The Relationship Between Personality and Empathy on Prosocial Behavior among Undergraduate Students in KLANG Valley, Malaysia

Farah Dayana Khairol Anwar[2], Aini Azeqa Ma'rof[1,2], Haslinda Abdullah[1,2]

[1]Institute for Social Science Studies, Universiti Putra Malaysia, 43400 Serdang, Selangor, Malaysia, [2]Faculty of Human Ecology, Universiti Putra Malaysia, 43400 Serdang, Selangor, Malaysia.
Email**:** azeqa@upm.edu.my

Abstract
This study investigates the impact of different personality qualities, namely Openness, Conscientiousness, Extroversion, Agreeableness, Neuroticism, and empathy, on prosocial behavior in a sample of 322 adults. The study employed a quantitative research methodology to examine personality traits and prosocial behavior using self-reported measures. Correlation and multiple regression analyses were then conducted to determine the predictive potential of these traits. The examination of levels of prosocial conduct indicated that a majority of individuals displayed elevated tendencies towards engaging in prosocial actions. Similarly, the distribution of personality traits exhibited elevated scores mostly in the dimensions of Conscientiousness and Openness. Correlation research revealed notable positive associations between prosocial conduct and the majority of personality qualities, with empathy being the most prominent factor. Importantly, there was no significant correlation observed between Neuroticism and prosocial conduct. The results of the multiple regression analysis highlighted the importance of empathy in predicting prosocial conduct, transcending the impact of other personality qualities. The regression model explained a significant amount of the variation in prosocial behavior, demonstrating the powerful ability of empathy in conjunction with specific personality traits to make accurate predictions. The study emphasizes the crucial role of empathy in cultivating prosocial behaviors, indicating that interventions targeting the improvement of empathetic abilities could be successful in encouraging prosocial activities in different situations.
Keywords: Prosocial Behavior, Empathy, Personality Traits, Behavioral Predictors, Undergraduate students

Introduction

Prosocial behaviors, which include actions such as assisting, distributing, and consoling, are crucial for upholding social connections and promoting the well-being of a society. These actions have been associated with a multitude of favorable results, such as enhanced psychological well-being and increased social approval. A recent study highlights the importance of comprehending the psychological factors that encourage these behaviors in different social settings (Padilla-Walker & Carlo, 2014). Gaining a comprehensive understanding of these factors is essential for cultivating cultures that promote benevolence and collaboration.

Personality qualities have traditionally been regarded as indicators of many actions, including prosociality. The Five Factor Model, comprising Openness, Conscientiousness, Extroversion, Agreeableness, and Neuroticism, offers a comprehensive framework for examining variations in behavioral patterns among individuals. Specifically, personality qualities such as Agreeableness have repeatedly been linked to elevated levels of prosocial conduct. Individuals with this attribute demonstrate greater tendencies towards cooperation and compassion (Graziano & Tobin, 2018).

Empathy, which refers to the capacity to comprehend and experience the emotions of others, is an essential element of prosocial conduct. It enables individuals to empathize with others' emotional experiences and encourages them to engage in benevolent actions. The impact of empathy on prosocial behavior is extensively documented, as research consistently demonstrate a robust correlation between empathetic concern and the probability of engaging in helpful actions (Zaki, 2019). Empathy has a crucial role in predicting prosocial behavior, and its impact can be strengthened or influenced by other personality qualities. For example, a compassionate person with a high score in Conscientiousness may be more inclined to participate in helpful behaviors because of a strong feeling of obligation and accountability. Gaining insight into these relationships offers a more intricate perspective on the routes that lead to prosocial conduct (Decety & Cowell, 2019).

Although the connections between personality traits, empathy, and prosocial conduct are well-established, there is still a lack of comprehensive studies that investigate these correlations together. The majority of current research mostly examines individual features in isolation or fails to thoroughly investigate the combined impact of these traits on prosocial behavior. To comprehend the impact of these factors on real-life behavior, a comprehensive approach is required (Eisenberg et al., 2016). Considering the significance of prosocial behavior in promoting social unity and personal welfare, it is crucial to conduct additional study on the collective impacts of personality traits and empathy. This research could provide valuable insights for interventions focused on improving prosocial behavior by specifically developing personality traits and providing empathy training. By cultivating these characteristics, educators and policymakers can successfully encourage favorable social exchanges and enhance the well-being of the community (Spinrad & Eisenberg, 2017).

