are two important points. Firstly, social exchange theorists believe that enjoying helping others results in happiness (Aronson et al., 2016) and secondly, the belief that people are intrinsically valuable, as a motivation for prosocial behaviour (Strickland, 2001), and knowing others are more valuable than requiring himself/herself to do something selflessness could represent a social exchange style, which is called *overinvestment* and consistent with prosocial personality. However, the difference between altruism and egoism are discussed as different patterns of activity in the brain (Cutler & Campbell-Meiklejohn, 2018).

As claimed by many thinkers, the basic purpose of morality is altruism and avoidance of egoism (Sha'bani, 2013). On the other hand, altruism means that selflessness and devotion would not be realised

in the real world without considering the agent's purpose and intention (Akhavan, 2011). In the opinion of Baron et al. (2006), it is more logical to consider prosocial behaviours with two parts, one based on egoistic motivations and another on altruistic motivations.

Schwartz's value system. According to Schwartz's theory (2012) of basic human values, values are beliefs, desirable goals, criteria or standards beyond specific situations and actions, that are ordered in human thought by their importance which are guided according to the importance of each value. The definition of each value is given in Table 1.

The interaction between values in a value system structure leads to a particular function in an individual and is observed in one's behavioural style or personality. In Schwartz's theory, agreement and confrontation between values are shown in a circular and continuous structure of values-creating two bipolar dimensions (Figure 1).

Relationship of values with prosociality and social exchange. There are several studies on the relationship between values and prosocial behaviour, as well as the effects of values on prosociality. For example, one can refer to the role of values in

Figure 1.

Theoretical model of relations among ten motivational types of values



Source. Schwartz, 2012

decision making (Ravlin & Meglino, 1987), the predictive values in prosocial behaviours (Bond & Chi, 1997), the impact stability, and the greatest effect of values on voluntary behaviour during aging (Okun & Schultz, 2003). The role of social values as an important mediator in the spontaneous cooperation of prosocial people (Mischkowski & Glöckner, 2016), social and personal criteria, practical values as the predictors of prosocial behaviour (Lai et al., 2018; Penner et al., 2005), and the effect of values such as equality in the lower social classes of society on the occurrence of prosocial behaviour (Piff et al., 2010).

On the other hand, Ahmadloo (2016) states that according to George Caspar Homans's explanation of social behaviour, value is considered an effective variable in the process of social exchange. Besides, in the opinion of Blau, values and common norms, as social exchange mediators at a macro level, are the same generalised rewards such as social approval, reputation, prestige, and money (Ahmadloo, 2016). In the field of psychology and social exchange styles, Thibaut suggested that the benefits are derived from a broader context of behaviour that underlies the existence of values such as altruism, competition, and fairness (VandenBos, 2015).

# Hypothesis

Considering the relationship between the variables as well as the results of previous studies, the present research attempts to answer the question of whether prosocial personality and various social exchange styles could be predicted based on a value system. Accordingly, two hypotheses are investigated:

- There is likely to be an association between prosocial personality along with its two other factors (other-oriented empathy and helpfulness) and value system
- There is likely to be an association between Social exchange styles (fairness, tracking, overinvestment, individualism, and benefitseeking) and value system

## Methods

The research is a descriptive-correlational study. Data were analysed using descriptive statistics (median, standard deviation, and Pearson correlation coefficient) and inferential statistics (stepwise multiple linear and multi-dimensional scaling analysis) in IBM SPSS Statistics for Windows, Version 22.0.

# **Participants**

The population included statistical all undergraduate students who were studying in the academic year of 2018-19 (first semester) at Ferdowsi University, Mashhad (N = 13000 students). Using a multistage cluster sampling method, four of the 12 faculties were randomly selected, after which two departments were selected from each faculty. The eiaht departments Electrical selected were: engineering, Civil engineering, Physics, Chemistry, Statistics, Applied Mathematics, Geography and Persian Literature. The sample size was estimated to be 373 people using Cochran's formula, but 394 students from the eight departments were asked to participate in anticipation of participant withdrawal. Convenience sampling was used. The participants were informed about the research goal. They filled out questionnaires by the paper-pencil method. Finally, 57 questionnaires were excluded due to a considerable number of unanswered questions in them. In addition, some of the questionnaires were obviously answered by chance. Therefore, the realised sample size is 337.

#### Materials

Prosocial Personality Battery (PSB). The Prosocial Personality Battery (PSB) was designed to evaluate prosocial attitudes in terms of personality traits by Penner. He identified two factors and 30 items in prosocial personality (2002). This has been normalized in Iran by Bajlān (2011). The test-retest method was used to estimate the reliability of the whole questionnaire and its subscales (.98 for the whole questionnaire and .42 for its subscales). The internal consistency coefficients of the whole questionnaire and its two factors were reported .79

and .17-.74, respectively. In addition, the correlation coefficients between the score of the "other-oriented empathy" factor in this questionnaire and "conscientiousness" and "agreeableness" in the Neuroticism – Extraversion – Openness Five-Factor Inventory were estimated to be .55 and .38, respectively, indicating the desirable convergent validity of PSB-30. Also, the results of confirmatory factor analysis and indicators such as (RMSEA = .02; AGFI = .95; GFI = .96) showed that the two-factor structure has a good fitness in Iranian society (as cited in Saffarinia, 2016).

