

The Impact of Peer Relationships on Prosocial Behavior

Min Ou*, Jingnan Wang

School of Psychology, Northwest Normal University, Lanzhou, 730070, Gansu, China

**Corresponding author*

Keywords: Peer Relationships, Prosocial Behavior, Mental and Physical Health

Abstract: This analysis focuses on the impact of peer relationships on prosocial behavior. The research employed a questionnaire method, leveraging a self-designed demographic data collection tool, a peer relationship scale, and a prosocial behavior scale to survey some adults in the Lanzhou area. A total of 354 questionnaires were collected. Subsequent to data arrangement, SPSS was leveraged for analysis. The results showed a significant correlation between peer relationships and prosocial behavior ($p < 0.001$), with peer relationships positively predicting prosocial behavior ($\beta = 0.960$, $t = 67.417$, $p < 0.001$). Better peer relationships were aligned with an increased tendency for prosocial behavior. This result suggests that individuals should value peer relationships, as fostering good peer relationships not only plays a role in diminishing stress and promote psychological and somatic health but also contributes to the development of a positive social atmosphere.

1. Introduction

Peer relationships play a crucial role in the socialization process of individuals. During adulthood, peer relationships have a profound role in psychological maturation and social behavior [1]. Prosocial behaviors, such as helping, sharing, and cooperating, are important manifestations of social harmony and individual well-being [2]. Research indicates that positive peer relationships can promote the development of prosocial behavior, while negative peer relationships may inhibit such behavior [3]. Therefore, exploring the impact of peer relationships on prosocial behavior not only helps understand the formation mechanisms of social behavior but also provides theoretical and practical guidance for promoting positive social behavior. Peer relationships refer to the interactions and connections between individuals and their peers, including friendships, classmates, and other forms of peer interaction [4]. These relationships are typically characterized by mutual support, emotional bonds, shared interests, and participation in activities [5]. Peer relationships are not only an important component of social networks but also a significant vehicle for individual socialization and emotional development [6]. Numerous studies have shown that peer relationships significantly influence individuals' mental health, social adaptation, and academic achievement. For example, positive peer relationships can enhance self-esteem and confidence, reducing feelings of loneliness and symptoms of depression [7]. Conversely, poor peer relationships, such as exclusion or bullying, can lead to psychological issues and difficulties in social adaptation [8]. Additionally, peer relationships influence the development of social behavior by providing emotional support and behavioral role models [9].

In recent years, researchers have begun to focus on how peer relationships affect prosocial behavior.

Some studies suggest that positive peer relationships can promote the development of prosocial behavior. For instance, individuals with supportive friendships are more likely to exhibit helping and sharing behaviors [10]. Furthermore, cooperation and mutual assistance among peers are considered important drivers of prosocial behavior [11]. These studies provide an initial empirical foundation for exploring the relationship between peer relationships and prosocial behavior. Prosocial behavior refers to voluntary actions aimed at helping others or promoting social harmony[2]. Such behaviors comprise but are not exclusively aimed at helping, sharing, cooperating, comforting, and donating. Prosocial behavior not only aids individual social adaptation and mental health but also contributes to the overall well-being of society [12]. Therefore, understanding the formation mechanisms and influencing factors of prosocial behavior has significant theoretical and practical implications. Regarding the relationship between peer relationships and prosocial behavior, existing research has revealed various mechanisms. For example, emotional support and a sense of belonging among peers can enhance individuals' prosocial motivation [9]. Additionally, cooperative and mutual assistance behaviors among peers provide practical opportunities for prosocial behavior [11]. Some studies have also found that social norms and expectations within peer relationships can influence individuals' prosocial behavior [10]. These studies provide important theoretical foundations for a deeper understanding of the relationship between peer relationships and prosocial behavior.

In summary, the impact of peer relationships on prosocial behavior is a complex and important research area. By exploring the relationship between peer relationships and prosocial behavior, we can better understand the formation mechanisms of social behavior and provide effective intervention strategies for promoting positive social behavior. This study focuses on adult individuals to investigate the impact of peer relationships on prosocial behavior.

