A Comparative Analysis on Influence of College Students' Empathy on Their Prosocial Behavior

¹Leilani R. Santos

¹Jose Rizal University, Mandaluyong City, Philippines

Abstract

Background: This study is intended to evaluate the influence of college students' empathy on their prosocial behavior. Empirical research has indicated that there exists a significant correlation between empathy and prosocial behavior. The ability to empathize with others has been found to have a positive correlation with an individual's inclination towards engaging in prosocial behavior. It is interesting to note that individuals who possess a high level of empathy tend to display a greater inclination towards engaging in prosocial behaviors.

Methods: This research study will lean on the quantitative approach because the main goal is to collect numerical data of the given variables such as the comparative analyses on the influence of college students' empathy on their prosocial behavior that will generate and interpret numerical results and to explain further discussion about the given phenomenon.

Results: It is evident that a significant number of students exhibit empathetic behavior on certain occasions, which may vary depending on the specific circumstances. It shows that age, r = .530, p<0.05, is positively correlated with level of a student's empathy. It shows that socio-economic status, r = .618, p<0.05, is positively correlated with level of a student's empathy. It shows that there is gender difference in how the ranks of scores on prosocial behavior are dispersed between male and female students, U = 10815.000, p>0.05.

Conclusion: It appears that they possess a heightened level of attentiveness towards the emotions and desires of those around them. Individuals may engage in more prosocial behaviors as a means to prevent feelings of guilt associated with unhelpful thoughts and actions.

Keywords: Empathy, Prosocial Behavior, Social, Mental Health.

I. Introduction

Responsibility plays a significant role in various aspects of morality. Prosocial attitudes hold significant importance in nurturing positive mental qualities and fostering a healthy personality. They also play a crucial role in facilitating individual socialization. The cultivation of prosocial behavior in young students is not solely connected to the establishment of social responsibility and moral behavior, but also intricately tied to the

advancement, growth, balance, and cohesion of a society (Liu et al., 2020). Currently, there is a growing emphasis on enhancing development of college students' prosocial behavior within the realm of educational reform across various regions globally. Miles et al. (2021) highlighted the notion that the fundamental goal of education is to cultivate individuals who are well-rounded knowledgeable, rather than solely focusing on the acquisition of information and scholarly pursuits. The emphasis was placed on the

importance of nurturing the moral conscience, morality, civic obligations, and social responsibility of students in higher education.

The exploration of college students' prosocial behavior extends well beyond simply enhancing the breadth and depth of theoretical research in this area. The discoveries from this research have the potential to facilitate enhanced socialization and foster greater success among college students. Furthermore, it is worth noting that this particular aspect can also serve as a valuable foundation, both in theory and practice, for the integration of moral education within higher education institutions. By fostering the dissemination of ideas and approaches pertaining to moral education, it can effectively address the pressing need for ethical development in our ever-evolving society.

Statement of the Problem

The study is intended to evaluate the influence of college students' empathy on their prosocial behavior.

Specifically, it seeks to answer the following questions:

- 1. What is the profile of the respondents in terms of the following?
- 2. What is the level of the student's empathy?
- 3. What is the level of the student's prosocial behavior?
- 4. Is there a significant relationship in the level of a student's empathy and the profiles of the respondents?
- 5. Is there a significant difference in the level of a student's prosocial behavior and their profiles?

2. Methods

This research study will lean on the quantitative approach because the main goal is to collect numerical data of the given variables such as the comparative analyses on the influence of college students' empathy on their prosocial behavior that will generate and interpret

numerical results and to explain further discussion about the given phenomenon. The researcher will use comparative analysis research methodology to further examine the main topic of this study, which will focus on the link between college students' empathy on their prosocial behavior. In this case, comparative design will be used to investigate the process of comparing two or more items in order to uncover and find new information about them. It frequently analyzes and contrasts social structures and processes from throughout the world in order to identify broad patterns. Comparative analysis attempts to comprehend the study and explain each part of data that is being compared. (Taherdoost, 2022).

2.1 Respondents and Sampling

The research study will have a total of three hundred sixty six (366) participants from different cities in Metro Manila. participants will consist of college students from sixteen to above twenty-four (19-above 24) years of age who are residing in Metro Manila, National Capital Region, Philippines. For this reason, the participants from the National Capital Region are selected. Going on to selecting the participants of the study, the researcher will use purposive sampling to focus on college students from 1st year to 4th year level. Purposive sampling is a form of nonprobability sampling in which researcher choose people from the broader public to take part in surveys at their discretion (Alchemer, 2021).

