

The Role of Identity Development and Moral Reasoning in Predicting Prosocial Behavior

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ABSTRACT

Objective: This study aimed to examine the role of identity development and moral reasoning in predicting prosocial behavior among adolescents in Peru.

Methods and Materials: The research employed a descriptive correlational design involving 350 adolescents from urban areas in Peru, selected using convenience sampling based on Morgan and Krejcie's table. Data were collected using standardized measurement tools: the Prosocial Behavior Scale (Carlo & Randall, 2002), the Ego Identity Process Questionnaire (Balistreri et al., 1995), and the Defining Issues Test-2 (Rest et al., 1999). Pearson correlation analysis and multiple linear regression were conducted using SPSS-27 to examine relationships between identity development, moral reasoning, and prosocial behavior.

Findings: Descriptive analyses indicated moderately high mean scores for prosocial behavior ($M = 3.78$, $SD = 0.67$), identity development ($M = 4.12$, $SD = 0.56$), and moral reasoning ($M = 4.25$, $SD = 0.52$). Significant positive correlations emerged between prosocial behavior and identity development ($r = 0.59$, $p < 0.01$) and moral reasoning ($r = 0.62$, $p < 0.01$). Regression analysis revealed identity development ($\beta = 0.29$, $p < 0.01$) and moral reasoning ($\beta = 0.36$, $p < 0.01$) as significant predictors of prosocial behavior, explaining 41% of the variance ($R^2 = 0.41$, $F(2,347) = 119.48$, $p < 0.01$). Moral reasoning was the stronger predictor.

Conclusion: Identity development and moral reasoning significantly predicted adolescents' prosocial behavior, with moral reasoning showing greater predictive strength. These findings emphasize the importance of fostering adolescents' moral reasoning and identity formation to promote prosocial behaviors, suggesting practical implications for educational and psychological interventions.

Keywords: Prosocial Behavior, Identity Development, Moral Reasoning, Adolescents, Predictive Analysis

1. Introduction

Prosocial behavior—defined as voluntary actions intended to benefit others—plays a critical role in promoting social cohesion, empathy, and collective well-being among adolescents (Carlo et al., 2024). These behaviors include helping, sharing, cooperating, comforting, and volunteering, all of which are essential for fostering healthy interpersonal relationships and community participation (Li et al., 2024). The adolescent period represents a pivotal stage for the development of prosocial behaviors, as young people begin to form deeper understandings of their social roles and moral responsibilities (Iwasa et al., 2023; Jian & Skeem, 2024). Understanding the psychological and developmental mechanisms underlying prosocial behaviors during this period is therefore of great importance to educators, psychologists, and policymakers (Setiawan et al., 2022; Torres et al., 2025).

One of the central factors influencing adolescent prosocial behavior is identity development. During adolescence, individuals engage in the process of exploring and committing to values, beliefs, and roles that form their personal and social identities (Kil et al., 2023). A coherent identity allows adolescents to internalize moral values and view prosocial acts as consistent with their sense of self (Neaman et al., 2021; Sakı & Öztaş, 2024). Various dimensions of identity—such as moral, cultural, ethnic, religious, and social identity—have been shown to be strongly associated with prosocial behavior across different cultural settings (Maiya et al., 2024; Maiya et al., 2020; Streit et al., 2020). For instance, cultural and ethnic identity have been found to mediate the effects of cultural stressors on prosocial actions in Latino and immigrant youth (Torres et al., 2025; Xiao et al., 2024). Similarly, religious and moral identity help foster altruistic behaviors by reinforcing a personal commitment to ethical standards and community values (Arifiana et al., 2024; Ding et al., 2018).

In addition to identity, moral reasoning plays a vital role in predicting adolescents' prosocial tendencies. Moral reasoning involves cognitive processes through which individuals evaluate actions in terms of right and wrong, justice, and fairness (Shi et al., 2020; Xiao et al., 2020). Higher levels of moral reasoning are associated with increased ethical sensitivity and a stronger inclination toward helping behaviors (Li et al., 2022; Streit et al., 2020). Adolescents who engage in advanced moral reasoning can assess the consequences of their actions more thoughtfully

and act according to internalized moral principles, even when it may not result in direct personal gain (Bhadra & Kumar, 2023; Liu et al., 2024). Research also shows that moral identity—the extent to which being a moral person is central to one's self-concept—acts as a mediator between cognitive moral development and actual prosocial behavior (Li et al., 2024; Xia, 2025). In addition, contextual variables such as family, education, peer relationships, and digital exposure further influence how moral reasoning and identity development translate into prosocial actions (Hassler et al., 2024; Wang et al., 2021).