Social Exchange Styles Questionnaire (SESQ). Leybman et al.'s (2011) social exchange style questionnaire (SESQ) is used to investigate personal differences in terms of social exchange styles. It consists of 54 items and five subscales which were normalized in Iran by Saffarinia (2016). For the subscales tracking, fairness, individualism, benefitseeking and overinvestment, Cronbach's alpha was obtained as .84, .81, .81, .75 and .68, respectively. The results of exploratory factor analysis and principal component (PC) analysis using varimax rotation confirmed the existence of five factors with an eigenvalue greater than 1.5: tracking, individualism, benefit-seeking fairness, overinvestment. The results of exploratory factor analysis indicate that out of 54 items in the main questionnaire, 13 items (5, 6, 11, 12, 26, 27, 30, 32, 36, 40, 44, 51, and 53) were removed. Moreover, the results of confirmatory factor analysis (i.e., indices of  $x^2/df = 3.46$ , GFI = .89, AGFI = .86, CFI = .86, and RMSEA = .07) showed relatively good fitness of the 41-item model. Moreover, the concurrent validity of this scale was approved by the Personal Norm of Reciprocity (PNR) scale, NEO personality inventory, Self-Esteem Inventory, and Social Support Appraisals Scale. (Saffarinia, 2017).

Portrait Values Questionnaire (PVQ). By 2012, the validity of Schwartz's theory had been investigated in dozens of studies in 82 countries with different cultures (Schwartz, 2012) using Schwartz's Value Survey (SVS) and Portrait Values Questionnaire (PVQ-40) by Schwartz (2006a). In Iran, after confirming the validity of the theoretical model of this questionnaire in terms of meaning

and structure, its reliability was investigated using the test-retest method with a two-week interval and (Universalism: acceptable coefficients Benevolence: .79, Tradition: .80, Conformity: .77, Security: .78, Power: .87, Achievement: .83, Hedonism: .86, Stimulation: .81, and Self-direction: .78) were reported. In scoring, two items (14 and 35) were deleted for Iranian men (Delkhamoush, 2014; Delkhamoush & Ahmadi Mobarakeh, 2011). Since this research has been carried out in a religious city and in an Iranian society with a probability of extrinsic religious orientation, asking indirect questions about an individual's values could reduce the probability of a social desirability response set, thereby increasing the reliability of results. Furthermore, the PVQ is more objective than SVS, so it is easier to fill this out. Therefore, PVQ was the preferred scale.

Table 2.

Means and standard deviations of the variables (n = 337)

Scale	Subscales	Μ	SD
	Prosocial personality	3.38	0.30
Prosocial Personality	Helpfulness	3.02	0.42
	Other-oriented empathy factor	3.51	0.35
	Over-investment	2.96	0.43
Social	Fairness	3.60	0.48
Exchange	Tracking	3.49	0.42
Styles	Individualism	2.56	0.52
	Benefit-seeking	2.95	0.52
	Universalism	4.34	0.81
	Benevolence	4.34	0.86
	Tradition	3.32	0.92
	Conformity	3.97	0.81
Value System	Security	4.24	0.88
Value System	Power	3.63	0.99
	Achievement	4.47	0.99
	Hedonism	4.43	0.99
	Stimulation	4.16	1.03
	Self-direction	4.44	0.89

#### Results

The total number of participants was 337, of which 77.7% were male and 22.3% female. The mean and standard deviation of students' ages were 20.89 and 3.53, respectively. They were students of different study fields: electrical engineering 18.7%, civil engineering 17.5%, chemistry 15.7%, mathematics 11%, geography 10.7%, statistics 9.8%, physics 9.5%, and Persian literature 7.1%. The descriptive statistics of the research data (mean and standard deviation) are listed in Table 2.

The following are correlation coefficients between the ten basic values in the Schwartz's value system with prosocial personality. Its two factors are listed in Table 3, with their correlation coefficients and social exchange styles listed in Table 4.

According to the results of multiple regression analysis in Table 5, the hypotheses of this study are confirmed.

## Hypotheses 1

The value of  $R^2$  indicates that 18% of the variance of prosocial personality and 19% of the variance of other-oriented empathy factors are explained by benevolence and universalism values. Benevolence ( $\beta = .28$ ;  $\rho < .001$ ) and universalism ( $\beta = .22$ ;  $\rho < .001$ )

can significantly predict prosocial personality. Also, other-oriented empathy can be significantly predicted by benevolence ( $\beta$  = .28;  $\rho$  < .001) and universalism ( $\beta$  = .23;  $\rho$  < .001). In terms of helpfulness, the value of R² indicates that 3% of the variance of the helpfulness factor is explained by tradition and benevolence values. Tradition ( $\beta$  = .14;  $\rho$  = .01) and benevolence ( $\beta$  = .11;  $\rho$  = .03), can significantly predict this factor.

# Hypothesis 2

Regarding the second hypothesis, the following results were obtained:

**Fairness style.** According to the R<sup>2</sup> value, universalism, achievement, hedonism, and benevolence values explain 29% of the variance of the fairness style. The fairness style can be significantly predicted by universalism ( $\beta$ = .26;  $\rho$  < .001), achievement ( $\beta$ = .20;  $\rho$  < .001), hedonism ( $\beta$ = .14;  $\rho$ = .006), and benevolence ( $\beta$ = .11;  $\rho$ = .03).