2.2 Research Instruments

The first questionnaire that the researcher will use is from Spreng et al (2009) called Toronto Empathy Questionnaire. The Toronto Empathy Questionnaire (TEQ) depicts empathy as predominantly an emotional experience. The TEQ revealed strong convergent validity in three trials, correlating positively with behavioral measures of social decoding, selfreport measures of empathy, and negatively with an Autism symptomatology measure. It also demonstrated remarkable internal consistency and great test-retest reliability. The TEQ is a short, dependable, and valid instrument for measuring empathy. The TEQ consists of 16 favorably and negatively worded/scored items from a variety of scales. The authors designed the TEQ to be a short, unambiguous, and homogeneous scale with excellent psychometric qualities such as a stable single component structure; high internal consistency, construct validity, and test re-test reliability.

The second questionnaire that the researcher will use is from Caprara ett al., (2005). The Prosociality Scale is appropriate for use in surveys but not for individual assessment or diagnoses. It is made up of 16 items that pertain to four different sorts of prosocial behaviors ("types of actions"): helping, sharing, caring, and empathy. Caprara et al., (2005) identified helping, sharing, and caring as prosociality qualities that can be assessed beginning in childhood. Empathy, on the other hand, is classified as a component of adult prosociality since it involved "perspective-taking" and sensing others' needs in order to respond appropriately to them.

2.3 Data Gathering

The survey questionnaire will be distributed to respondents via Google Forms. A survey questionnaire is a data-gathering instrument that consists of a series of questions designed to elicit important information from respondents and can be administered via online platforms (Mcleod, 2023).

Potential participants who meet the participation conditions will be directed to the survey page, where they can provide informed consent and complete the survey. Each respondent will take about 15-20 minutes to collect data. Following adequate data collection, the findings will be sorted, counted, and prepared for data discussion and analysis.

2.4 Ethical Considerations

For the application of this research tool, the participants were informed about the study objectives and necessity to sign a Free and Informed Consent Form in accordance with Code of Ethics for Psychology Professionals. This step was conducted after approval by the

Research Ethics Committees of the participating and co-participating institutions.

There are diverse ethical concerns which may arise in a study including informed consent, privacy and confidentiality of the participants and use of the data collected during the study.

To address the ethical concerns which may arise in the study all the participants will be informed about the purpose of the study prior to commencement of the data collection and notified that participation in the study is voluntary. Additionally, all participants will be required to sign consent forms prior to enrolling in the study. Any information disclosed by the participants in the study will be confidential and they will not be required to disclose any identifying details. All the data collected for the study will be used only for the purpose of the study.

2.5 Statistical Analysis

After the collection of pertinent data from the chosen participants, the researcher will proceed with the analysis and interpretation of the gathered data. The researcher will employ the mean derived from the data collected in the questionnaire to do further analysis using SPSS, which serves as the principal statistical analysis software.

SPSS, often known as the Statistical Package for the Social Sciences, is a software tool utilized by research experts to effectively analyze and manipulate intricate datasets. The aforementioned procedures are employed for the purpose of analyzing and producing a unique pattern among different variables of data (Noels, 2018). The results obtained from the data collection will be organized and analyzed in accordance with the research questions proposed in this study, so facilitating the derivation of the required outcomes based on the variables established by the researchers.

The data analysis in this study will be conducted in a methodical manner, following a series of steps. Initially, the researcher will utilize two standardized tests for the administration of the questionnaire; the researcher will proceed to organize the

collected data through the process of tabulation. The study encompasses the frequency and proportion of the socio-demographic characteristics, as well as a summary of the respondents' responses. Various scenarios employ it to ascertain whether there exists any disparity in the means of distinct groupings. The researchers will evaluate and discuss the quantitative findings obtained from the Statistical Package for the Social Sciences (SPSS) in the results and discussion portion. The use of this statistical analysis will also aid the researcher in formulating a definitive conclusion for the study.