Theoretical models, including social identity theory and ecological systems theory, highlight how the interaction between personal, social, and environmental factors shapes prosocial development (Özkan et al., 2023; Sotnik et al., 2023). According to social identity theory, identifying with a group promotes adherence to group norms, which may include helping and cooperative behaviors (Colbert & Chan, 2020; McDougale & Li, 2022). Ecological models emphasize the roles of school climate, family involvement, and cultural background in facilitating the development of moral identity and reasoning, thus supporting prosocial behavior (Arifiana et al., 2024; Maiya et al., 2024). For example, moral socialization processes mediated by maternal warmth have been shown to influence adolescents' value formation and ethical decisions (Kil et al., 2023). Similarly, the practice of ethical leadership in organizational settings can enhance young individuals' sense of social responsibility and commitment to helping others (Özkan et al., 2023).

Empirical research across diverse cultural contexts has provided robust evidence for the roles of identity and moral reasoning in prosocial behavior. Studies among Chinese, Chilean, Indian, and American adolescents confirm that those with secure identities and higher moral reasoning tend to engage more frequently in community service, peer support, and environmentally responsible behaviors (Bhadra & Kumar, 2023; Colbert & Chan, 2020; Ding et al., 2018; Neaman et al., 2021). Among Chinese adolescents, reading morally themed content and engaging in reflective activities were associated with enhanced moral reasoning and prosocial outcomes (Li et al., 2022). Likewise, service-learning programs in higher education have been linked with greater formation of prosocial identities, which in turn increase adolescents' engagement in volunteerism and civic activities (McDougale & Li, 2022). The emergence of digital platforms and online social environments has also reshaped the dynamics of prosocial behavior, with online identity and

social self-efficacy influencing virtual helping behaviors (Xia, 2025).

Given the theoretical and empirical literature discussed above, the current study aims to investigate the roles of identity development and moral reasoning in predicting prosocial behavior among adolescents in Peru.

2. Methods and Materials

2.1. Study Design and Participants

This study utilized a descriptive correlational design to examine the role of identity development and moral reasoning in predicting prosocial behavior among adolescents. The research population consisted of adolescents from urban areas in Peru, from which a sample size of 350 participants was determined using the Morgan and Krejcie sampling table. Participants were selected through convenience sampling, ensuring diversity in terms of gender, socioeconomic status, and educational backgrounds. The inclusion criteria encompassed adolescents aged between 15 and 19 years, enrolled in secondary education institutions, and voluntary consent to participate in the research. Exclusion criteria involved individuals diagnosed with cognitive or psychological conditions potentially affecting their ability to complete questionnaires accurately. Ethical approval was obtained from the Institutional Review Board, and informed consent was secured from both participants and their legal guardians, ensuring confidentiality and voluntary participation.

2.2. Measures

2.2.1. Prosocial Behavior

The Prosocial Behavior Scale developed by Carlo and Randall (2002) is a widely used instrument for assessing various dimensions of prosocial tendencies in adolescents and young adults. This scale includes 23 items divided into six subscales: public, anonymous, direct, emotional, compliant, and altruistic prosocial behaviors. Respondents rate each item on a 5-point Likert scale ranging from 1 (does not describe me at all) to 5 (describes me greatly), with higher scores indicating greater prosocial tendencies. The scale has demonstrated good internal consistency across subscales (Cronbach's alpha values ranging from 0.70 to 0.86) and has been validated in multiple cultural contexts, confirming its reliability and construct validity in predicting socially beneficial behaviors (Torres et al., 2025; Xia, 2025; Xiao et al., 2024).

2.2.2. Ego Identity

The Ego Identity Process Questionnaire (EIPQ) was developed by Balistreri, Busch-Rossnagel, and Geisinger (1995) to assess identity development based on Marcia's theory of identity statuses. The EIPQ contains 32 items and evaluates two key dimensions of identity: exploration and commitment, across ideological (occupation, religion, politics, values) and interpersonal (friendship, dating, gender roles) domains. Each item is rated on a 6-point Likert scale from 1 (strongly disagree) to 6 (strongly agree), and higher scores reflect stronger levels of exploration or commitment. The tool has shown strong psychometric properties, with acceptable reliability (Cronbach's alpha values typically above 0.70) and confirmed construct validity through factor analysis and correlation with related developmental constructs (Aldahadha Al-Khawaldeh & Mohammed Al-Khawaldeh, 2023; Nazari et al., 2023; Shahla et al., 2022).