**Tracking style.** The value of  $R^2$  indicates that achievement, power, and universalism explain 16% of the variance of tracking style. The achievement ( $\beta = .18$ ;  $\rho = .002$ ), power ( $\beta = .20$ ;  $\rho < .001$ ), and universalism ( $\beta = .16$ ;  $\rho < .001$ ) can significantly predict the tracking style.

Table 3.

Pearson correlation coefficient between the value system variables and prosocial personality with its two factors

		Prosocial personality		pfulness actor	Other-oriented empathy factor		
Value system	r	p	r	p	r	р	
Universalism	.35	.001	.12	.025	.35	.001	
Benevolence	.38	.001	.13	.011	.38	.001	
Tradition	.13	.014	.16	.003	.08	.121	
Conformity	.24	.001	.09	.071	.23	.001	
Security	.22	.001	.02	.606	.25	.001	
Power	001	.989	.01	.818	006	.908	
Achievement	.18	.001	.004	.937	.21	.001	
Hedonism	.15	.005	.03	.500	.16	.003	
Stimulation	.18	.001	.06	.265	.18	.001	
Self-direction	.24	.001	01	.810	.28	.001	

Overinvestment style. According to  $R^2$  value, 12% of the variance of overinvestment style can be explained by the power, benevolence, and universalism values. The power ( $\beta$  = -.19; p < .001), benevolence ( $\beta$  = .27; p < .001), and universalism ( $\beta$  = -.25; p < .001) values can significantly predict the overinvestment style.

Individualism style. The R<sup>2</sup> value indicates that the benevolence and tradition values explain 18% of the variance of individualism style. This style can be significantly predicted by benevolence ( $\beta = -.43$ ;  $\rho < .001$ ), and tradition ( $\beta = .10$ ;  $\rho = .04$ ) values.

Benefit-seeking style. According to  $R^2$  value, benevolence, power, and tradition can explain 19% of the variance of the benefit-seeking style. The benefit-seeking style can be predicted by benevolence ( $\beta = .31$ ; p < .001), power ( $\beta = .26$ ; p < .001), and tradition ( $\beta = .25$ ; p < .001) values.

Multidimensional scaling analysis was used to investigate the structural conformity of Schwartz's theory across the participants, and its results were reported with two indices of badness-of-fit and goodness-of-fit of R-squared (Figure 2).

Figure 2 has been established based on the panel introduced by Schwartz (2012); in this panel, the roots of the dynamic structure reveal the association between the values in two dimensions. In the first dimension, the values for controlling the anxiety

triggered by insecurity in society and the world are called generally self-protective values. Values on the right in the first dimension which are against the values based on anxiety-free motivation- values on the left, are called growth or self-expansive values. In the second dimension, values generally adapt to individual interests – the top values in the second dimension - which are against the values that adapt the relationships with others and social orientation - bottom values in the second dimension.

According to Figure 2, the variables with a high score in dimension one include the values of tradition, power, conformity, and security, which are opposed to the values of hedonism, self-direction, stimulation, benevolence, and universalism. As such, in dimension 1, there is a high overlap between all variables, except for achievement, and the initial model. In Schwartz's original model, the value of achievement has a high score and is seen alongside the values in group 1 in dimension one, while here, it had a below-average score.

In dimension 2, the scores of power, simulation, hedonism, and self-direction variables were above average, while the scores of tradition, conformity, security, universalism and benevolence variables were below average. Here, also, there is a high overlap between all variables, except for achievement, and Schwartz's original model.

Table 4.

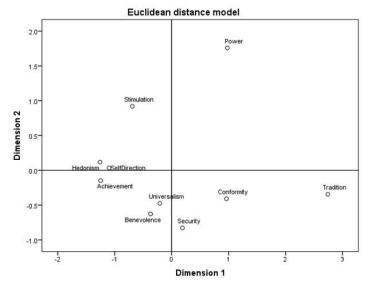
Pearson correlation coefficient between the value system variables and social exchange styles

	Fai	rness	Tra	Tracking		Over- investment		Individualism			Benefit- seeking	
Value system	r	p	r	p		r	p	r	p	r	p	
Universalism	.44	.001	.27	.001		16	.002	19	.001	06	.244	
Benevolence	.37	.001	.18	.001		.14	.007	41	.001	24	.001	
Tradition	04	.460	.00	.996		.07	.182	.23	.001	.19	.001	
Conformity	.22	.001	.18	.001		03	.520	13	.012	.04	.407	
Security	.29	.001	.26	.001		13	.013	001	.985	.10	.046	
Power	.21	.001	.29	.001		20	.001	.01	.748	.23	.001	
Achievement	.41	.011	.32	.001		10	.066	25	.001	.01	.754	
Hedonism	.35	.001	.26	.001		02	.663	20	.001	02	.606	
Stimulation	.27	.001	.19	.001		.009	.864	09	.087	.02	.677	
Self-direction	.35	.001	.29	.001		10	.056	17	.001	02	.622	

In the present study, stress and the R-squared indices were obtained .156 and .897, respectively, indicating a relatively good value and acceptable fit of the model with R-squared greater than .60.

Figure 2.