In light of the above concerns, this study aims to look at the empathy, well-being and self-efficacy on altruism with specific research questions as follows:
1. What are the levels of personality, empathy, and prosocial behavior among university students?

2. What are the relationships between personality, empathy, and prosocial behavior among university students?
3. What are the unique factors that predicts prosocial behavior among the university students?

Empathy and its Direct Effects on Prosocial Behavior
Empathy is widely acknowledged as a primary driver of prosocial conduct, serving as the foundation for behaviors that promote the well-being of others. The concept includes both emotional and intellectual aspects, with each having a separate but interwoven influence on prosocial behaviors. Affective empathy pertains to the emotional responses elicited by another individual's emotions, whereas cognitive empathy entails comprehending these emotions on an intellectual level. Recent study highlights that empathy, particularly when it entails an emotional bond, directly enhances the inclination to participate in prosocial actions such as assisting, sharing, and consoling individuals in pain (Telle & Pfister, 2016).
Both the cognitive and affective aspects of empathy play distinct roles in promoting prosocial behavior. Cognitive empathy enables individuals to perceive and comprehend the feelings of others, serving as a foundation for acceptable social reactions. On the other hand, affective empathy refers to the act of experiencing and understanding the emotions of others, which might result in a natural need to relieve their suffering. The act of sharing emotions is essential for triggering prosocial behaviors, as evidenced by research that show a strong link between heightened levels of affective empathy and a greater frequency of altruistic actions (Mestre et al., 2017).
The neurobiological foundation of empathy provides valuable understanding into the reasons and mechanisms behind individuals' reactions to the emotional states of others. Neuroscientific research utilizing brain imaging methods has discovered that certain areas of the brain, such as the anterior insula and the anterior cingulate cortex, become active when individuals experience empathy, especially when they observe others going through pain or misery. These neural reactions are linked to the initial inclination to assist, indicating that our brains are inherently programmed to react to the suffering of others by initiating acts that benefit society (Decety, 2015).
Empirical research offers strong evidence of the correlation between empathy and prosocial conduct. Research conducted by Zaki (2019) has shown that persons who possess a greater degree of empathetic concern are more inclined to participate in acts of assistance, thereby demonstrating the significant influence of empathy in social interactions. Experimental findings have demonstrated a causal link between empathy and altruism, as seen by greater prosocial behaviors resulting from manipulations of empathetic experiences (Batson & Shaw, 2019). These findings confirm the significance of developing empathy in order to promote a society that is more cooperative and compassionate, both in theory and in practice.

Influence of the Big Five Personality Traits on Prosocial Behavior
The interaction between empathy and personality traits provides a more comprehensive comprehension of the factors that forecast prosocial conduct. Recent research suggests that empathy can enhance the positive social benefits of specific personality qualities, such as Agreeableness and Conscientiousness. Eisenberg and Miller (1987) discovered that empathic concern can act as a mediator in the connection between these attributes and altruistic acts. This implies that empathy strengthens the natural inclination of pleasant and conscientious persons to engage in prosocial actions. In addition, Carlo et al. (2011) conducted study that

examines how individuals with both high empathy and high Agreeableness exhibit increased prosocial impulses, especially in intricate social contexts. This correlation indicates that empathy and personality traits do not function alone, but rather interact in significant ways to influence social behaviors.

Personality qualities have a significant impact on human behavior, particularly the inclination to participate in prosocial behaviors. Agreeableness and Conscientiousness, two of the Big Five personality qualities, have been specifically linked to increased occurrences of prosocial activity. Individuals with a high level of Agreeableness typically demonstrate qualities such as kindness, empathy, and cooperation, which increases the likelihood of them engaging in behaviors that are beneficial to others. Conscientiousness, characterized by self-discipline, responsibility, and diligence, is generally indicative of ethical and community-oriented actions (Graziano & Tobin, 2018).