3. Results

I. Level of the student's empathy

Table 1. Level of the student's empathy

Items	N	Mean
TEQ1	366	2.87
TEQ2	366	1.78
TEQ3	366	3.53
TEQ4	366	1.22
TEQ5	366	3.51
TEQ6	366	3.18
TEQ7	366	.93
TEQ8	366	3.01
TEQ9	366	2.56
TEQ10	366	1.33
TEQ11	366	.93
TEQ12	366	.97
TEQ13	366	2.82
TEQ14	366	.78
TEQ15	366	.75
TEQ16	366	3.20
WEIGHTED	366	
MEAN		2.09

Table 1 represents the level of the student's empathy. It is evident that a significant number of students exhibit empathetic behavior on certain occasions, which may vary depending on the specific circumstances. In the study conducted by Tikkanen et al. (2022), it was found that simply recognizing the emotions of others and engaging in perspective taking may not be sufficient. The researchers suggest that actively responding to and attuning oneself to the emotions of others is necessary in order to promote overall well-being in academic settings. The exploration of empathy profiles has the potential to enhance our comprehension

of the intricate connections between different dimensions of empathy and one's overall wellbeing in academic settings (Pfattheicher et al., 2020).

II. Level of the student's prosocial behavior

Table 2. Level of the student's prosocial behavior

Descriptive Statistics

Items	N	Mean
PS1	366	4.23
PS2	366	4.01
PS3	366	4.31
PS4	366	3.89
PS5	366	4.11
PS6	366	3.93
PS7	366	3.99
PS8	366	3.59
PS9	366	4.13
PS10	366	3.91
PS11	366	3.11
PS12	366	3.94
PS13	366	3.90
PS14	366	4.02
PS15	366	3.93
PS17	366	4.16
Weighted Mean	366	3.95

Table 2 represents the level of the student's prosocial behavior. It appears that the student's prosocial behavior is occasionally true. The authors of the study conducted by Wang et al. (2021) place significant emphasis on the role of empathy in motivating individuals to engage in prosocial behaviors. Individuals who possess a heightened sensitivity to the emotions of others and possess the ability to perceive their thoughts and desires are more inclined to engage in acts of assistance and support. prosocial Promoting behaviors facilitated through the deliberate instruction and demonstration of empathy (Yue and Yang, 2021).

Prosocial attitudes hold significant value as they contribute to various positive mental qualities and play a crucial role in fostering a well-rounded personality and facilitating healthy social interactions. The cultivation of prosocial behavior in young students is intricately connected to the formation of social responsibility and moral behavior. Moreover, it plays a crucial role in the development,

progress, harmony, and stability of a society (Fu et al., 2021)

III. Significant relationship in the level of a student's empathy and the respondent's age and socio-economic status

Table 3. Significant relationship in the level of a student's empathy and the respondent's age

Correlations

			age	TEQ_ Scores
Age	Correlation Coefficient	1.000	.033	
	Sig. (2-tailed)		.530	
Spear		N	366	366
man's rho	TEO C	Correlation Coefficient	.033	1.000
rno TEQ_S cores	Sig. (2-tailed)	.530		
	N	366	366	

Finding shows that age, r = .530, p<0.05, is positively correlated with level of a student's empathy. According to the findings of Guariglia et al. (2023), the process of aging encompasses a multitude of transformations that are contingent upon various genetic and behavioral elements. These factors include lifestyle choices as well as the quantity and caliber of social connections one maintains.

Notably, empathy emerges as a potential influential factor in shaping these social relationships. In this study, they aimed to examine the relationship between perceived social support and empathy throughout different stages of life (Zhang et al., 2021). Specifically, they sought to explore how empathy may mediate this relationship, while also accounting for the potential influence of gender and education. The findings of this study indicate that the presence of empathic skills plays a crucial role in understanding the dynamics between age and social support within interpersonal relationships. The findings of this study indicate that the cultivation of empathy has the potential to elicit social support and, consequently, enhance overall well-being. This effect is particularly pronounced when empathy is fostered from early childhood and sustained throughout the lifespan. Such a developmental trajectory can contribute to the establishment of socioemotional competence, which serves as a protective mechanism in later years, facilitating successful and fulfilling aging experiences (Wang and Wu, 2020).

Table 4. Significant relationship in the level of a student's empathy and the respondent's socioeconomic status

Correlations

			Socioec onomic	TEQ_ Scores
Socioe	Correlation Coefficient	1.000	026	
~	conom	Sig. (2-tailed)		.618
Spear ^{1C} man's	N	366	366	
rho	TEQ_	Correlation Coefficient	026	1.000
	Scores	Sig. (2-tailed)	.618	
		N	366	366

Finding shows that socio-economic status, r =.618, p<0.05, is positively correlated with level of a student's empathy. The study conducted by Jiménez-Moya et al. (2021) was centered on investigating the correlation between social class and empathy. However, the nature of this relationship remains uncertain. In a recent experimental study conducted, it was observed that individuals belonging to the high-class demographic displayed a noteworthy inclination towards engaging in helping behaviors when empathy was present (Stevens and Taber, 2021). Interestingly, this effect was found to be consistent across recipients from various social classes, indicating that the influence of empathy on helping behaviors remained unaffected by the social status of the recipient. In contrast, the findings of this study indicate that the variable of empathy did not yield any discernible impact on participants from lower socioeconomic backgrounds.