Two-dimensional map of the variables in spatial form



## Discussion

On a global level, it is widely accepted that values influence prosocial behaviour (Bayram, 2016). According to Schwartz (2010), there may be an association between the ten motivational types of value and prosocial behaviour. However, in his view, most cases, the values of universalism, benevolence, conformity, security, and power have been mentioned as values influencing prosocial behaviour. This result is also consistent with the results of Bond and Chi's (1997) study, in which regression equations showed that universalism, benevolence, and conformity values are the strongest predictors of prosocial behaviours. As stated by D'Andrade (2008), the issue of altruism against selfinterest is considered as a bipolar structure in which, according to Schwartz's value system theory, altruism pole, in self-transcendence benevolence and universalism values, and selfinterest in a self-enhancement pole.

According to the results of this study, the

helpfulness factor, which evaluates moral behaviour tendencies based on the previous experience of behaviours (Penner et al., 1995), can be predicted by the values of tradition and benevolence. This result is consistent with research on ethical behaviours. For example, one can refer to studies on the prediction of ethical behaviour based on values (Dinh et al., 2012), the importance of values and norms in predicting ethical behaviours (Kromerova & Šukys, 2018; Lai et al., 2018), and the effect of values on voluntary behaviour (Bekkers & Wiepking, 2007). The value overlap between benevolence and tradition can explain the contribution of tradition and benevolence, which together lead to adherence and selflessness within the group (Seligman et al, 2013), in predicting the helpfulness factor. In addition, tradition is presented in the social-focus pole in Schwartz's dynamic model (Schwartz, 2012), which, like self-transcendence, stands on the opposite side of the personal-focus pole.

In prosocial personality, the other-oriented empathy factor is mainly characterized by the individual's prosocial thoughts and feelings (Penner, 1995). The factor is related to cognitive and emotional components such as reasoning and empathy. Previous studies have confirmed the associations between these components, prosociality and prosocial values. For example, the mediating role of ethical reasoning in the association between personal values and decision-making in real life (Lan et al., 2008) is confirmed in previous studies. Also, the role of empathic self-efficacy beliefs as a mediator variable in the relation between self-transcendence value and prosociality (Caprara et al., 2012) is another evidence for this association. The later research has indicated that the self-transcendence value (with the components of universalism and benevolence) influences prosociality through the mediation of cognitive beliefs. This result is consistent with the result of the present study indicating the contribution of universalism and benevolence in the prediction of the cognitive and emotional factor of other-oriented empathy in prosocial personality. Alteer et al. (2013)

Table 5.

Regression results from the association between value systems, prosocial personality and value system factors

Criterion variables	Predictor variables	R	R2	В	Beta	t
Prosocial personality	benevolence universalism	.43	.18	.74 .42	.28*** .22***	5.15 4.16
Other-oriented empathy factor	benevolence universalism	.43	.19	.63 .37	.28***	5.14 4.23
Helpfulness factor	tradition benevolence	.19	.03	.12 .11	.14** .11*	2.60 2.12
Social exchange style (Fairness)	universalism achievement hedonism benevolence	.54	.29	.23 .22 .21 .14	.26*** .20*** .14** .11*	4.85 3.70 2.78 2.12
Social exchange style (Tracking)	achievement power universalism	.40	.16	.17 .25 .12	.18** .20*** .16***	3.16 3.74 2.99
Social exchange style (Over-investment)	power benevolence universalism	.35	.12	13 .17 11	19*** .27*** 25***	- 3.67 4.85 - 4.45
Social exchange style (Individualism)	benevolence tradition	.42	.18	46 .10	43*** .10*	- 8.62 2.06
Social exchange style (Benefit-seeking)	benevolence Power Tradition	.43	.19	48 .47 .36	31*** .26*** .25***	- 6.29 5.42 5.16

has reviewed previous research on personal values and ethical judgment and argued that many studies have indicated a significant association between ethical awareness or ethical sensitivity and personal values. Moreover, the nature of the two values of benevolence and universalism, which are in the self-

transcendence pole and tend to altruism (D'Andrade, 2009) as well as the nature of the components of the "other-oriented empathy" factor, which are in line with altruism (Penner et al., 2005), can explain the association between them as the variables predicting prosocial personality. Interestingly, benevolence and

universalism have almost the same contribution in predicting prosocial personality and its second factor.

Considering the common concept of fairness and prosociality (De Cremer & Van Lange, 2001), and the semantic affinity of fairness to some components of prosocial personality -such as mutual concerns and moral reasoning- one can explain the power of benevolence and universalism values as common predictor variables to predict both fairness style and prosocial personality. In addition, given neurological findings on the importance of hedonism in fairness style (Tabibnia et al., 2008) and the proximity and conformity of hedonism and achievement values in Schwarz's model (2012), one can explain the power of aforementioned values to predict fairness. The existence of two groups of seemingly contrary values in a social exchange style can indicate the dynamics and complexity of human values, which can be manifested in the combination of different motivations, from altruistic to egoist ones, in a behavioural style. This can remind Schwartz's (2010) view that people experience conflict and consistent consequences when choosing a behavioural style.

Regarding the predictive role of values, such as power, is the most important predictive value, in an exchange commitment, that is characterised by calculating self-interest in relation to an organization (Kazemi & Oreizy, 2011), as well as its common concept with tracking style, one can explain the prediction of this style based on the value of power. In addition, achievement, as a value proximate to power, can predict tracking style. Moreover, achievement and power are anxiety-based values that prevent the loss of goals and protect the self against the threat (Schwartz, 2012). So, they can be consistent with the concept of tracking style, which is a response to anxiety in relationships (Leybman et al., 2011). The value of universalism, in which some concepts such as social justice and equality are discussed, can represent a trait in a person with this style, which is defined by continuous and accurate monitoring of profits and costs. However, given the fact that universality is based on anxiety-free values and is in contradiction with the values of power and achievement, it is required to further investigate this issue in future studies.