The characteristics of Agreeableness and Conscientiousness have been thoroughly examined due to their association with prosocial conduct. Agreeableness, which represents an individual's overall inclination towards maintaining social harmony, is closely associated with a tendency to engage in altruistic acts. Individuals with a high level of agreeableness are more inclined to select cooperative solutions when faced with interpersonal difficulties. Conscientiousness has a role in promoting prosocial conduct by being linked to traits such as dependability and attentiveness. This motivates individuals to consistently fulfill their social responsibilities and commitments (Soto, 2019).

Agreeableness and Conscientiousness consistently exhibit a favorable correlation with prosocial conduct, whereas Neuroticism and Extroversion yield varied results. Neuroticism, commonly linked to emotional instability, does not reliably forecast prosocial conduct and may instead impede it due to heightened levels of stress and worry. Extroversion, which is marked by high levels of energy and friendliness, can encourage prosocial conduct in group situations. However, it can also result in dominant behaviors that prioritize expressing influence rather than aiding others. These subtle distinctions emphasize the intricate interaction between many personality qualities and how they influence acts that benefit others (Jensen-Campbell & Graziano, 2018).

The impact of individual characteristics on altruistic actions is also contingent upon situational conditions and their interplay with other attributes. The manifestation of prosocial behavior can be influenced by situational settings, which can either amplify or inhibit it based on factors such as social norms, perceived advantages, and the presence of other individuals. Furthermore, the interplay among several personality qualities can offer a more profound comprehension of prosocial conduct. For example, an individual who scores high in both Agreeableness and Conscientiousness is likely to display more pronounced and persistent prosocial conduct compared to someone who only scores high in one of these traits (Roberts et al., 2005).

Method
Participants
The study enlisted a homogenous sample of 322 participants selected from Klang Valley area, Malaysia. The participants' ages spanned from 19 to 24 years, with an average age of 21 years. Sample comprised of around 54% females and 46% males, with the objective of achieving gender parity in order to obtain a thorough understanding of prosocial behaviors across different genders.

Procedure and Measures

The focal group comprised undergraduate students from diverse community backgrounds within the Klang Valley, Malaysia. Participants were sourced through a combination of community outreach, local advertising, and social media platforms, to optimize inclusivity and engagement. A digital survey, crafted using Google Forms, was employed to collect data regarding personality traits, empathy levels, and prosocial behaviors. This survey method was selected for its simplicity, accessibility, and capacity to preserve respondent anonymity, thereby minimizing potential response biases.

Prior to survey distribution, potential participants received an email containing detailed information about the study objectives, assurances of confidentiality, and the voluntary basis of their involvement. Informed consent was required electronically before participants could access the questionnaire, ensuring they were fully aware of their participation terms. Data collection was followed by quantitative analysis using SPSS software, which included descriptive statistics, correlation analyses, and multiple regression analyses to explore the predictive relationships between personality traits, empathy, and prosocial behavior. These methodological choices were designed to rigorously assess how various personality dimensions and empathy contribute to prosocial actions, providing a thorough understanding of these psychological dynamics within the sampled population.

Prosocial Behavior

The Prosocial Behavior Scale created by Caprara et al. (2005) was used to assess prosocial behavior. The scale comprises 16 items specifically formulated to evaluate the frequency of prosocial behaviors, such as cooperation and assistance towards others. Participants' responses are measured using a five-point Likert scale, where 1 represents "Never true" and 5 represents "Always true". Higher scores on the scale indicate a stronger inclination towards engaging in prosocial activities. The scale's emphasis on persistent prosocial activities enables a thorough evaluation of an individual's propensity to assist and collaborate in everyday interactions. Illustrative examples encompass statements such as "I endeavor to provide assistance to individuals when they encounter difficulties" and "I am accessible to those who require aid from me." The scale offers a thorough evaluation of an individual's predisposition towards prosocial behavior, with a reported Cronbach's alpha of 0.87, indicating a good level of reliability.

