# Journal of Neuro and Spine

# **Exploring the Relationship Between Self-Compassion and Prosocial Behavior Among University Students; Mediating Role of Empathy**

# Salma Munawar<sup>1\*</sup>, Tahir Farid<sup>2</sup>, Sadaf Iqbal<sup>3</sup>, Anum Gul<sup>4</sup>

<sup>1</sup>Department of Psychology Abdul Wali khan University, Mardan.

<sup>2</sup>Assistant Professor Psychology at Abdul Wali Khan University Mardan.

<sup>3</sup>Assistant Professor Psychology at Abdul Wali Khan University Mardan.

<sup>4</sup>Department of Psychology Abdul Wali khan University, Mardan.

# \*Corresponding Author

Salma Munawar, Department of Psychology Abdul Wali khan University, Mardan.

Submitted: 31 Jan 2023; Accepted: 08 Feb 2023; Published: 23 Feb 2023

**Citation:** Munawar, S., Farid, T., Iqbal, S., Gul, A. (2023). Exploring the Relationship Between Self-Compassion and Prosocial Behavior Among University Students; Mediating Role of Empathy. *J Neuro Spine*. 1(1), 34-40.

#### Abstract

Interpersonal relationships are of high significance in university life. Building on self-determination theory that explicates that individuals engage in prosocial behaviour primarily for their own satisfaction, we postulates that empathy positively mediate the relationship between self-compassion and pro-social behavior. Based on cross-sectional design, the data were obtained from 400 university students of different Pakistani universities. We found that Self-compassion is positively associated with pro-social behavior and empathy. The results also indicate the empathy positively mediate the relationship between Self compassion and pro-social behaviour. Implication for theory and practice are discussed.

Keywords: Self-Compassion, Empathy, Pro-Social Behavior, Interpersonal Relationships

### Introduction

Interpersonal relationships are more important in university life. Empathy is a crucial element in the development and maintenance of healthy interpersonal relationships. Empathy aids students in understanding one another's emotional states in university. Compassion and empathy are complementary traits essential to university life. Understanding one another's emotions fosters pro-social behaviour and fosters compassion for others. One must first love oneself in order to be compassionate toward others [1-3]. A healthy and positive attitude toward oneself that includes treating oneself with love and understanding in times of suffering, personal failings, and difficulties in life is known as self-compassion [4-7].

Empathy and prosocial behaviour are linked with self-compassion [4-7]. When people intentionally act in a way that benefits others in a social setting, this is referred to as prosocial behavior [8]. Adults who engage in pro-social behaviour report higher levels of happiness, wellbeing, and academic achievement [9-12]. Thus, it is crucial for students to act in a pro-social manner toward everyone, including family, friends, strangers, and other classmates [13].

In order to increase positive emotions using self-compassion

techniques and enable students to become more mindful of them, our purpose is to examine self-compassion and pro-social behaviour among students. Sympathy, empathy, self-control, and other dispositional traits are frequently the driving forces behind pro-social behavior toward others [14]. The relationship between social-cognitive variables and social behaviour still requires clarification with regard to mediating and moderating factors. Examining the social advantages of self-compassion is a small but developing area of research interest [4-7].

Even in Pakistan, more specifically in Khyber Pakhtunkhwa, there is currently no study examining the relationship between self-compassion and prosocial behaviour among university students, as well as the mediating role of empathy in this positive relationship. Various studies have been conducted to investigate the mediating role of different variables in the relationship between self-compassion and prosocial behavior [5-7,13]. This study examines "the relationship between self-compassion and prosocial behaviour among university students and the mediating role of empathy" based on the scant and scarce literature that is currently available in globe.