With regards to the conformity between the concept of overinvestment style and prosocial personality, as well as the confrontation of the power value with the prosocial behaviours (Niemi & Young, 2013), a negative relationship is expected between power and overinvestment. In addition, the concept of power with the meaning of 'to control or dominate people and resources' (Schwarts, 1994), semantically the opposite of the concept of overinvestment with the meaning of devoting the resources without expectation of any benefit from others, which can show the negative relationship between the two variables. The positive relationship between the benevolence value overinvestment style can be explained by the semantic relationship between this style (with the concept of self-transcendence and other-orientation) and self-transcendence. Moreover, considering the concepts (social justice and equality and the welfare of all, not a group of people) discussed under universalism, values that are opposed to sacrificing resources for another's welfare overinvestment, there is a negative relationship between these two variables. However, given the concepts, such as the broad-minded, discussed under universalism, it is required to further investigate the reason for its negative relationship with the overinvestment style- such as the unpredictability of universalism in the helpfulness factor, in further research.

The negative relationship between individualism style and benevolence can be explained by the selfreliance and low investment in social relationship in individualism and the social welfare of all people in benevolence. Moreover, tradition value is placed on a conservative pole which is characterised by few social relations and self-reliance than sociality and altruism, which is consistent with individualism with a negative relationship with altruism (Leybman et al., 2011). Also, considering the negative relationship between individualism and the benevolence value and the positive relationship between it and tradition value, it is not expected that the conformity between benevolence and tradition values results in in-group self-sacrifice. Therefore, the combination of tradition and benevolence acts in two different ways (positively or negatively), depending on the exchange style, indicating the dynamics of interactions between values in Schwartz's theory.

Seeking benefit semantically has the highest selfinterest compared to other styles, explaining its negative relationship with benevolence value and its positive relationship with power value. In addition, the conformity between two traditions and benevolence values in the benefit-seeking style can be explained in the same way as the individualism style. Additionally, both tradition and power are anxiety-based values that prevent the loss of purpose and protect the self against the threat (Schwartz, 2012). So, the combination of these two values as factors predicting seeking-benefit could indicate anxiety in this style and the need to protect self and prevent the loss of personal goals and resources. However, one of the concepts discussed in tradition value in Schwartz's theory—accepting my portion in life—is not consistent with this style. This shows the need for more investigation of the relationship between the tradition value and the benefit-seeking style in future studies.

In multidimensional scaling, dimension 1, with the separation of two groups of values, based on anxiety and free from anxiety, and dimension 2, with the separation of social-oriented values from individual-oriented values, show conformity. Thus, the multidimensionality of value variables can be seen in Schwartz's value system (Schwartz, 2006). However, on those axes, the place of achievement values is not in accordance with the aforementioned classification procedure.

The movement of achievement value in Schwartz's value system in Iranian society has also been reported previously by Delkhamoush & Ahmadi Mobarakeh, (2011). The social norms in a collectivist society dominated by religious rulers and formed in a political environment can make achievement in a religious society with a fundamentalist approach conditional on adherence to the aforementioned norms and even lead to moral hypocrisy. In such cases, to acquire social dignity and achievement, individuals will at least pretend to abide by norms that are in line with self-transcendence, which could be equivalent to the fourth stage of Kohlberg's moral

development (social progress through moral hypocrisy). As a result, the achievement value will appear in the social pole, along with values such as social conformity and tradition, as well as the variable of benevolence as a 'free from anxiety' value. In general, the achievement value can be considered one of the values that can be naturally and functionally transformed in ideological communities. Perhaps, in the present study, the achievement value, with the role of predictive variable and positive relationship with fairness exchange style, as a style close to prosocial personality, is consistent with this explanation.

#### Conclusion

According to the results of the present study, it is recommended to enhance the benevolence and universalism values in students to improve their prosocial personality and to grow those styles close to prosocial personality, such as fairness and overinvestment.

The dynamics of values and interactions between them, such as the different function of the tradition value in its interaction with other values, indicate the dynamics of values in achieving a behavioural style or character. It also shows the importance of all values so that paying attention to just some values would result in the unexpected consequences. In addition, simultaneously considering consistent and conflict values in fairness style could indicate an egoist-altruist spectrum in a person with prosocial interests.

On the report of Flynn and Black (2011), who studied the beliefs about altruism and egoism, the relationship between these two variables describes a dynamic, systematic and value-oriented theory. Investigating predictor factors, such as values discussed in the field of prosociality, along with social exchange styles (with egoistic-altruistic spectrum), can help complete that model. Additionally, the study of mediator variables and conditions, such as political (Rothstein, 2004) or cultural (Butler & Fehr, 2018) conditions, affecting the relationships between the values using structural equations can be helpful.

However, perhaps an individual's need for simplistic thinking or unconscious absolutism in concepts and definitions to separate the realities in a concept sometimes results in his mental confusion in a semantic spectrum. Monroe (1996) has analogised various viewpoints on altruism [and prosocial behaviours] to Rumi's story about description of an elephant by blind people. In his opinion, description of altruism from a viewpoint or in terms of an aspect of only with one reason would be both wrong and right to some extent, indicating different mechanisms in this concept.