Personality

The Big Five Inventory (BFI) developed by Benet-Martinez and John (1998) was used to assess personality traits. This inventory comprises a total of 44 items that jointly evaluate the five primary aspects of personality: openness, conscientiousness, extroversion, agreeableness, and neuroticism. Each characteristic is depicted by around 9 to 10 items, and the responses are recorded on a five-point Likert scale ranging from 1 ("Very inaccurate") to 5 ("Very accurate"). Examples of items are "garrulous" for extroversion and "discerns others' vulnerabilities" for openness. This scale offers a strong framework for determining the prevailing personality qualities of participants, which are essential for comprehending variations in behavior and temperament among individuals. For instance, extroversion is evaluated using statements such as "Engages in extensive conversation" and "Demonstrates high levels of vitality." Openness encompasses traits such as "Possesses a vibrant imagination" and "Appreciates artistic encounters." The overall dependability of the BFI is highly satisfactory, as evidenced by a Cronbach's alpha coefficient of 0.86 for the complete scale.

Empathy

The assessment of empathy among undergraduates was conducted using specific subscales of the Interpersonal Reactivity Index (IRI) developed by Davis (1980). This index quantifies empathy by assessing perspective-taking and empathetic care using two subscales, each of 7 items. The ratings for responses are measured using a five-point Likert scale, ranging from 1 ("Very inaccurate") to 5 ("Very accurate"). Some examples of items from the perspective-taking subscale include "I strive to consider multiple viewpoints in a disagreement before reaching a conclusion" and "Occasionally, I attempt to gain a deeper understanding of my friends by envisioning situations from their perspective." The empathic concern subscale includes sample questions such as "I frequently experience compassionate and caring emotions towards individuals who are less fortunate than myself" and "When I witness someone being exploited, I feel a sense of guardianship towards them." The subscales exhibit robust internal consistency, as evidenced by a Cronbach's alpha of 0.75 for perspective-taking and 0.78 for empathetic concern.

Data Analysis

The quantitative data collected were analyzed using the Statistical Package for the Social Sciences (SPSS) software, specifically version 29.0. At first, descriptive statistics were used to summarize the demographic features of the 322 undergraduate participants, providing a basic overview of the sample makeup. This preliminary examination was crucial in establishing the framework for further comprehensive investigations.

After conducting an initial analysis, Pearson correlation coefficients were computed to investigate the associations between different personality traits, specifically Openness, Conscientiousness, Extroversion, Agreeableness, Neuroticism, and levels of empathy. Additionally, the combined effect of these traits on prosocial behaviors was examined. The selection of this strategy was based on its effectiveness in uncovering the magnitude and orientation of the associations between these variables.

In addition, multiple regression analyses were performed to evaluate the individual and combined predictive abilities of these qualities on prosocial behavior. This analytical methodology facilitated a comprehensive investigation into the individual impact of each personality characteristic and empathy, as well as their combined influence, on prosocial behavior among the participants. The meticulous methodology employed in this data analysis allowed for a comprehensive investigation of the hypothesized connections, yielding intricate understandings of the intricate dynamics between personality traits, empathy, and prosocial behavior in the specific setting of this study.

Results and Discussion

The data analysis shown in Table 1 offers valuable information on several aspects of personality traits, prosocial behavior, and empathy among the participants. The results provide a thorough examination of these characteristics, highlighting significant trends and variations within the group. The data indicates a substantial frequency of high prosocial behavior, with an average score of 2.73 (standard deviation = 0.49). Among the 322 participants in the study, a significant majority of 75.1% exhibited high levels of prosocial conduct, with scores ranging from 59 to 80. The results suggest that most of the participants have a strong inclination towards engaging in activities such as helping and working together. Among the entire group of participants, just 2.0% (8 individuals) displayed low levels of

prosocial behaviors, whereas 22.9% (90 individuals) demonstrated intermediate levels of prosocial behaviors.