# Theory and Hypothesis Self-Compassion and Empathy

Self-compassion, according to MacBeth & Gulley (2012), is linked to happy feelings and strong coping mechanisms [16-18]. Welp & Brown (2013) conducted research in the United States to determine whether self-compassion predicts people's willingness to assist others and empathy for those who are in need of assistance. In their first study, they discovered that self-compassion predicted less empathy for a hypothetical person while increasing willingness to help them. Empathic anxiety may have some drawbacks that can be managed with the aid of self-compassion (Marshall et al, 2019). Self-compassion and empathy are predictors of a person's willingness to assist someone in need. With college students, community adults, and meditator samples, Neff and Pommier (2013) discovered that perspective taking and empathic concern were highly related to self-compassion. By examining potential connections between self-compassion and empathy in students, our study aims to supplement the body of prior research.

*H0*: There is no relationship between Self-Compassion and empathy.

H1: Self-Compassion is positively related with empathy.

# **Empathy and Pro-Social Behavior**

According to an Australian study, empathy predicted increases in pro-social behaviour over time. The importance of empathy and interpersonal skill in adolescent friendships is highlighted by Chow et al. (2013), who also take into account how these constructs are related in friendship dyads. Healthy social behaviour depends on the development of empathy and prosocial behavior has long been thought to be significantly influenced by empathy [1, 19-22]. According to Batson et al. (1999), the growth of prosocial behaviour with the ultimate goal of enhancing others' well-being is associated with empathy.

Schonert-Reichl et al. (2011) claim that kids in the Roots of Empathy (ROE) program significantly improved in a number of areas, including prosocial behaviour. Almost no research has been conducted in Pakistan, specifically in Khyber Pakhtunkhwa, and there has been very little research in this area overall. Because university life is more about interpersonal relationships than anything else, our research sought to examine this relationship among students.

*H0*: There is no relationship between Empathy and Pro-Social Behaviour.

H2: Empathy is positively related with Pro-Social Behaviour.

### **Self-Compassion and Pro-Social Behavior**

A small but growing body of research examines the potential advantages of self-compassion for other [4,24,25]. Several studies reveal that self-compassion has been linked to increased tendency to apologies [26], improved relationship harmony among college students [2,7], increased self-reported compassion for people in general, empathic concern, and altruism among community adults, and increased tendency to resolve relationship issues in a way that balances the needs of self and others [4,25]. The key finding of Yang et al. (2021) was that Chinese adoles-

cents' self-compassion positively and longitudinally predicted pro-social behaviour at both the between-person and within-person levels. They found that pro-social behaviour was more prevalent among adolescents who scored higher on self-compassion.

*H0*: There is no relationship between Self-Compassion and Pro-Social Behaviour.

*H3*: Self-Compassion is positively related with Pro-Social Behaviour.

# Mediating Role of Empathy in Relationship Between Self-Compassion and Pro-Social Behavior

Self-compassion and empathy have both been theorized to encourage prosocial behaviour, but the evidence supporting this claim is scant. Self-compassion and empathy were found to be the only variables Marshall et al. (2014) used to predict peer-rated prosocial behaviour. They concluded that only empathy could accurately predict increases in prosocial behaviour over time. According to their study of Israeli adults, self-compassion may serve as a protective barrier against the potential drawbacks of empathic distress concern for others [15]. In contrast to findings for adults and meditators, Neff and Pommier (2013) found no associations between self-compassion and empathic concern in their undergraduate sample. However, they did discover a tepid correlation between perspective-taking and self-compassion. In that it examines the role of empathy as a mediator and determines the relationship between self-compassion and pro-social behaviour. According to a study by Karishma and Nabila (2018), agreeableness serves as a mediator in the indirect relationship between self-compassion and prosocial behaviour. This study suggests that agreeableness can act as a mediator between prosocial behaviour and self-compassion. But because there is so little research on the role of empathy as a mediator in the connection between self-compassion and prosocial behaviour, this is the main objective of our study.

H0: Empathy does not mediate the relationship between self-compassion and students pro-social behaviour.

*H4*: Empathy positively mediates the relationship between self-compassion and students pro-social behavior.

