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Article

Exploring the Mediating Roles of Moral Identity and Empathy in the Relationship Perceptions of School Moral Atmosphere and Altruism in Chinese College Students

Lingyu Li

Faculty of Chinese International College, Dhurakij Pundit University, Thailand.

ORCID iD: <https://orcid.org/0009-0006-1108-0036>

Email: 804206539@qq.com

Hsuan-Po Wang*

Faculty of Chinese International College, Dhurakij Pundit University, Thailand.

ORCID iD: <https://orcid.org/0000-0002-0240-8793>

Email: sam710701@gmail.com

Abstract

Grounded in Social Cognitive Theory, this study explores how undergraduates' perceptions of their institution's moral climate shape altruistic conduct, with a focus on the successive mediating functions of moral identity and empathy. Data were gathered through 650 questionnaires distributed across five universities in Hebei Province, China, using convenience sampling. After screening, 600 valid responses were retained for analysis with SPSS version 29.0, yielding an effective response rate of 92.31%. The analysis indicated that gender, discipline, and age serve as significant demographic determinants influencing students' perceptions of the moral climate, their moral identity, levels of empathy, and their propensity for altruistic behaviour. Structural Equation Modelling (SEM) demonstrated that both moral identity and empathy act as crucial mediators between perceived institutional moral atmosphere and altruistic conduct. Moral identity was shown to exert a stronger influence on empathy, which in turn heightened altruistic actions, thereby supporting the notion of sequential mediation. Furthermore, a direct pathway was identified linking the moral climate of the institution to altruistic behaviour, suggesting a dual mechanism comprising both immediate and mediated effects that reinforce prosocial engagement in a morally supportive environment. These results highlight the significance of cultivating an academic context that fosters internalised moral values and nurtures empathy, ultimately guiding students towards altruistic practices within university life. The implications of these findings are discussed in relation to future policy design and intervention strategies in moral education.

Keywords

Perceptions of the School Moral Atmosphere, Altruistic Behaviour, Moral Identity, Empathy, Social Cognitive Theory, College Students.

Correspondence to Hsuan-Po Wang, Faculty of Chinese International College, Dhurakij Pundit University, Thailand.

ORCID iD: <https://orcid.org/0000-0002-0240-8793>, Email: sam710701@gmail.com

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Introduction

One of the central facets of prosocial conduct is altruism, which is instrumental in sustaining social cohesion and cooperation within educational contexts (Liang, Su, & Shang, 2023). Altruistic engagement among university groups not only strengthens the moral character of individuals but also contributes to shaping the institution's broader moral climate (Li et al., 2023). The cultivation of moral reasoning and ethical dispositions is closely tied to the moral ethos of schools, where respect, fairness, responsibility, and integrity function as foundational elements on which students rely. When institutions uphold clear ethical standards and nurture mutual regard, stronger internalisation of prosocial values is fostered (Liu et al., 2024).

Such an environment encourages the adoption of socially responsible behaviours, guiding students to act with consideration for others and to participate voluntarily in activities that benefit both their peers and the wider community (Yang et al., 2025). Just as psychological mechanisms influence the moral atmosphere that steers behaviour, moral identity plays a formative role. Empathy, defined as an affective sensitivity to others' needs, enhances awareness of moral issues and stimulates supportive responses (Peng et al., 2024). These two constructs emerge through the dynamic interaction between individual dispositions and situational moral cues. Achieving a more comprehensive understanding of altruistic conduct therefore requires examining how situational moral cues are translated into internalised moral identity and empathic engagement (Gao et al., 2024). Emphasising the interplay between environmental contexts and moral psychology advances the goal of nurturing ethically grounded individuals equipped for constructive participation in social life (Jin, Jowsey, & Yin, 2024). Recognising the importance of moral dimensions in educational settings not only supports personal development but also contributes to the establishment of a cooperative and socially just academic culture.

Aim

This study seeks to analyse how perceptions of a school's moral climate shape altruistic behaviour, with particular attention to the consecutive mediating effects of moral identity and empathy among Chinese university students.

Key Contributions

- Responses were obtained from 600 undergraduates enrolled at five universities in Hebei Province, producing a substantial dataset for investigating the psychological and behavioural processes underlying moral and altruistic development.
- Theory-informed hypotheses were formulated to connect perceptions of school moral climate with moral identity, empathy, and altruistic conduct, thereby structuring the empirical evaluation of complex mediating relationships.
- A sequential mediation framework, grounded in Social Cognitive Theory, was advanced, situating moral identity and empathy as psychological mechanisms linking institutional moral climate to altruistic outcomes.
- Analyses were performed using SPSS version 29.0, incorporating T-tests, ANOVA, reliability assessments, mediation analysis, and SEM, thus providing multi-level confirmation of theoretical propositions and inter-variable associations.

The structure of the study is as follows: Section 1 introduces the research background; Section 2 surveys the relevant body of literature; Section 3 describes the methodological framework; Section 4 reports the principal findings; Section 5 delivers a detailed discussion of the outcomes; and Section 6 concludes the investigation.

Related Work

Feng et al. (2020) investigated the psychological costs of altruism during the COVID-19 pandemic by administering surveys and applying SEM to data from 1,346 students. The findings indicated that heightened altruism was associated with stronger experiences of negative affect, anxiety, and depression, particularly under conditions of elevated risk perception. Although the cross-sectional design precluded causal inference, the results suggested that altruistic individuals displayed greater psychological vulnerability during crises. In another study, Liu et al. (2023) demonstrated that perceptions of a school's moral climate significantly influenced moral sensitivity in a sample of 658

students. Moral identity served as a mediator, while Belief in a Just World functioned as a moderator, with path analysis validating these associations. Despite restricted generalisability due to regional sampling and reliance on self-reporting, the study provided evidence of the mechanisms linking institutional moral environments to moral development.