Evaluating the individuals' personality traits provides useful insights into their psychological characteristics. The attribute of openness, as shown by a mean score of 2.59 (SD = 0.52), was notably high in 59.8% of the group (235 participants), suggesting a prevalent inclination towards creativity and open-mindedness. Furthermore, a significant level of conscientiousness was evident, as indicated by an average score of 2.58 (SD = 0.54) and 60.1% (236 individuals) falling into the high category. This demonstrates a notable degree of attentiveness and accuracy among the participants. Conversely, the average score for extroversion was 33.43 (SD = 4.11), suggesting that 55.3% of the group (178 participants) had low levels of extroversion, with scores ranging from 8 to 19. This implies that the sample primarily consisted of persons with a tendency towards introversion. The attribute of agreeableness displayed a highly uniform distribution, with an average score of 2.46 (standard deviation = 0.52). More precisely, 52.4% of the participants, which is equivalent to 206 individuals, achieved intermediate scores, whilst 46.6% of the participants, or 183 individuals, achieved high scores. This suggests a dominant tendency towards cooperation and amicability among the participants. Among the sample, a significant majority of 70.5% or 277 individuals had a moderate level of neuroticism, as indicated by a mean score of 2.02 (with a standard deviation of 0.54). This suggests that the participants have displayed a harmonious and stable emotional response. These findings illustrate a complex interplay of personality factors that define the psychological atmosphere of the group.

In addition, the participants demonstrated a significant ability to empathize, as indicated by the substantial percentage of 58.3% (229 individuals) scoring between 51 and 70. Instances of low empathy ratings were infrequent, with only 3.1% (12 individuals) displaying inadequate levels of empathy. The high level of empathy noticed in individuals indicates their great predisposition towards engaging in prosocial behavior, showing a prevailing collective and community-oriented mentality among young people.

The results suggest that the participants possess positive personality traits that facilitate social inclusion and enhance community involvement. The heightened levels of prosocial behavior and empathy observed in this generation suggest a strong emphasis on ethical conduct and a tendency to actively engage in collective efforts. The widespread occurrence of introversion indicates a preference for deep and meaningful intimate connections rather than superficial social engagements. These changes have important consequences for understanding social interactions and developing strategies aimed at increasing community involvement and improving the well-being of young individuals.

Table 1

Level of Study Variables

Level	n	%	Mean	SD
Prosocial Behavior			2.73	.49
Low (16 – 37)	8	2.0		
Moderate (38 – 58)	90	22.9		
High (59 – 80)	295	75.1		
Personality				
Openness			2.59	.52
Low (10 - 23)	5	1.3		
Medium (24 - 36)	154	38.9		
High (37 - 50)	235	59.8		
Conscientiousness			2.58	.54
Low (9 – 21)	9	2.3		
Medium (22 – 32)	148	37.7		
High (33 – 45)	236	60.1		
Extroversion			33.43	4.11
Low (8 – 19)	178	55.3		
Moderate (20 – 28)	89	27.6		
High (29 – 40)	55	17.1		
Agreeableness			2.46	.52
Low (9 – 21)	4	1.0		
Moderate (22 – 32)	206	52.4		
High (33 – 45)	183	46.6		
Neuroticism			2.02	.54
Low (8 – 19)	54	13.7		
Moderate (20 – 28)	277	70.5		
High (29 – 40)	62	15.8		

Empathy				
Low (14 – 33)	12	3.1	2.55	.56
Moderate (34 – 50)	152	38.7		
High (51 – 70)	229	58.3		

Table 2 presents the correlations between prosocial behavior and various personality traits and empathy among the participants (N = 322). The results showed strong significant and positive correlations between prosocial behavior and the personality traits of Openness ($r = .617$, $p < .001$), Conscientiousness ($r = .622$, $p < .001$), Extroversion ($r = .589$, $p < .001$), and Agreeableness ($r = .558$, $p < .001$). Each of these features exhibits a robust association with heightened levels of prosocial activity. In contrast, there was no statistically significant correlation observed between Neuroticism and prosocial conduct ($r = -.005$, $p = .919$), indicating that there is no significant relationship between the two variables. Moreover, a significant positive correlation was seen between Empathy and prosocial activity ($r = .662$, $p < .001$), suggesting that higher levels of empathy are associated with improved prosocial conduct.