## **Limitations**

It is required to cautiously generalise the findings of this research due to the following limitations, including the statistical population, gender disproportion in participants, the smaller number of completed questionnaires than the sample size estimated by the Cochran formula, the probability of participants' bias and carelessness (according to the researcher's observations) in filling out the questionnaire, and finally, the probability of lack of participation of specific groups (such as individualism and seeking-benefit styles or who are with non-prosocial behaviour).

# Implications for Practice and Theory

The findings and results of the present study can be cautiously used in the field of social capital and human resources; for example, in recruitment regarding the importance of values and prosociality in different jobs (Joosten et al., 2015; Lan et al., 2010; Vorkapić et al., 2019), generation of media content, making families more efficient, and guidance of consultants. However, it should be noted that the utilization of value concepts by power authorities, such as the ideological state or totalitarian government, can lead to a change in the nature of the values.

It is suggested to consider those findings of the present study that were not consistent with previous research, as well as those that were suggested to be further investigated in future studies.

## Conflicts of Interest

The authors declare no conflicts of interest.

# Contributorship Statement

Majid Saffarinia: Supervision Ezatollah Kordmirza Nikoozadeh: Advisor Mohammad Javad Sharghi: Conceptualization; Methodology; Data analysis; Writing-review & editing.

# Acknowledgements

The researcher would like to thank all those who participated in the present study, especially Professor Sh. H. Schwartz for his valuable comments that helped improve this article. Also, Dr Mirdoraghi is greatly appreciated for her influential and useful advice.

## References

- Ahmadloo, H. (2016, March). The position of Value Concept in Social Exchange Theory: A Review of Homans' and Belau's opinions. Paper presented at the 4th International Conference on psychology and sociology, Tehran, Iran. https://civilica.com/doc/492293/
- **Akhavan, M. (2011).** Rationality and altruism in ethics; Nagel and Gensler. (Unpublished doctoral dissertation). Allameh Tabataba'i University, Tehran.
- Aknin, L.B., Sandstrom, G.M., Dunn, E.W., & Norton, M.I. (2011). It's the recipient that counts: Spending money on strong social ties leads to greater happiness than spending on weak social ties. *PLoS ONE 6*(2): e17018. doi: 10.1371/journal.pone.0017018
- Aknin, L.B., Hamlin, J.K., & Dunn, E.W. (2012). Giving leads to happiness in young children. *PLoS ONE* 7(6): e39211. doi: 10.1371/journal.pone.0039211
- Alteer, A. M., Yahya, S. B., & Haron, M. H. (2013). Auditors' personal values and ethical judgment at different levels of ethical climate: A conceptual link. *Journal of Asian Scientific Research*, *3*(8), 862–875. http://www.aessweb.com/pdf-files/103%20jasr%203(8)862-875.pdf
- Aronson, E., Wilson, T. D., Akert, R. M., & Sommers, S. R. (2016). Social psychology (9th Ed.) (Trans. B. Saffarinia & Hasanzadeh). Tehran: Arasbaran Pub.
- Atkinson, R. L., Atkinson, R. C., Smith, E. E., Bem, D. J., Nolen-Hoeksema, S., & Smith, C. D. (2000). *Hilgard's Introduction to Psychology* (12th. Ed.) (Trans. B. (Barahani, Birashch, Zamani, Shamlu, Shahraary, Karimi, Gahan, Mohioddin, & Hashemian), Tehran: Roshd Pub.
- **Bajlān, F. (2011).** Validation and normalization of the prosocial personality questionnaire. (Unpublished Master dissertation). Payame Noor University, Tehran.
- Baron, R. A., Byrne, D., & Branscombe, N. R.
  (2006). Social psychology (11th Ed.) (Trans. B. Karimi, Y.), Tehran:
  Ravan Pub.
- Batson, C. D., & Thompson, E. R. (2001). Why don't moral people act morally? Motivational considerations. *Current Directions in Psychological Science*, 10(2), 54–57. doi:10.1111/1467-8721.00114
- Bayram, A. B. (2016). Values and prosocial behaviour in the global