In the realm of compassionate behavior, it is noteworthy to highlight that empathy has demonstrated a favorable impact on individuals from both high and low socioeconomic backgrounds (Simon and Nader-Grosbois, 2021). However, it is crucial to underscore that this positive effect is contingent upon the recipient of assistance belonging to the same social class as the empathetic individual. This observation underscores the notion that empathy, while undoubtedly important, may not be the sole catalyst for fostering cooperative relationships. It further suggests

that considering the social class of the individual receiving assistance could provide valuable insights into this matter.

IV. Significant difference in the level of a student's prosocial behavior and their profiles

Table 5. Significant difference in the level of a student's prosocial behavior and their gender

Test Statistics^a

	PS_Scores
Mann-Whitney U	10815.000
Wilcoxon W	15568.000
Z	-2.500
Asymp. Sig. (2-tailed)	.012

a. Grouping Variable: gender

Finding shows that there is gender difference in how the ranks of scores on prosocial behavior are dispersed between male and female students, U = 10815.000, p>0.05. This suggests that male and female students tend to have differences response on their prosocial behavior. The present study, conducted by Van der Graaff et al. (2018), reveals intriguing findings that indicate a gradual increase in prosocial behavior during the period of midadolescence, followed by a subtle decline thereafter. Furthermore, it is worth noting that the findings highlight the significance of gender when it comes to the progression of prosocial behavior during the adolescent years (Pang et al., 2022).

Specifically, it is observed that girls tend to exhibit an earlier onset of growth in prosocial behavior compared to boys. This aligns with the concept of gender role intensification theory, which suggests that disparities between genders become more pronounced as early adolescence transitions into mid-adolescence (Memmott-Elison et al., 2020).

The intricate and gender-specific patterns of growth identified in this extensive study may shed light on the discrepancies observed in previous research that focused on narrower age ranges during adolescence and/or failed to consider the influence of gender on developmental patterns.

4. Discussion

The pandemic and subsequent lockdowns have undoubtedly had a profound impact on college students. They have been forced to navigate a significant transition from physical classes to online remote classes, resulting in a loss of daily social activities and a heightened sense of pressure regarding employment. These circumstances have had a substantial effect on their mental well-being, as well as their ability to engage in normal interpersonal activities and maintain a fulfilling social life. In light of the post COVID-19 pandemic, it becomes crucial to delve into the various factors that contribute to enhancing the mental well-being of college Prosocial behavior students. is often highlighted due to the inherent value it holds for individuals, as it serves as a tangible expression of their social interactions.

It appears that there is a notable presence of empathetic behavior among students, which seems to manifest in different ways depending on the particular circumstances. It seems that the student's prosocial behavior is intermittently true to themselves. The findings indicate that there is a positive correlation between age and the level of a student's empathy (r = .530, p<0.05). The research findings indicate that there is a positive correlation (r = .618, p<0.05) between a student's level of empathy and their socio-economic status. The findings suggest that there may be a gender difference in the distribution of scores on prosocial behavior among male and female students. However, it is important to note that the statistical analysis (U = 10815.000, p>0.05) indicates that this difference is not statistically significant.

5. Conclusions

This study revealed that empathy in college students may positively predict prosocial conduct and social responsibility, and social responsibility can positively predict prosocial behavior, and social responsibility can partially mediate the influence of empathy on prosocial behavior. College students are in the process of creating and stabilizing their ideals. Role models, societal circumstances, and cultural

background all have a significant impact on the formation of their religions.