The data presented in Table 2 demonstrate a notable association between particular personality traits and prosocial behavior among the individuals. The strong correlations with Openness, Conscientiousness, Extroversion, and Agreeableness suggest that individuals with higher levels of creativity, diligence, sociability, and kindness are more likely to engage in prosocial behaviors, such as providing help, sharing resources, and cooperating with others. The strongest correlation with prosocial behavior was found in Empathy, indicating that the ability to understand and share the feelings of others plays a crucial role in motivating prosocial actions.

Interestingly, there was no significant correlation observed between Neuroticism and prosocial behavior, indicating that emotional stability cannot consistently predict prosocial tendencies like other personality traits do. This finding suggests that the relationship between Neuroticism and prosocial conduct may be complex and maybe affected by additional factors, such as situational or contextual variables.

The results are consistent with previous research indicating that acts of kindness are often associated with positive personality characteristics and a high capacity for empathy. The results have significant ramifications for educational and corporate settings, as fostering these qualities could lead to enhanced social interactions and behaviors that value the community. In order to obtain a more comprehensive comprehension of how personality impacts social behaviors, further investigation could explore the potential mediators or moderators in the relationship between Neuroticism and prosocial behavior.

Table 2
Correlations among Study Variables

Variable	Prosocial Behavior	
	r	*p*
Openess	.617**	.001
Conscientiousness	.622**	.001
Extroversion	.589**	.001
Agreeableness	.558**	.001
Neuroticism	-.005	.919
Empathy	.662**	.001

N = 322, * $p < .05$, ** $p < .001$

Table 3 presents the results of a multiple regression analysis conducted to determine the influence of various personality traits and empathy on prosocial behavior. The model explained a substantial portion of the variability in prosocial behavior, as indicated by an R^2 value of .496 and an adjusted R^2 value of .81. These numbers suggest a robust correlation between the model and the data. The statistical analysis demonstrates the model's relevance with an F-value of 65.38 and degrees of freedom of 5 and 316 ($p < .001$). Among the variables, empathy was discovered to be a substantial predictor of prosocial behavior (B = .408, SE = .408, β = .001, $p < .001$). The attribute of openness had a positive influence on prosocial behavior, albeit its impact was rather small (B = .125, SE = .018, β = .094, $p > .05$). The variables of Conscientiousness and Extroversion had minimal effects on the outcome. The coefficient (B) for Conscientiousness was .142 with a standard error (SE) of .119, and the beta (β) value was .054. The p-value was greater than .05, indicating that the effect was not statistically significant. Similarly, the coefficient (B) for Extroversion was .171 with a standard error (SE) of .136, and the beta (β) value was .026. The p-value was also greater than .05, suggesting that the effect was not statistically significant. Contrary to expectations, agreeableness did not exert a substantial influence on the prediction of prosocial conduct (B = -.012, SE = .140, β = .858, $p > .05$).

The regression analysis in Table 3 confirms the significant influence of empathy in fostering prosocial behavior, as indicated by its strong and noteworthy impact on the model. This underscores the notion that empathy, more than any other characteristic, is crucial in motivating endeavors that aim to promote the well-being of others. The relatively minor influence of Openness, Conscientiousness, and Extroversion on prosocial behavior suggests that while these traits may contribute to prosocial actions, their impact is not as substantial as that of empathy. The lack of a significant impact from Agreeableness is particularly intriguing, given that this trait typically aligns with prosocial behavior. This anomaly suggests that Agreeableness, within the context of this study, does not operate alone but instead interacts with other traits or environmental factors to influence prosocial behaviors. The increased adjusted R^2 value indicates the model's capacity to capture a significant amount of the variation in prosocial behavior. This discovery offers proof of the importance and effectiveness of the included factors, with empathy playing a particularly crucial role. These findings highlight the need of cultivating empathic skills in educational and professional settings in order to enhance prosocial behavior. Further inquiry could explore the combined effects of these traits and other situational factors to better understand the complex relationship between personality and prosocial behavior.