- context: Why values predict public support for foreign development assistance to developing countries. *Journal of Human Values, 22*(2), 93–106. doi: 10.1177/0971685815627749
- Bekkers, R., & Wiepking, P. (2007). Generosity and philanthropy: A literature review. Report commissioned by the John Templeton Foundation. Available at SSRN: http://ssrn.com/abstract=1015507
- Böckler, A., Tusche, A., Schmidt, P., & Singer, T. (2018). Distinct mental trainings differentially affect altruistically motivated, norm motivated, and self-reported prosocial behaviour. *Scientific Reports*, 8(1), 13560. doi: 10.1038/s41598-018-31813-8
- Bond, M. H., & Chi, V. M.-Y. (1997). Values and moral behavior in mainland China. Psychologia: An International Journal of Psychology in the Orient, 40(4), 251–264.
- Butler, J. V., & Fehr, D. (2018). The Causal Effect of Cultural Identity on Cooperation. Working paper.
- 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*(6), 1289. doi: 10.1037/a0025626
- Chen, F., & Krajbich, I. (2018). Biased sequential sampling underlies the effects of time pressure and delay in social decision making. *Nature Communications*, *9*(1), 3557. doi:10.17605/OSF.IO/UKG7B
- Clary, E. G., & Snyder, M. (1999). The motivations to volunteer: Theoretical and practical considerations. *Current directions in psychological science*, *8*(5), 156–159. doi: 10.1111/1467-8721.00037
- Cutler, J., & Campbell-Meiklejohn, D. (2018). A comparative fMRI meta-analysis of altruistic and strategic decisions to give. Neurolmage, 184, 227–241. doi: 10.1016/j.neuroimage.2018.09.009
- D'Andrade, R. (2008). A study of personal and cultural values: American, japanese, and vietnamese. New York: Palgrave Macmillan. doi: 10.1057/9780230612099
- Davis, M. H., Hall, J. A., & Meyer, M. (2003). The first year: Influences on the satisfaction, involvement, and persistence of new community volunteers. *Personality and Social Psychology Bulletin*, *29*(2), 248–260. doi: 10.1177/0146167202239050
- De Cremer, D., & Van Lange, P. A. (2001). Why prosocials exhibit greater cooperation than proselfs: The roles of social responsibility and reciprocity. *European Journal of personality*, *15*(S1), S5-S18. doi: 101002/per.418
- **Delkhamoush, M. T (2014).** Human values in Iranian students: Second round (after one decade). *Journal of Iranian psychology, 10* (40), 331–350.
  - https://www.sid.ir/en/journal/ViewPaper.aspx?ID=395851
- Delkhamoush, M. T., & Ahmadi Mobarakeh, M. (2011). Content and structure of values among Iranian adolescents. *Developmental Psychology: Journal of Iranian psychology, 29*(8), 5–25.
- https://jip.stb.iau.ir/article\_512267\_eacc682970b6b086254f0b10daea 1e86.pdf
- Dinh, J. E., Lord, R. G., Hall, R. J., Hannah, S. T., Leavitt, K., Shondrick, S. J., & Usher Perez, A. L. (2012). Implicit and explicit values as a predictor of ethical decision-making and ethical behavior. In *Proceedings of the New Frontiers in Management and Organizational Cognition Conference*. National University of Ireland Maynooth.
- Flynn, S. V., & Black, L. L. (2011). An emergent theory of altruism and self-interest. *Journal of Counseling & Development*, 89(4), 459–469. doi:10.1002/j.1556-

- 6676.2011.tb02843.x
- Fritzsche, D., & Oz, E. (2007). Personal values' influence on theethical dimension of decision making. *Journal of Business Ethics*, *75*(4), 335-343. doi: 10.1007/s10551-006-9256-5
- Joosten, A., van Dijke, M., Van Hiel, A., & De Cremer, D. (2015). Out of control!? How loss of self-control influences prosocial behavior: the role of power and moral values. *PloS one, 10*(5), e0126377. doi: 10.1371/journal.pone.0126377
- Kazemi, M. S., & Oreizy, H. R. (2011). The relationship of organizational commitment and staff value system. *Quartery Journal of Career & Organizational Counceling*. *3*(7), 54–75.
- Klein, N. (2016). Prosocial behavior increases perceptions of meaning in life, *The Journal of Positive Psychology, 12*(4), 354–361. doi: 10.1080/17439760.2016.1209541
- Kromerova, E., & Šukys, S. (2018). Does internalization of moral values predict adolescents' prosocial behaviour and less tolerance towards antisocial behaviour?. In *Proceedings of the International Scientific Conference*. Volume III (305), 315–327. doi: 10.17770/sie2018vol1.3270
- Lai, F., Siu, A., & Shek, D. (2018). Examining the predictors of prosocial behavior in Chinese adolescents using a social ecological model. New York: Nova Science Publishers.
- Lan, G., Gowing, M., McMahon, S., Rieger, F., & King, N. (2008). A study of the relationship between personal values and moral reasoning of undergraduate business students. *Journal of Business Ethics*, 78(1-2), 121–139. doi: 10.1111/j.1467-8608.2010.01587.x
- Lan, G., Gowing, M., Rieger, F., McMahon, S., & King, N. (2010).

  Values, value types and moral reasoning of MBA students.

  Business Ethics: A European Review, 19(2), 183–198. doi: 10.1111/j.1467-8608.2010.01587.x
- Leimgruber, K.L., Shaw, A., Santos, L.R., & Olson, K.R. (2012). Young Children Are More Generous When Others Are Aware of Their Actions. *PLoS ONE* 7(10): e48292. doi: 10.1371/journal.pone.0048292
- **Leybman, M. J., Zuroff, D. C., & Fournier, M. A. (2011).** A five-dimensional model of individual differences in social exchange styles. *Personality and Individual Differences, 51*(8), 940–945. doi:10.1016/j.paid.2011.07.024
- Long, M. C., & Krause, E. (2017). Altruism by age and social proximity. *PloS ONE*, 12(8): e0180411, doi: 10.1371/journal.pone.0180411.
- Mancini, A., Betti, V., Panasiti, M. S., Pavone, E. F., & Aglioti, S. M. (2011). Suffering makes you egoist: Acute pain increases acceptance rates and reduces fairness during a bilateral ultimatum game. *PloS ONE*, 6(10): e26008. doi: 10.1371/journal.pone.0026008
- Maner, J. K., & Gailliot, M. T. (2007). Altruism and egoism: Prosocial motivations for helping depend on relationship context. *European Journal of Social Psychology*, 37(2), 347–358. doi: 10.1002/ejsp.364
- Mischkowski, D., & Glöckner, A. (2016). Spontaneous cooperation for prosocials, but not for proselfs: Social value orientation moderates spontaneous cooperation behavior. *Scientific reports*, 6, doi: 10.1038/srep21555
- Monroe, K. R. (1996). The heart of altruism: Perceptions of a common humanity. New Jersey: Princeton university press. doi: 10.1515/9781400821921
- Niemi, L., & Young, L. (2013). Caring across boundaries versus keeping boundaries intact: Links between moral values and