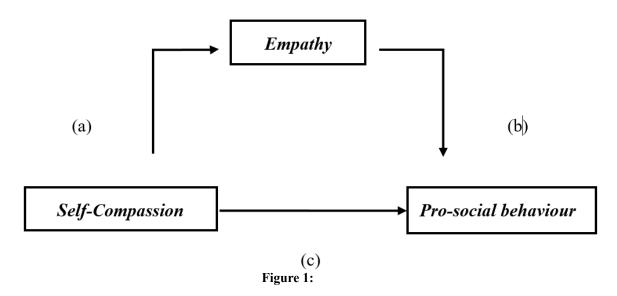
# **Self-Determination Theory**

We all share psychological needs for relatedness, competence, and autonomy, according to Deci and Ryan (1985). By meeting these needs, you can encourage personal enjoyment of activities and independent behaviour control. This theory introduces us to the concept of intrinsic motivation, which is the drive to act in a way that you know will make you feel good. People are more likely to be intrinsically motivated if they engage in an activity solely for the enjoyment it brings them, if they have the autonomy to choose to do so, if they are fully competent in the tasks they are performing, and if they feel connected to and supported by significant others, such as a manager at work, a parent at home, a teacher at school, or teammates (kinship). Early studies based on the theory of self-determinism mainly looked at how internal motivation was impacted by a decline in experienced autonomy.

Early studies based on the theory of self-determinism mainly

looked at how internal motivation was impacted by a decline in experienced autonomy. If properly fostered, Ryan and Deci (2000) hypothesized that we have a tendency to be pro-social animals. When we don't receive this care, we are more likely to seek out objectives that, on the surface, satisfy our most fundamental psychological needs (like achieving success in life or gaining status). Because we engage in prosocial behaviour primarily for our own satisfaction and volunteerism rather than for external rewards like prizes, money, or recognition, the study's underlying theory is that prosocial behaviour is primarily driven by intrinsic motivation.

#### **Model of the Study**



The conceptual framework presented above demonstrates the direct relationships between the independent variable self-compassion and prosocial behaviour, the direct relationships between the independent variable (self-compassion) and the mediator variable (empathy), the direct relationships between the mediator variable (empathy) and the prosocial behaviour, and the mediating effect (indirect effect) of empathy in the relationship between self-compassion and prosocial behavior among students.

# Methodology

In order to determine the mediating effects of empathy in relation to self-compassion and university students' pro-social behaviour, the impacts of self-compassion on students' pro-social behaviour, the impacts of self-compassion on students' empathy, and the impacts of empathy on students' pro-social behaviour, the methodological approach used to conduct this study will be explained in this chapter. This section will also cover the details of the research design, including the rationale behind their selection, the data collection tools and procedures, sampling criteria for the participants, and research instrumentation. The research used in this study was quantitative in nature. By gathering quantifiable data and using statistical operations to analyses the data, the variables were systematically investigated. 400 students who were enrolled in undergraduate and graduate programmed at the time of enrollment in the study. The age range of the study participants is 18 to 26. Students from a variety of universities, including Bacha Khan University, Benazir Bhutto University, City University, Women University Mardan, Peshawar University, IQRA International University, and Abdul Wali Khan University (Main Campus) participated. Data from participants were gathered using a convenience sampling technique without regard to

probability. Our completely convenient sample allows us to generalize the findings to all students of Pakistan.

#### Measures

The tools we use to gather data from respondents are called measures instruments. We will use three scales to gauge participants' responses because the three variables in my proposed study self-compassion, pro-social behaviour, and empathy-all have three components. The randomly selected respondents will receive the standardized questionnaire. The questionnaire will be filled out by the respondents, and the researcher will then gather the data. The researcher can interpret the findings based on the respondents' responses. In a study with no potential risks or benefits to the participants, research subjects were informed of the study's purpose and asked for their consent. In order to assist participants with any questions they may have about the study, an email address was provided at the end of this section. The participants were questioned about their demographics, which included their name (optional), age, gender, current academic major, year of undergraduate study, and university name.