2.2.3. Moral Reasoning

The Defining Issues Test, Version 2 (DIT-2), developed by Rest, Narvaez, Thoma, and Bebeau (1999), is a well-established measure of moral reasoning based on Kohlberg's theory of moral development and neo-Kohlbergian perspectives. The DIT-2 presents participants with five moral dilemmas, followed by 12 issues per dilemma that respondents rate and rank in terms of importance. The scoring yields several indices, including the P-score (Principled Moral Reasoning) and the N2 score (which captures both moral schema preference and the ability to reject lower-stage reasoning). The instrument is suitable for individuals aged 16 and older. Studies consistently support the DIT-2's reliability (with test-retest reliability around 0.70) and validity, including construct, predictive, and convergent validity, making it a standard in moral development research (Kotluk & Tormey, 2023; Miranda-Rodríguez et al., 2023; Tama et al., 2023).

2.3. Data Analysis

Data analysis was performed using the Statistical Package for Social Sciences (SPSS-27). Initially, descriptive statistics, including means, standard deviations, and frequencies, were calculated to summarize participants' demographic information and scores on measurement tools. Subsequently, Pearson correlation coefficients were computed to investigate the strength and direction of the linear relationships between the dependent variable

(prosocial behavior) and each independent variable (identity development and moral reasoning). To further examine the predictive capability of identity development and moral reasoning concerning prosocial behavior, a multiple linear regression analysis was conducted, with prosocial behavior as the dependent variable and identity development and moral reasoning as independent predictors. The assumptions underlying regression analysis, including normality, linearity, multicollinearity, and homoscedasticity, were tested and confirmed prior to analysis to ensure accurate and reliable results. Statistical significance was determined using a standard alpha level of 0.05.

3. Findings and Results

Table 1

Descriptive Statistics for Study Variables

Variable	Mean	Standard Deviation
Prosocial Behavior	3.78	0.67
Identity Development	4.12	0.56
Moral Reasoning	4.25	0.52

The descriptive analysis in Table 1 revealed that moral reasoning had the highest mean score ($M = 4.25$, $SD = 0.52$), indicating participants exhibited relatively high moral reasoning levels. Identity development also had a high mean score ($M = 4.12$, $SD = 0.56$), whereas prosocial behavior showed a moderate-to-high average ($M = 3.78$, $SD = 0.67$). These results suggest that adolescents demonstrated generally positive developmental outcomes across all variables.

Before conducting multiple linear regression analysis, assumptions were rigorously tested and confirmed. Normality was assessed through examining skewness and kurtosis values, which fell within acceptable ranges of ± 2 (prosocial behavior: skewness = -0.38, kurtosis = 0.79; identity development: skewness = -0.26, kurtosis = 0.47;

The participants in this study consisted of 350 adolescents from urban areas of Peru. Among the participants, 193 (55.1%) were female and 157 (44.9%) were male. In terms of age distribution, 63 (18.0%) adolescents were 15 years old, 78 (22.3%) were 16 years old, 74 (21.1%) were 17 years old, 72 (20.6%) were 18 years old, and 63 (18.0%) were 19 years old. Regarding socioeconomic status, 82 participants (23.4%) belonged to lower socioeconomic backgrounds, 187 (53.4%) represented middle socioeconomic status, and 81 (23.1%) belonged to upper socioeconomic groups. Furthermore, concerning educational level, 147 (42.0%) participants were in the 10th grade, 125 (35.7%) were in the 11th grade, and 78 (22.3%) participants were enrolled in the 12th grade.

moral reasoning: skewness = -0.14, kurtosis = 0.61). Linearity between the dependent and independent variables was verified by inspecting scatterplots, which demonstrated clear linear trends without curvilinear patterns. Homoscedasticity was confirmed through the analysis of residual scatterplots, indicating consistent dispersion of residuals around zero without discernible patterns. Additionally, multicollinearity was evaluated through tolerance and Variance Inflation Factor (VIF) values, with results indicating no problematic collinearity (identity development: tolerance = 0.84, VIF = 1.19; moral reasoning: tolerance = 0.84, VIF = 1.19). Therefore, all assumptions were satisfactorily met, justifying the use of linear regression analysis.