Based on this, the study proposes the following hypothesis: Peer relationships have a direct predictive effect on prosocial behavior.

2. Research Methods

2.1 Research Subjects

The study selected its participants from the adult population of the Lanzhou area in Gansu Province. Before the survey, the principles of voluntariness and anonymity were explained, and a unified instruction was provided. Online questionnaires were circulated by class, yielding a total of 354 completed responses, including 169 males (47.74%) and 185 females (52.26%); 197 participants were from urban areas (55.65%), and 157 were from rural areas (44.35%); 76 were only children (21.47%), and 278 were not only children (78.53%).

2.2 Research Tools

2.2.1 General Demographic Questionnaire

The demographic survey used in this research was custom-designed and collected essential information including age, gender, and place of origin.

2.2.2 Peer Relationship Scale(PRS)

The study selected the Chinese Adolescent Sports Friendship Quality Scale developed by Zhu Yu et al. To align with the research objectives, the questionnaire items related to training and competition were revised to "physical exercise." The questionnaire consisted of 25 items, using a 5-point Likert scale, with a total score range of 25–125. Higher scores indicated better peer relationships. In this study, the internal consistency Cronbach's α coefficient of the peer relationship scale was 0.977.

2.2.3 Prosocial Tendencies Measure (PTM)

The Prosocial Tendencies Measure (PTM) revised by Kou Yu et al. (2007) was used. The scale includes six dimensions: altruism, anonymity, and emergency, with a total of 26 items. The Prosocial Tendency Scale uses a 5-point scoring method, with higher total scores indicating a higher tendency for prosocial behavior. The scale has a wide range of applications and can be used for adolescents or college students. In this study, the internal consistency Cronbach's α coefficient of the scale was 0.979.

2.3 Data Statistics

SPSS 26.0 was used for independent sample t-tests, Pearson correlation modeling and hierarchical regression assessment.

3. Results

Table 1: Differences analysis (N=354)

		N	Peer relationship M \pm SD	Prosocial behavior M \pm SD
gender	Man	169	83.568 \pm 25.880	86.864 \pm 28.790
	Woman	185	83.460 \pm 26.549	85.784 \pm 28.550
	t		0.039	0.354
Place of origin	Countryside	157	74.529 \pm 28.305	76.331 \pm 30.744
	City	197	90.670 \pm 21.954	94.244 \pm 24.099
	t		5.875***	5.981***
Family formation	Only-child	76	73.092 \pm 28.850	74.921 \pm 30.560
	Not-only child	278	86.360 \pm 24.721	89.410 \pm 27.320
	t		-3.659***	-3.744***

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; “p” is the probability, reflecting the probability of an event.

From Table 1, it can be seen that no marked differences were recorded in peer relationships and prosocial behavior by gender ($ps > 0.05$), but there were significant differences in peer relationships and prosocial behavior by geographic origin and family arrangement ($p < 0.001$). Participants from rural areas scored significantly higher on alexithymia than those from urban areas, whereas urban participants showed substantially higher scores on peer relationships and prosocial behavior than residents from rural zones. Non-only children had significantly increased scores on peer relationships and prosocial behavior than only children.

Table 2: Correlation analysis (N=354)

	1	2	3	4	5	6
1. Gender	1					
2. Age	0.015	1				
3. Place of Origin	-0.103	-0.028				
4. Family Formation	-0.045	-0.022	-0.018	1		
5. Peer relationship	-0.002	0.130*	-0.307***	0.208***	1	
6. Prosocial behavior	-0.019	0.139**	-0.311***	0.208***	0.969***	1

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; “p” is the probability, reflecting the probability of an event.

From Table 2, it can be seen that peer relationships and prosocial behavior were significantly positively correlated ($p < 0.001$), meaning that an upsurge in peer relationships were aligned with a higher likelihood of prosocial behavior. Participants' age was positively correlated with peer

relationships ($p < 0.05$) and prosocial behavior ($p < 0.01$). Participants' place of origin was negatively correlated with peer relationships and prosocial behavior ($ps < 0.001$). Participants' family structure was positively correlated with peer relationships and prosocial behavior ($ps < 0.001$).