# Three Main Measures Used to Collect Data There are Short Form of Self-Compassion Scale (SCS-SF)

Dr. Kristin Neff created the SCS-SF, a short version of the self-compassion scale, in 2003. It has six subscales. Each subscale has two items on it. The subscales include self-kindness (2, 6), self-judgment (2, 6), over-identified (1, 9), common humanity (5, 10), isolation (4, 8), and mindfulness (3, 7). (11, 12). Each item on the scale is scored out of 5 with responses ranging from almost never (1) to almost always (5). The scale has a high Cronbach's alpha, with values of 93 [28], 90 [29], and 86 [28], [16].

#### **Toronto Empathy Questionnaire (TEQ)**

The 16-item Toronto Empathy Questionnaire (TEQ), developed by Spreng et al. in 2009, measures empathy. It uses a 5-point Likert scale, with 0 being never, 1 being rarely, 2 being occasionally, 3 being frequently, and 4 being always. The Cronbach=.85 [30], Cronbach=.72 [31], and Cronbach's =.81 are all values for the Toronto Empathy Questionnaire [32]. The Toronto Empathy Questionnaire is a quick, straightforward, uniform, and effective tool for measuring empathy [30]. Negative items are 2, 4, 7, 10, 11, 12, 14, and 15 while positive items are 1, 3, 5, 6, 8, 9, and 13. Students will be deemed to have greater empathy than average if they receive a score of 45 or higher.

## **Pro-Social Behavior Scale (PBS)**

Caprara et al. developed the pro-social behaviour scale (2005). It is a 16-item survey that looks at four different prosocial be-

haviours and is scored on a Likert scale with 1 being "never/almost never true," 2 "occasionally true," 3 "sometimes true," 4 "often true," and 5 "almost always/always true" (sharing, helping, taking care of, and feeling empathic). According to Kamari et al. (2021) and Cronbach = 0.91, the overall scale's Cronbach's alpha is 0.94. [33].

# Results

# **Student's Demographic Profile**

Male respondents made up 52.5% of the total and female respondents made up 47.5%. A quarter of the participants were between the ages of 18 and 20; 60.5% were between the ages of 21 and 23; and 14.5% were between the ages of 24 and 26. Students from various departments were included in this study because it was designed to evaluate university students.

Table 1: Demographic Information of the students

Characteristics	n	%				
Age of respondents						
18 to 20 years old	100	25.0				
21 to 23 years old	242	60.5				
24 to 26 years old	58	14.5				
Gender of respondents						
Male	190	52.7				
Female	210	47.3				

*Note.* N=400, n= number of samples; %= percentage of sample.

## **Descriptive, Correlation and Regression Results**

Correlational analysis was performed to examine the basic relationship between variables. The main characteristics of the sample, including mean, standard deviation, and variable correlations, are shown in the following table 2.

Table 2: Descriptive, reliability, correlational, and regression results of the study variables

Variable	<b>Descriptive Statistics</b>		α	<b>Correlation Coefficient</b>			ent	Regression Coefficient	
	M	SD		1	2	3		3	2
1 Self-Compassion	3.51	.55	.723	-				.40**	.36**
2 Prosocial Behaviour	4.11	.63	.918	.41**	-				.55**
3 Empathy	3.49	.61	.816	.44**	.53**	*	-		
R2								.20	.17
ΔR2								.19	.17
F								96.19**	81.45**

*Note. N*=400, \*\**P* <.001.

Table 2 demonstrate moderate to strong positive correlation between study variables. The scales reliabilities ranges from .723 to .918. Table 2 also indicate the positive relationship of Self-compassion with Empathy (b = .40, p<.001), supporting Hypothesis 1. Hypothesis 2 predicted the positive relationship of empathy with pro-social behaviour. The results revealed that empathy had a positive relationship with prosocial behaviour (b=.55, p < .001), supporting hypothesis 2. Table 4.3 indicates positive relationship of self-compassion with pro-social behaviour (b=.36, p < .001), supporting hypothesis 3.

# The Mediating Effects of Empathy in Connection Between Self Compassion and Pro-Social Behaviour

To analyze mediating hypotheses the process program for SPSS

developed by Hayes (2013) was used. For this we used model 4 from Hayes process templates to find the mediating effect of empathy on the association between self-compassion and pro-social behaviour. Additionally, 95% correct bias CI with 5000 bootstrapping procedures sample estimates was selected.