Table 3
Multiple Regression Analysis

Variable	Prosocial Behavior			
	B	SE. B	Beta, β	*p*
Openness	.125		-.018	.094
Conscientiousness	.142		.119	.054
Extroversion	.171		.136	.026
Agreeableness	-.012		.140	.858
Empathy	.408		.408	.001
R^2	.496			
Adjusted R^2	.81			
F	65.38			

Empathy as a Central Driver of Prosocial Behavior: Interactions with Personality Traits

Prosocial behaviors, defined as voluntary actions undertaken with the explicit aim of benefiting others, play a vital role in maintaining social harmony and fostering cooperative connections. Recent research highlights the pivotal importance of empathy in fostering prosocial actions, despite the prior association of various personality traits with these behaviors. The objective of this discussion is to assess the degree to which empathy, when compared to traits such as Openness, Conscientiousness, Extroversion, and Agreeableness, exerts a stronger influence on prosocial behaviors. The exploration is grounded in contemporary psychological research, which offers comprehensive insights into these dynamics.

Engaging in prosocial behavior is crucial in various social situations, as it has a significant impact on multiple factors such as group productivity and interpersonal relationships. Personality traits have conventionally been considered as indications of such behaviors. Individuals who possess traits such as inventiveness and a willingness to experiment with new ideas are more likely to be motivated to engage in prosocial acts, according to Poropat (2019). Cooperative and altruistic actions are strongly associated with conscientiousness and agreeableness (Soto, 2019). However, the connection between these traits and acts of kindness may vary based on the situation and the specific behavior in question.

Empathy stands out among several personality traits because of its strong association with prosocial behavior. Empathy is the ability to understand and share the feelings of another person, which can motivate actions to reduce their pain or improve their well-being. The aforementioned attribute has been proven to be a more dependable predictor of prosocial behaviors, often serving as an intermediary between personality variables and prosocial outcomes (Clark et al., 2020). Individuals who possess a heightened sense of empathy are more likely to engage in actions of aid, not just because they understand the pain and distress experienced by others, but also because they are motivated to alleviate it.

The regression analysis of the given data clearly shows that empathy has a far greater influence on prosocial behavior than other personality traits. The beta coefficient of empathy displayed a much higher value in comparison to the coefficients of other traits, suggesting a strong and direct association with prosocial actions. The strong predictive power of empathy is emphasized by a correlation coefficient of .662 (p < .001). In contrast, traits such as

Extroversion and Agreeableness exhibited less correlations, highlighting that while they may be beneficial, they may not be as crucial in driving prosocial behaviors as empathy.

Contrary to expectations based on previous research, the attribute of Agreeableness did not show a significant ability to predict prosocial behavior in this study. This anomaly suggests that the influence of Agreeableness on prosocial behavior may depend on the particular circumstances, indicating a more nuanced comprehension than previously held beliefs. Recent study indicates that the impact of Agreeableness on prosocial activities might be affected by factors such as the perceived cost of the prosocial action or the presence of reciprocal expectations (Thompson & Chen, 2021).

Limitations and Future Directions

One significant limitation of the current research is its cross-sectional design, which prevents the ability to show a cause-and-effect relationship between personality traits, empathy, and prosocial conduct. While there are significant correlations and regression coefficients suggesting strong linkages, they do not provide evidence that heightened empathy or specific personality traits actually cause an increase in prosocial behavior. Furthermore, relying on self-reported assessments may introduce bias, as individuals may submit replies that they perceive as socially desirable rather than accurate reflections of their behavior and ideas.

Another limitation concerns the extent to which the results can be used. The study sample may not adequately encompass the breadth of individuals, as cultural, socio-economic, and environmental factors can significantly influence both personality traits and the expression of prosocial behavior. For instance, the impact of empathy on prosocial conduct can vary based on the cultural context, where the norms and anticipated behaviors for interpersonal interactions differ. Therefore, conclusions derived from a certain population may not be universally valid in many global contexts.