Table 3: Regression analysis of peer relationships and prosocial behavior (N=354)

Models and Variables	Prosocial behavior			
	Model 1		Model 2	
	β	t	β	t
1. Gender	-0.043	-0.878	-0.019	-1.411
Place of origin	-0.308	-6.240***	-0.018	-1.320
Age	0.136	2.761**	0.014	1.044
Family formation	0.204	4.139***	0.007	0.539
2. Peer relationship			0.960	64.417***
ΔR^2	0.148		0.939	
R ²	0.158		0.940	
F	16.378***		1092.708***	

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; “p” is the probability, reflecting the probability of an event.

As depicted in Table 3, when examining gender, place of origin, age, and family structure were included as control variables in the regression model, peer relationships significantly positively predicted prosocial behavior ($\beta = 0.960$, $t = 67.417$, $p < 0.001$). The higher the level of peer relationships, the higher the level of prosocial behavior.

4. Discussion

This study examined the impact of peer relationships on prosocial behavior. The outcomes demonstrated a notable positive association between peer relationships and prosocial behavior in adult individuals, and peer relationships directly and positively predicted prosocial behavior. That is, higher levels of peer relationships made individuals more likely to exhibit prosocial adolescent conduct, consistent with previous findings. Hypothesis was supported.

Good peer relationships provide a favorable environment for the maturation of prosocial behavior. Establishing good peer relationships can make individuals more friendly toward each other. Acceptance, tolerance, and appreciation from friends can give students a greater sense of security and trust, reducing stress and anxiety caused by external factors and creating a pleasant mood. Individuals in a positive emotional state are more likely to engage in friendly behaviors. Positive social goals promote the realization of prosocial behavior. Social goals reflect social needs. Establishing positive and friendly social goals in peer interactions, such as willingness to help and support others, desire for intimacy, and hope for acceptance and fair treatment, all convey mainstream cultural values and behavioral norms. The values of friendship, mutual assistance, and integrity among peers can have a subtle positive influence on students, shaping their social cognition, behavior, personality, and self through group pressure, leading to more positive, friendly, and upright behaviors, i.e., prosocial behavior.

The maturation of peer relationships and prosocial behavior in adult individuals has unique characteristics. Compared to adolescents, adult peer relationships are more stable and complex, typically including colleagues, friends, and family members [13]. These relationships provide emotional support, social resources, and behavioral role models for adults, thus fostering the growth of prosocial behavior. For example, cooperation and mutual assistance among colleagues can enhance the prosocial atmosphere in the workplace, while emotional support from friends can stimulate individuals' altruistic motivation [14]. Additionally, adult prosocial behavior is often closely related to their social roles and responsibilities. For instance, as parents or community members, adults are

more inclined to exhibit helping and sharing behaviors [15]. These behaviors not only aid individual social adaptation but also contribute to the overall well-being of society.

Based on this, the following suggestions are proposed to boost the advancement of peer relationships and prosocial behavior in adult individuals:

(1) Policy makers and community leaders should strengthen social support networks: Adults should actively establish and maintain diverse social support networks, including friends, colleagues, and family members. These relationships not only provide emotional support but also offer practical opportunities for prosocial behavior [16].

(2) Organizational leaders and community organizers should promote cooperation and mutual assistance: In workplaces and communities, organizers can encourage cooperation and mutual assistance among adults through team projects and volunteer activities, thereby enhancing their prosocial behavior [14].

(3) Educational institutions and media outlets should enhance social responsibility: Through education and publicity, increase adults' sense of social responsibility, making them aware of the importance of prosocial behavior for social harmony [15].

(4) Mental health professionals and counselors should provide psychological support: For adults with poor peer relationships, psychological counselors should offer emotional support and behavioral guidance to help them improve social relationships and promote the development of prosocial behavior [12].

6. Limitations and Future Directions

The current investigation is a cross-sectional study and can only explore correlations, not a causal link. Future research could use experimental methodologies to clarify the duty of peer relationships in prosocial behavior. Additionally, individual differences in prosocial behavior could be considered, exploring the influence of peer interactions on altruistic actions in different groups.