In hypothesis 4, we hypothesized the positive mediating effect of empathy on the association between self-compassion and pro-social behaviour. The results shown in table 4.4 indicated that empathy had positively mediated the influence of self-compassion on pro-social behaviour ( $\beta=0.26,\ p<0.0005$ ), hence our Hypothesis 4 is supported fully.

Table 3: Regression Coefficient, and Bootstrapping for the Mediation model of Self-Compassion, empathy and prosocial Behaviour

<b>Testing Paths</b>	В	SE	t	p	Bootstrapping	
					LLCI	ULCI
IV→ M (a)	.49	.05	9.81	.000	.39	.59
$M \rightarrow DV(b)$	.45	.05	9.39	.000	.35	.54
$IV \rightarrow M \rightarrow DV(c')$	.26	.05	4.80	.000	.15	.36
$IV \rightarrow DV(c)$	.47	.05	9.03	.000	.37	.58
Indirect effects	.22	.05			.13	.32

*Note.* N=400, IV (Self Compassion), DV (Pro-Social Behaviour), Mediator (Empathy), LLCI (lower-level confidence interval), and ULCI (upper-level confidence interval).

### **Discussion**

The main goal of this study was to determine the mediating effects of empathy in the relationship between self-compassion and university students' pro-social behaviour, as well as the effects of self-compassion on pro-social behaviour, empathy in students, and pro-social behaviour in students. These variables have received only a limited amount of research attention, and no studies focusing specifically on university students in Pakistan have been done in the past. The relationship between self-compassion and pro-social behaviour was examined in Chinese adolescents as well as college students, but not typically university students [23].

The findings show that empathy is significantly influenced by one's own compassion (Table 2). The b values in the self-compassion and empathy regression statistics show that there is a positive relationship between them (b = .40). Previous studies, like Neff and Pommier (2013), which found that perspective-taking and empathy were significantly correlated with self-compassion in meditator, community adult, and college student samples, as well as greater relationship consensus among college students, support this finding [27]. The study's first hypothesis (Table 2) is accepted because it is corroborated by earlier research in the field.

According to the findings of our second hypothesis, pro-social behaviour and empathy are positively correlated (b=.55, p.001) (Table 2). This result is consistent with earlier studies that showed empathy could predict changes in pro-social behavior over time [15]. Empathy is a well-established factor in the prediction of pro-social behavior [20-22]. Empathy and the growth of pro-social behaviour, with the ultimate goal of enhancing others' well-being, were linked by Batson et al. (1999). Thus, we will accept our second hypothesis in light of these earlier studies. The findings also demonstrate how self-compassion greatly influences pro-social behaviour (Table 2). Self-compassion and prosocial behavior's regression statistics' b values show a positive correlation between the two variables (b=.36). This result is consistent with earlier studies that found that prosocial behaviour in Chinese adolescents was positively and longitudinally predicted by self-compassion, both at the within-person and within-person levels [23]. Teenagers who scored higher on self-compassion eventually display higher levels of pro-social behaviour, according to Yang et al. (2021). In college students, community adults, and samples of meditators, perspective taking and empathic concern were strongly associated with self-compassion

[4]. The study's third hypothesis (Table 2) is accepted because it is corroborated by earlier research in the field. According to the findings, self-compassion and students' pro-social behaviour are related in part through empathy (b=.26, p.0005) (Table 3). This result is consistent with earlier studies that found an indirect link between self-compassion and pro-social behavior [13]. Self-compassion and empathy are the only factors that predict pro-social behaviour as judged by peers, according to Marshall et al. (2014). Thus, we will accept our fourth hypothesis in light of these earlier studies.