- interpersonal orientations. *PloS ONE, 8*(12): e81605, doi: 10.1371/journal.pone.0081605
- Okun, M. A., & Schultz, A. (2003). Age and motives for volunteering: testing hypotheses derived from socio-emotional selectivity theory. *Psychology and aging, 18*(2), 231–239. doi: 10.1037/0882-7974.18.2.231
- Parks, L., & Guay, R, P. (2009). Personality, values, and motivation. Personality and Individual Differences 47(7), 675–684. doi: 10.1016/j.paid.2009.06.002
- Penner, L. A. (2002). The causes of sustained volunteerism: an interactionist perspective. *Journal of Social Issues*, 58(3), 447–467. doi: 10.1111/1540-4560.00270
- Penner, L. A., Dovidio, J. F., Piliavin, J. A., & Schroeder, D. A. (2005).

  Prosocial behavior: Multilevel perspectives. *Annu. Rev. Psychol.*, *56*, 365–392.

  doi:10.1146/annurev.psych.56.091103.070141
- 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). Hillsdale, NJ: LEA.
- Piff, P. K., Kraus, M. W., Côté, S., Cheng, B. H., & Keltner, D. (2010). Having less, giving more: The influence of social class on prosocial behavior. *Journal of Personality and Social Psychology*, *99*(5), 771–784. doi: 10.1037/a0020092
- Ravlin, E. C., & Meglino, B. M. (1987). Effect of values on perception and decision making: A study of alternative work values measures. *Journal of Applied Psychology*, 72(4), 666–673. doi: 10.1037/0021-9010.72.4.666
- Rothstein, B. (2004). Social trust and honesty in government: A causal mechanisms approach. In creating social trust in post-socialist transition (pp. 13–30). New York: Palgrave Macmillan. doi: 10.1057/9781403980663\_2
- Saffarinia, M. (2016). Social Psychology & Personality Tests (2nd Ed.). Tehran: Arjmand publishers.
- Saffarinia, M. (2017). The Investigation of Psychometric Characteristics of Social Exchange Styles Scale in Iranian Population. *Journal of Industrial and Organizational Psychology Studies. 4*(1), 1–18. doi: 10.22055/jiops.2018.23881.1065
- Schacter, H. L., & Margolin, G. (2019). When it feels good to give: Depressive symptoms, daily prosocial behavior, and adolescent mood. *Emotion*, 19(5), 923–927. doi: 10.1037/emo0000494
- Schroeder, D. A., & Graziano, W. G. (Eds.). (2015). *The Oxford handbook of prosocial behavior*. Oxford: Oxford Library of Psychology.
- Schwartz, S. H. (1994). Are there universal aspects in the structure and contents of human values? *Journal of social issues*, *50*(4), 19–45. doi: 10.1111/j.1540-4560.1994.tb01196.x
- 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). Washington, DC: American Psychology Association.
- Schwartz, S. H. (2012). An Overview of the Schwartz Theory of Basic Values. *Online Readings in Psychology and Culture, 2*(1). doi: 10.9707/2307-0919.1116
- Seligman, C., Olson, J. M., & Zanna, M. P. (Eds.). (2013). *The Psychology of Values: The Ontario Symposium,* Volume 8. Psychology Press.

- Paper presented at *the psychology of values: The Ontario symposium* (Vol. 8), Canada.
- https://core.ac.uk/download/pdf/230168494.pdf
- Sha'bani, Z. (2013). A meta-analysis of moral development in researches that are conducted between 2006 and 2008 in Iran.

  Journal of Research and Writing Academic Books, 16 (27), 42–81
- Simpson, B., & Willer, R. (2008). Altruism and indirect reciprocity: The interaction of person and situation in prosocial behavior. *Social Psychology Quarterly*, 71(1), 37–52. doi: 10.1177/019027250807100106
- Strickland, B. R. (2001). *Gale Encyclopedia of Psychology*. New York: Gale group.
- Tabibnia, G., Satpute, A. B., & Lieberman, M. D. (2008). The sunny side of fairness: preference for fairness activates reward circuitry (and disregarding unfairness activates self-control circuitry). *Psychological Science*, *19*(4), 339–347. doi: 10.1111/j.1467-9280.2008.02091.x.
- Vanelli, J. (2018). Prosocial Behavior as a Stress Moderator: The Physiological and Psychological Components (publication no. 787) [Senior Honors Thesis .Liberty University]. https://digitalcommons.liberty.edu/honors/787
- Vorkapić, S. T., Lacmanović, S., & Katić, V. (2019). Gratitude and Prosocial Behaviour among Preservice Preschool Teachers: Their Significance in the Future Educational Work. *Scientific Concepts Behind Happiness, Kindness, and Empathy in Contemporary Society* (pp. 43–75). Hershey, PA: IGI Global. doi: 10.4018/978-1-5225-5918-4.ch003