7. Conclusion

There is a positive correlation between peer relationships and prosocial behavior, and peer relationships can positively predict prosocial behavior. This suggests that improving prosocial behavior is meaningful for fostering good peer relationships.

Acknowledgement

This study was supported by the 2025 University-level Graduate Research Funding Project of Northwest Normal University (No. KYZZB2025019).

References

- [1] Rubin, K. H., Bukowski, W. M., & Bowker, J. C. (2015). Children in peer groups. *Handbook of child psychology and developmental science*, 4, 175-222. <https://doi.org/10.1002/9781118963418.childpsy405>
- [2] Eisenberg, N., VanSchyndel, S. K., & Spinrad, T. L. (2016). Prosocial motivation: Inferences from an opaque body of work. *Child Development*, 87(6), 1668-1678. <https://doi.org/10.1111/cdev.12638>
- [3] Wentzel, K. R. (2017). Peer relationships, motivation, and academic performance at school. In A. J. Elliot, C. S. Dweck, & D. S. Yeager (Eds.), *Handbook of competence and motivation: Theory and application* (2nd ed., pp. 586–603). The Guilford Press.
- [4] Bukowski, W. M., & Raufelder, D. (2018). Peers and the self. *Handbook of peer interactions, relationships, and groups*, 141-156.
- [5] Hartup, W. W. (2021). The company they keep: Friendships and their developmental significance. In *The social child* (pp. 143-163). Psychology Press. <https://doi.org/10.2307/1131681>

- [6] Parker, J. G., Rubin, K. H., Erath, S. A., Wojslawowicz, J. C., & Buskirk, A. A. (2015). *Peer relationships, child development, and adjustment: A developmental psychopathology perspective. Developmental psychopathology: Volume one: Theory and method*, 419-493. <https://doi.org/10.1002/9780470939383.ch12>
- [7] Laursen, B., & Hartup, W. W. (2002). *The origins of reciprocity and social exchange in friendships. New Directions for Child & Adolescent Development*, 2002(95). <https://doi.org/10.1002/cd.35>
- [8] Ladd, G. W. (2006). *Peer rejection, aggressive or withdrawn behavior, and psychological maladjustment from ages 5 to 12: An examination of four predictive models. Child development*, 77(4), 822-846. <https://doi.org/10.1111/j.1467-8624.2006.00905.x>
- [9] Wentzel, K. R., Muenks, K., McNeish, D., & Russell, S. (2017). *Peer and teacher supports in relation to motivation and effort: A multi-level study. Contemporary Educational Psychology*, 49, 32-45.
- [10] Padilla-Walker, L. M., & Carlo, G. (Eds.). (2014). *Prosocial Development: A Multidimensional Approach. Oxford University Press*. <https://doi.org/10.1093/acprof:oso/9780199964772.001.0001>
- [11] Fabes, R. A., Carlo, G., Kupanoff, K., & Laible, D. (1999). *Early adolescence and prosocial/moral behavior I: The role of individual processes. The Journal of Early Adolescence*, 19(1), 5-16.
- [12] Penner, L. A., Dovidio, J. F., Piliavin, J. A., & Schroeder, D. A. (2005). *Prosocial behavior: Multilevel perspectives. Annu. Rev. Psychol.*, 56, 365-392. DOI: 10.1146/annurev.psych.56.091103.070141
- [13] Carstensen, L. L. (2006). *The influence of a sense of time on human development. Science*, 312(5782), 1913-1915. DOI: 10.1126/science.1127488
- [14] Omoto, A. M., Snyder, M., & Hackett, J. D. (2010). *Personality and motivational antecedents of activism and civic engagement. Journal of personality*, 78(6), 1703-1734. <https://doi.org/10.1111/j.1467-6494.2010.00667.x>
- [15] Midlarsky, E., & Kahana, E. (2007). *Altruism, well-being, and mental health in late life. https://doi.org/10.1093/acprof:oso/9780195182910.003.0006*
- [16] Cohen, S., & Wills, T. A. (1985). *Stress, social support, and the buffering hypothesis. Psychological bulletin*, 98(2), 310. <https://doi.org/10.1037/0033-2909.98.2.310>