Table 2

Correlation between Prosocial Behavior and Predictor Variables

Variable	Prosocial Behavior (r)	p-value
Identity Development	0.59	<0.01
Moral Reasoning	0.62	<0.01

The correlation analysis in Table 2 indicated significant positive correlations between prosocial behavior and identity development ($r = 0.59$, $p < 0.01$), as well as between

prosocial behavior and moral reasoning ($r = 0.62$, $p < 0.01$). These findings demonstrate that higher levels of identity development and moral reasoning were significantly

associated with increased prosocial behaviors among adolescents.

Table 3

Summary of Regression Analysis Predicting Prosocial Behavior

Source	Sum of Squares	Degrees of Freedom	Mean Squares	R	R ²	Adjusted R ²	F	p
Regression	64.52	2	32.26	0.64	0.41	0.40	119.48	<0.01
Residual	94.28	347	0.27					
Total	158.80	349						

The regression analysis in Table 3 results indicated that identity development and moral reasoning significantly predicted prosocial behavior ($F(2, 347) = 119.48, p < 0.01$), explaining approximately 41% of the variance ($R^2 = 0.41$,

adjusted $R^2 = 0.40$). This robust result demonstrates the combined predictive power of the two independent variables on prosocial behaviors among adolescents.

Table 4

Multivariate Regression Results Predicting Prosocial Behavior

Predictor	B	Standard Error	β	t	p
Constant	0.54	0.16		3.38	<0.01
Identity Development	0.35	0.06	0.29	5.83	<0.01
Moral Reasoning	0.47	0.07	0.36	6.71	<0.01

The multivariate regression analysis in Table 4 revealed that both identity development ($B = 0.35, \beta = 0.29, p < 0.01$) and moral reasoning ($B = 0.47, \beta = 0.36, p < 0.01$) significantly predicted adolescents' prosocial behavior. Moral reasoning emerged as a slightly stronger predictor, indicated by its higher standardized beta coefficient ($\beta = 0.36$). These results highlight the unique and significant contributions of each predictor to prosocial behavior among adolescents.

4. Discussion and Conclusion

This study examined the predictive roles of identity development and moral reasoning in prosocial behavior among adolescents in Peru. The results revealed significant positive correlations between both identity development and moral reasoning with prosocial behavior. Multiple regression analysis further confirmed that both variables significantly predicted prosocial behavior, jointly accounting for 41% of the variance. Among the predictors, moral reasoning emerged as the stronger factor. These findings align with a wide body of literature demonstrating that adolescents with coherent identities and advanced moral reasoning capacities are more inclined to engage in voluntary behaviors that benefit others (Carlo et al., 2024; Iwasa et al., 2023; Jian & Skeem, 2024; Torres et al., 2025).

The positive relationship observed between identity development and prosocial behavior supports prior findings indicating that adolescents with a clearer sense of self are more likely to internalize societal norms and values, which in turn promotes prosocial conduct (Kil et al., 2023; Sakl & Öztaş, 2024). Identity development enables young individuals to see helping behaviors as integral to who they are, reinforcing the consistency between belief and behavior (Neaman et al., 2021; Setiawan et al., 2022). These findings resonate with the work of Maiya et al. (2024), who found that ethnic and cultural identities in immigrant adolescents acted as mediators between family processes and prosocial behaviors. Similarly, Torres et al. (2025) highlighted that cultural identity could reduce the adverse effects of cultural stressors and enhance prosociality, particularly in Latino youth. Research also shows that moral and religious identity components contribute significantly to adolescents' sense of moral obligation and ethical commitment (Arifiana et al., 2024; Maiya et al., 2020).

The finding that moral reasoning significantly predicts prosocial behavior is also consistent with a growing body of developmental and cognitive psychology research. Adolescents with higher levels of moral reasoning are better equipped to assess ethical dilemmas, understand the consequences of actions, and regulate behavior in alignment with abstract moral principles (Shi et al., 2020; Streit et al.,

2020; Xiao et al., 2020). This cognitive maturity helps translate moral values into real-world prosocial actions, such as helping peers, showing empathy, or engaging in community service (Li et al., 2022; Liu et al., 2024). For instance, Bhadra and Kumar (2023) showed that moral reasoning moderated by social experiences significantly increased prosocial engagement in Indian youth, especially in online interactions. Likewise, Xia (2025) found that adolescents' moral identity and social self-efficacy acted as important mediators in the relationship between socioeconomic status and online prosocial behavior, further underscoring the role of moral reasoning as a critical cognitive factor in ethical action.