Reference

- [1] Caprara G. V., Capanna C., Steca P., Paciello M. (2005a). Misura e determinanti della prosocialità. Un approccio sociale cognitivo [Measurement and determinants of prosociality. A social-cognitive approach]. G. Ital. Psicol. 32, 287–307. 10.1421/20313
- [2] Fu, W., Wang, C., Chai, H. et al. Examining the relationship of empathy, social support, and prosocial behavior of adolescents in China: a structural equation modeling approach. Humanit Soc Sci Commun 9, 269 (2022). https://doi.org/10.1057/s41599-022-01296-0casp.2507
- [3] Guariglia, P., Palmiero, M., Giannini, A. M., & Piccardi, L. (2023). The Key Role of Empathy in the Relationship between Age and Social Support. Healthcare (Basel, Switzerland), 11(17), 2464. https://doi.org/10.3390/healthcare1117246
- [4] Jiménez-Moya, G., Luengo Kanacri, B. P., Cumsille, P., Martínez, M. L., & Berger, C. (2021). You May Have My Help but Not Necessarily My Care: The Effect of Social Class and Empathy on Prosociality. Frontiers in psychology, 12, 588017. https://doi.org/10.3389/fpsyg.2021.588017
- [5] Liu Q, Zhao F, Zhang S. Considering the reciprocal relationship between meaning in life and prosocial behavior: a crosslagged analysis. J Psychol Sci. (2020) 43:1438–45. 10.16719/j.cnki.1671-6981.20200623
- [6] Memmott-Elison MK, Holmgren HG, Padilla-Walker LM, Hawkins AJ (2020) Associations between prosocial behavior, externalizing behaviors, and internalizing symptoms during adolescence: a metaanalysis. J Adolesc 80(1):98–114. https://doi.org/10.1016/j.adolescence.2020 .01.012
- [7] Miles A, Andiappan M, Upenieks L, Orfanidis C. 2021. Using prosocial

- behavior to safeguard mental health and foster emotional well-being during the COVID-19 pandemic: A registered report protocol for a randomized trial. PLoS ONE. (2021) 16:19. doi: 10.1371/journal.pone.0245865
- [8] Pang YL, Song C, Ma C (2022) Effect of different types of empathy on prosocial behavior: Gratitude as mediator. Front Psychol 13(1):1–7. https://doi.org/10.3389/fpsyg.2022.768827
- [9] Pfattheicher S, Nockur L, Böhm R, Sassenrath C, Petersen MB. The emotional path to action: empathy promotes physical distancing and wearing of face masks during the COVID-19 pandemic. Psychol Sci. (2020) 31:1363–73.
- [10] Simon P, Nader-Grosbois N (2021) Preschoolers' empathy profiles and their social adjustment. Front Psychol 12(12):1–16.
 - https://doi.org/10.3389/fpsyg.2021.782500
- [11] Spreng, R. N., McKinnon, M. C., Mar, R. A., & Levine, B. (2009). The Toronto Questionnaire: **Empathy** scale development and initial validation of a factor-analytic solution to multiple empathy measures. Journal of personality assessment, 91(1), 62 - 71.https://doi.org/10.1080/002238908024843 81
- [12] Stevens F, Taber K (2021) The neuroscience of empathy and compassion in pro-social behavior. Neuropsychologia 159:107925. https://doi.org/10.1016/j.neuropsychologia .2021.107925
- [13] Tikkanen, L., Anttila, H., Pyhältö, K., Soini, T., & Pietarinen, J. (2022). The role of empathy between peers in upper secondary students' study engagement and burnout. Frontiers in psychology, 13, 978546. https://doi.org/10.3389/fpsyg.2022.978546
- [14] Van der Graaff, J., Carlo, G., Crocetti, E. et al. 2018. Prosocial Behavior in Adolescence: Gender Differences in Development and Links with Empathy. J Youth Adolescence 47, 1086–1099 (2018). https://doi.org/10.1007/s10964-017-0786-1

[15] Wang WC, Wu XC (2020) Mediating roles of gratitude, social support and posttraumatic growth in the relation between empathy and prosocial behavior among adolescents after the Ya'an earthquake. Acta Psychol Sinica 52(3):307–316

- [16] Wang, H., Wu, S., Wang, W., & Wei, C. (2021). Emotional Intelligence and Prosocial Behavior in College Students: A Moderated Mediation Analysis. Frontiers in psychology, 12, 713227. https://doi.org/10.3389/fpsyg.2021.713227
- [17] Yue Z, Yang JZ. Compassionate goals, prosocial emotions, and prosocial behaviours during the COVID-19 pandemic. J Community Appl Soc Psychol. (2021) 1–14. 10.1002/
- [18] Zhang WX, Li X, Chen GH, Cao YM (2021) The relationship between positive parenting and adolescent prosocial behaviour: the mediating role of empathy and the moderating role of the oxytocin receptor gene. Acta Psychol Sinica 53(9):976–991