#### **Implications**

The results of this study have significant ramifications for counselling psychology. University students should be encouraged to demonstrate and enhance self-compassion through various techniques, such as eating a healthy diet, taking a walk, exercising that keeps you physically and psychologically active, writing a letter to yourself, reflecting on the situation that caused pain, encouraging yourself, and practicing mindfulness. This is because there is a significant relationship between self-compassion and students' pro-social behaviour. This will encourage the growth of solid social ties, volunteerism, and helping a stranger in need. This discovery will also make it easier to establish and maintain strong relationships with friends and family by giving people a chance to empathize with one another.

#### **Recommendation for Future Research**

The purpose of the current study was to fill a research gap by examining the mediating effects of empathy in the relationship between self-compassion and university students' prosocial behaviour. It also sought to examine the effects of self-compassion on students' prosocial behaviour, empathy, and self-compassion on empathy, as well as the effects of empathy on students' prosocial behaviour. The current study successfully demonstrates statistical evidence that self-compassion and students' pro-social behaviour are correlated, and that empathy, a positive psychological trait, mediates this relationship to some extent. Future research should be done to examine these connections in more detail and precisely predict other factors that affect these connections.

Second, the Likert scale used in the current study undervalues the ability of the subjects to express their own comments on the items by recording responses to all items on a five-point Likert scale. Further research is therefore necessary. Third, since this study's methodology was a self-reported survey, biases in the

J Neuro Spine, 2023

way the results were reported should be considered. Longitudinal and additional observational studies are therefore required. Fourth, future studies are desired to make use of a larger sample size as well as other universities in my country Pakistan and other universities around the world. Our sample size was limited (n=400) and was only extended to universities in Khyber-Pakhtunkhwa.

#### References

- Gleason, K. A., Jensen-Campbell, L. A., & Ickes, W. (2009). The role of empathic accuracy in adolescents' peer relations and adjustment. Personality and Social Psychology Bulletin, 35(8), 997-1011.
- Campbell, W. K., & Baumeister, R. F. (2003). Is loving the self necessary for loving another? An examination of identity and intimacy. Blackwell handbook of social psychology: Interpersonal processes, 437-456. https://doi. org/10.1002/9780470998557.ch17
- Ricard, M. (2015). Altruism: The power of compassion to change yourself and the world. Little, Brown. London, UK: Atlantic Books.
- 4. Neff, K. D., & Pommier, E. (2013). The relationship between self-compassion and other-focused concern among college undergraduates, community adults, and practicing meditators. Self and Identity, 12(2), 160-176.
- Yang, Y., Guo, Z., Kou, Y., & Liu, B. (2019). Linking self-compassion and prosocial behavior in adolescents: The mediating roles of relatedness and trust. Child Indicators Research, 12(6), 2035-2049.
- Yang, Y., Guo, Z., Kou, Y., & Liu, B. (2019). Linking self-compassion and prosocial behavior in adolescents: The mediating roles of relatedness and trust. Child Indicators Research, 12, 2035-2049.
- 7. Yang, Y., Li, W., Sheldon, K. M., & Kou, Y. (2019). Chinese adolescents with higher social dominance orientation are less prosocial and less happy: A value-environment fit analysis. International journal of psychology, 54(3), 325-332. A value-environment fit analysis.
- Eisenberg, N. (2006). Prosocial behavior. https://psycnet. apa.org/record/2006-03571-024
- Aknin, L. B., Broesch, T., Hamlin, J. K., & Van de Vondervoort, J. W. (2015). Prosocial behavior leads to happiness in a small-scale rural society. Journal of experimental psychology: General, 144(4), 788.
- 10. Khanna, V., Sharma, E., & Chauhan, S. (2017). Effects of prosocial behavior on happiness and well-being. The International Journal of Indian Psychology, 4(2), 76-86.
- 11. Martela, F., & Ryan, R. M. (2016). Prosocial behavior increases well-being and vitality even without contact with the beneficiary: Causal and behavioral evidence. Motivation and Emotion, 40(3), 351–357. https://doi.org/10.1007/s11031-016-9552-z
- Caprara, G. V., Barbaranelli, C., Pastorelli, C., Bandura, A., & Zimbardo, P. G. (2000). Prosocial foundations of children's academic achievement. https://doi.org/10.1177/1469787405057750
- 13. Puspasari, K. D., & Nabila, Z. S. (2019, March). Agreeableness as a Mediator on Correlation between Self-Compassion and Prosocial Behavior in Adolescents. In 4th ASEAN