Moreover, the combined predictive strength of identity development and moral reasoning on prosocial behavior supports integrative developmental models that emphasize the interaction of cognitive and socio-emotional domains during adolescence (Kil et al., 2023; Wang et al., 2021). Adolescents who possess both a strong sense of self and well-developed moral reasoning are more likely to exhibit sustained engagement in helping behaviors across contexts. Research by McDougale and Li (2022) showed that participation in service-learning enhanced both prosocial identity and moral development, leading to greater commitment to civic engagement. Similarly, Liu et al. (2024) found that medical students with high moral identity and psychological capital demonstrated stronger tendencies toward altruistic and ethical behavior. These findings are echoed in Özkan et al. (2023), who demonstrated that responsible leadership and organizational ethics reinforce the development of prosocial behavior through identity-related pathways.

These findings also reinforce theoretical propositions from social identity theory, which posits that identification with valued social groups promotes adherence to group norms—including helping behavior (Colbert & Chan, 2020; Sotnik et al., 2023). Adolescents who view themselves as part of prosocial communities (e.g., school clubs, faith-based groups) may adopt and perform behaviors consistent with group expectations (McDougale & Li, 2022; Streit et al., 2020). From an ecological perspective, factors such as school climate, family values, and peer interactions shape adolescents' capacity to reason morally and build cohesive identities (Arifiana et al., 2024; Maiya et al., 2024). For example, research by Kil et al. (2023) highlighted that maternal warmth and family involvement moderated moral development and behavioral outcomes in adolescents. Hassler et al. (2024) also introduced the concept of the

"prosocial ambassador effect," demonstrating that adolescents who adopt a role model identity were more likely to sustain prosocial behaviors, suggesting the functional utility of identity-based interventions in moral development programs.

Cross-cultural evidence further supports the generalizability of these findings. Studies in China have revealed that exposure to prosocial media and literature boosts moral reasoning and promotes community engagement (Ding et al., 2018; Li et al., 2022). Research in Chile linked Catholic religious identity with both prosocial and pro-environmental behaviors, emphasizing how moral values embedded within religious identity shape behavioral choices (Neaman et al., 2021). Similarly, Bhadra and Kumar (2023) demonstrated that peer interactions and identity dynamics on social media contributed significantly to the prosociality of Indian youth. The universality of these patterns reinforces the conclusion that both identity and moral reasoning are central drivers of prosocial behavior, despite cultural differences in expression and emphasis.

5. Limitations & Suggestions

Although the findings of this study contribute meaningfully to the literature, several limitations must be noted. First, the use of a cross-sectional correlational design restricts the ability to make causal inferences. Second, self-report questionnaires may be vulnerable to social desirability bias, which could inflate the levels of reported prosocial behavior or moral reasoning. Third, the sample was limited to adolescents from urban areas in Peru, reducing the generalizability of results to rural populations or other cultural contexts. Lastly, the study did not explore potential moderating or mediating variables such as parental influence, peer support, or school climate, which may further clarify the mechanisms at work.

Future studies should consider adopting longitudinal or experimental designs to determine causal relationships between identity, moral reasoning, and prosocial behavior. Expanding research to rural or indigenous communities in Peru would also provide valuable comparative insights. Additionally, qualitative approaches such as interviews or focus groups could offer a richer understanding of the lived experiences behind identity formation and ethical decision-making. Exploring moderating variables like empathy, religiosity, or digital engagement may also help to develop a more comprehensive model of prosocial behavior in adolescence.

Based on the findings, educators and practitioners should design programs that support adolescents in identity exploration and moral development through reflective discussions, values-based activities, and service-learning opportunities. Schools should create environments that reinforce ethical decision-making and provide meaningful social roles that help adolescents internalize prosocial norms. Community-based programs, youth leadership initiatives, and culturally relevant mentorship can further support adolescents in developing a coherent moral identity and increase their likelihood of contributing positively to society.

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Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

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Authors' Contributions

This article is derived from the first author's doctoral dissertation. All authors equally contributed to this article.

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