To address the limitations mentioned, future research should employ longitudinal designs, which can better assess the causal linkages between components. By monitoring the changes in personality traits, empathy, and prosocial behavior over time, we can determine whether alterations in features such as empathy led to changes in prosocial acts, or if it is the reverse. Furthermore, longitudinal studies have the potential to examine the impact of life events, alterations in social environments, or interventions aimed at enhancing empathy on prosocial behavior across different phases of life.

To enhance the relevance of the results, future studies should aim to incorporate individuals from various cultural, economic, and social backgrounds, hence expanding the scope of research situations. By integrating experimental designs, in which researchers manipulate levels of empathy or other personality traits, it is feasible to acquire more definitive information concerning causality. In addition, utilizing more objective measures, such as direct observations or evaluations from unbiased sources, could reduce the inherent subjectivity of self-reported methods and provide a more accurate assessment of how personality traits and empathy are demonstrated in real-life behaviors.

Conclusion

Examining the correlation between empathy, personality traits, and prosocial behavior provides valuable understanding of the psychological factors that promote both societal harmony and personal empathy. This study emphasizes the significance of empathy as a pivotal determinant that exerts a substantial influence on prosocial behaviors, often surpassing other aspects of an individual's personality. The results underscore the importance

of empathy in fostering cooperative and altruistic behaviors. Nevertheless, the study's constraints in establishing a cause-and-effect relationship and its applicability to a wider population highlight the requirement for additional comprehensive, varied, and sustained research. To enhance understanding of these processes, future study should expand their methodological breadth and incorporate a broader spectrum of populations. Gaining a deeper comprehension in this domain not only enhances the discipline of psychology but also has practical implications for educational and social policies aimed at promoting prosocial behaviors in various community contexts.

References

Batson, C. D., & Shaw, L. L. (2019). Evidence for altruism: Toward a pluralism of prosocial motives. *Psychological Inquiry*.

Clark, A. B., & others. (2020). Empathy and prosocial behavior: The role of mediation. *Journal of Personality, 88*(3), 481-495.

Decety, J. (2015). The neural pathways, development, and functions of empathy. *Current Opinion in Behavioral Sciences*.

Decety, J., & Cowell, J. M. (2019). The psychological science of morality: A compassionate approach. *Nature Human Behaviour*.

Eisenberg, N., Spinrad, T. L., & Knafo-Noam, A. (2016). *Prosocial Development*. Guilford Press.

Graziano, W. G., & Tobin, R. M. (2018). *The Oxford Handbook of Prosocial Behavior*. Oxford University Press.

Jensen-Campbell, L. A., & Graziano, W. G. (2018). Agreeableness, extraversion, and peer relations in early adolescence: Winning friends and deflecting aggression. *Journal of Research in Personality*.

Mestre, M. V., & others. (2017). Empathy and prosocial behavior: The role of mediation and social understanding. *Journal of Psychology*.

Padilla-Walker, L. M., & Carlo, G. (2014). *Prosocial Development: A Multidimensional Approach*. Oxford University Press.

Poropat, A. E. (2019). A meta-analysis of the five-factor model of personality and academic performance. *Psychological Bulletin, 135*(2), 322-338.

Roberts, B. W., & others. (2005). Patterns of mean-level change in personality traits across the life course: A meta-analysis of longitudinal studies. *Psychological Bulletin*.

Soto, C. J. (2019). How replicable are links between personality traits and consequential life outcomes? The life outcomes of personality replication project. *Psychological Science, 30*(5), 711-727.

Spinrad, T. L., & Eisenberg, N. (2017). *Empathy, Prosocial Behavior, and Positive Development in Schools*. Springer.

Telle, N.-T., & Pfister, H.-R. (2016). Prosocial consequences of interpersonal synchrony: A meta-analysis. *Journal of Experimental Social Psychology*.

Thompson, G., & Chen, P. Y. (2021). Agreeableness and prosocial behavior: Contextual variability in personality-outcome relations. *Social Psychological and Personality Science, 12*(1), 114-123.

Zaki, J. (2019). *The War for Kindness: Building Empathy in a Fractured World*. Crown.