- Conference on Psychology, Counselling, and Humanities (ACPCH 2018) (pp. 158-162). Atlantis Press.
- Padilla-Walker, L. M., Nielson, M. G., & Day, R. D. (2016).
  The role of parental warmth and hostility on adolescents' prosocial behavior toward multiple targets. Journal of Family Psychology, 30(3), 331.
- Marshall, S. L., Parker, P. D., Ciarrochi, J., & Heaven, P. C. (2014). Is self-esteem a cause or consequence of social support? A 4-year longitudinal study. Child Development, 85(3), 1275-1291. https://doi.org/10.1111/12176
- 16. Neff, K. D. (2003). The development and validation of a scale to measure self-compassion. Self and identity, 2(3), 223-250.http://dx.doi.org/10.1080/15298860309027
- Neff, K. D., Pisitsungkagarn, K., & Hsieh, Y. P. (2008).
  Self-compassion and self-construal in the United States, Thailand, and Taiwan. Journal of Cross-Cultural Psychology, 39(3), 267-285.
- 18. Neff, K. D. (2011). Self-compassion, self-esteem, and well-being. Social and personality psychology compass, 5(1), 1-12.
- 19. Chow, C. M., Ruhl, H., & Buhrmester, D. (2013). The mediating role of interpersonal competence between adolescents' empathy and friendship quality: A dyadic approach. Journal of adolescence, 36(1), 191-200.
- 20. Eisenberg, N. (ed.) (1982). The Development of Prosocial Behavior. New York, NY: Academic Press.
- 21. Eisenberg, N., & Strayer, J. (1987). Critical issues in the study of empathy. Empathy and its development, 3-13. Strayer (Eds.), Empathy and Its Development (pp. 3–13). New York, NY, US: Cambridge University Press.
- Luengo Kanacri, B. P., Eisenberg, N., Tramontano, C., Zuffiano, A., Caprara, M. G., Regner, E., ... & 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. Frontiers in Psychology, 12.
- Yang, Y., Kong, X., Guo, Z., & Kou, Y. (2021). Can self-compassion promote gratitude and prosocial behavior in adolescents? A 3-year longitudinal study from China. Mindfulness, 12, 1377-1386.
- 24. Crocker, J., & Canevello, A. (2008). Creating and undermining social support in communal relationships: the role of compassionate and self-image goals. Journal of personality and social psychology, 95(3), 555.
- 25. Yarnell, L. M., & Neff, K. D. (2013). Self-compassion, interpersonal conflict resolutions, and well-being. Self and Identity, 12(2), 146-159.
- Howell, A. J., Dopko, R. L., Turowski, J. B., & Buro, K. (2011). The disposition to apologize. Personality and Individual Differences, 51, 509–514.
- Yang, X. (2016). Self-compassion, relationship harmony, versus self-enhancement: Different ways of relating to well-being in Hong Kong Chinese. Personality and Individual Differences, 89, 24-27.
- 28. Wasylkiw, L., MacKinnon, A. L., & MacLellan, A. M. (2012). Exploring the link between self-compassion and body image in university women. Body image, 9(2), 236-245.https://doi.org/10.1016/j.bodyim.2012.01.007
- 29. Neff, K. D., & McGehee, P. (2010). Self-compassion and

- psychological resilience among adolescents and young adults. Self and identity, 9(3), 225-240.
- 30. Totan, T., Dogan, T., & Sapmaz, F. (2012). The Toronto Empathy Questionnaire: Evaluation of Psychometric Properties among Turkish University Students. Eurasian Journal of Educational Research, 46, 179-198.
- 31. Kourmousi, N., Amanaki, E., Tzavara, C., Merakou, K., Barbouni, A., & Koutras, V. (2017). The Toronto empathy questionnaire: reliability and validity in a nationwide sample of Greek teachers. Social Sciences, 6(2), 62.
- 32. Yeo, S., & Kim, K. J. (2021). A validation study of the Korean version of the Toronto empathy questionnaire for the measurement of medical students' empathy. BMC Medical Education, 21, 1-8.
- 33. Caprara, G. V., Steca, P., Zelli, A., & Capanna, C. (2005). A new scale for measuring adults' prosocialness. European Journal of psychological assessment, 21(2), 77-89.
- Batson, C. D., Batson, J. G., Slingsby, J. K., Harrell, K. L., Peekna, H. M., & Todd, R. M. (1991). Empathic joy and the empathy-altruism hypothesis. Journal of Personality and Social Psychology, 61(3), 413–426. https://doi.org/10.1037/0022-3514.61.3.413
- 35. Brittian, A. S., Umaña-Taylor, A. J., & Derlan, C. L. (2013). An examination of biracial college youths' family ethnic socialization, ethnic identity, and adjustment: Do self-identification labels and university context matter?. Cultural Diversity and Ethnic Minority Psychology, 19(2), 177.
- 36. Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: mindfulness and its role in psychological well-being. Journal of personality and social psychology, 84(4), 822.
- 37. Calderón-Tena, C. O., Knight, G. P., & Carlo, G. (2011). The socialization of prosocial behavioral tendencies among Mexican American adolescents: The role of familism values. Cultural diversity and ethnic minority psychology, 17(1), 98.
- 38. Carlo, G. (2006). Care-based and altruistically based morality. In Handbook of moral development (pp. 569-598). Psychology Press.
- 39. Carlo, G., & Randall, B. A. (2002). The development of a measure of prosocial behaviors for late adolescents. Journal of youth and adolescence, 31, 31-44.

- Carlo, G., Knight, G. P., McGinley, M., Zamboanga, B. L.,
  Jarvis, L. H. (2010). The multidimensionality of prosocial behaviors and evidence of measurement equivalence in Mexican American and European American early adolescents. Journal of Research on Adolescence, 20(2), 334-358.
- Deci, E. L., & Ryan, R. M. (1985). The general causality orientations scale: Self-determination in personality. Journal of research in personality, 19(2), 109-134.
- 42. Gilbert, P. (2009). Introducing compassion-focused therapy. Advances in psychiatric treatment, 15(3), 199-208.
- 43. Kimmes, J. G., & Durtschi, J. A. (2016). Forgiveness in romantic relationships: The roles of attachment, empathy, and attributions. Journal of marital and family therapy, 42(4), 645-658.https://doi.org/10.1111/jmft.12171
- Kret, M. E., & De Gelder, B. (2012). A review on sex differences in processing emotional signals. Neuropsychologia, 50(7),1211-1221. https://doi.org/10.1016/j.neuropsychologia.2011.12.022
- 45. Lam, C. B., Solmeyer, A. R., & McHale, S. M. (2012). Sibling relationships and empathy across the transition to adolescence. Journal of youth and adolescence, 41, 1657-1670. https://doi.org/10.1007/s10964-012-9781-8
- 46. Merriam-Webster. (1995). Merriam-Webster's desk dictionary. Merriam-Webster: Springfield, MA
- 47. Neff, K. (2003). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. Self and identity, 2(2), 85-101. http://dx.doi.org/10.1080/15298860309032
- 48. Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. Contemporary educational psychology, 25(1), 54-67.
- 49. Schonert-Reichl, K. A., Smith, V., Zaidman-Zait, A., & Hertzman, C. (2012). Promoting children's prosocial behaviors in school: Impact of the "Roots of Empathy" program on the social and emotional competence of schoolaged children. School Mental Health, 4, 1-21.
- 50. Welp, L. R., & Brown, C. M. (2014). Self-compassion, empathy, and helping intentions. The Journal of Positive Psychology, 9(1), 54-65.

**Copyright:** ©2023: Salma Munawar. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.