Gu et al. (2023) explored altruism among graduate nursing students through phenomenological interviews with 17 participants analysed using Colaizzi's method. Four themes were identified: definitions of altruism, professional role, practical applications, and influencing factors. Although the study yielded insights into nursing education, its limited sample size narrowed the applicability of findings. Further research involving 986 students employed validated questionnaires and mediation analysis to investigate behavioural relationships. Results indicated that social support partially mediated the effect of trust, with chained mediation via moral identity. While the cross-sectional design prevented causal conclusions, the study shed light on predictors of online altruism. Similarly, predictors of recycling behaviour were examined among 523 Taiwanese students through SEM. Self-reported responses and cultural specificity restricted broader application, yet the analysis identified key behavioural determinants.

Parental Emotional Warmth (PEW) was found to shape Internet Altruistic Behaviour (IAB) both directly and indirectly through just-world belief and moral personality traits, based on a survey of 893 undergraduates (Chao, Yu, & Yu, 2021). The model explained 22.79% of variance. Despite being correlational, the study highlighted the significance of PEW in fostering online altruism. Wang et al. (2023) assessed predictors of altruism among 2,272 undergraduates using self-report questionnaires. Structural modelling confirmed that both empathy and just-world belief positively contributed to altruism, providing empirical support for motivational theories, though findings were constrained by reliance on self-report data. The role of empathy in mediating the relationship between socioeconomic status and altruism was tested with 253 Chinese adults using the dictator game and relational measures (Liu et al., 2023). Students were observed to act more generously, and affective empathy mediated behavioural outcomes, reinforcing the empathy–altruism hypothesis, though the study was limited by regional adolescent sampling. He et al. (2023) analysed attitudes toward altruism, death, and body donation willingness among 478 Chinese undergraduates. Findings revealed moderate readiness to donate, with acceptance of death, gender, and type of university serving as positive predictors, whereas fear of death reduced willingness, pointing to areas for awareness interventions.

The mediating roles of moral identity and self-control in the link between social class and IAB were tested using validated scales with 388 undergraduates. Social class was found to influence IAB directly and indirectly through three mediating paths. Although limited by self-reports, the research advanced understanding of social-class-related mechanisms in online altruism. Likewise, Li et al. (2023) investigated interpersonal responsibility as a culturally embedded trait in China through two studies: surveys of 393 students and a scenario experiment with 95 students. Perspective-taking emerged as an important factor, though small sample sizes limited broader application. Parental benevolence was also examined in relation to adolescents' IAB. A survey of 1,004 students revealed that paternal and maternal influences shaped gratitude via just-world belief, accounting for 27.07% and 24.27% of variance, respectively (Zhou et al., 2024). The results highlighted subtle psychological processes, though causality remained uncertain due to reliance on self-reporting. Hu et al. (2024) further demonstrated that downward social comparison encouraged altruism among 1,764 students through just-world belief and life satisfaction across two survey waves. Personal just-world belief mediated more strongly than the general dimension, though the conclusions were constrained by self-reports and limited temporal coverage.

Additional research using behavioural modelling and discrete-choice experiments with 925 medical students showed that altruism influenced career preferences. Students high in altruism valued non-financial rewards, whereas less altruistic individuals prioritised financial incentives. Although informative for recruitment strategies, the findings were restricted by sample bias and self-reported measures. Su et al. (2025) assessed 1,567 nursing students, analysing self, relational, interactional, expressive, and caring abilities. Mediation analysis revealed that altruism and communication linked self-compassion to outcomes, accounting for 30.88% of variance. The study underscored the need for educational strategies to strengthen compassion and prosocial competencies, but causality was limited by the cross-sectional design. Finally, Fang and Huang (2023) applied latent variable structural modelling to 489 students, showing that mediation effects were amplified among those with strong moral identity. Although constrained by reliance on cross-sectional survey data, the study clarified motivational pathways underlying altruism.

Materials and Methods

A structured survey was administered to 600 undergraduates drawn from five universities in Hebei Province, recruited through convenience sampling. Data were processed in SPSS version 29.0, where T-tests,

ANOVA, reliability assessments, and SEM were employed to examine the interconnections among school moral climate, moral identity, empathy, and altruistic conduct.

Data Collection

Data were collected through a structured questionnaire administered to 600 undergraduates representing various disciplines and academic years. Distribution was conducted both face-to-face and online, with participation being entirely voluntary, anonymous, and free of restrictions. The sample reflected diversity across gender, age, place of residence, and parental educational background. To illustrate representativeness, the demographic profile of participants is summarised in Table 1, supporting the generalisability of findings. Figure 1 presents the distribution of participant characteristics, providing context for observed differences in perceptions of moral climate, moral identity, empathy, and altruistic behaviour among university students.

Table 1: Background Characteristics of Participating College Students ($N = 600$).

Variable	Category	Frequency (%)
Gender	Male	288 (48.00%)
	Female	312 (52.00%)
Academic Major	Science and Engineering	164 (27.38%)
	Liberal Arts	162 (27.08%)
	Arts and Physical Education	138 (22.92%)
	Others	136 (22.62%)
Age Group (Years)	18–20	226 (37.69%)
	21–23	303 (50.46%)
	24 and Above	71 (11.85%)
Academic Year	First Year	137 (22.77%)
	Second Year	172 (28.62%)
	Third Year	160 (26.62%)
	Fourth Year and Above	131 (22.00%)
Type of Residence	On-Campus	278 (46.31%)
	Off-Campus	322 (53.69%)
	Primary or Below	72 (12.00%)
Parental Education	Secondary	183 (30.46%)
	Undergraduate	216 (36.00%)
	Postgraduate and Above	129 (21.54%)

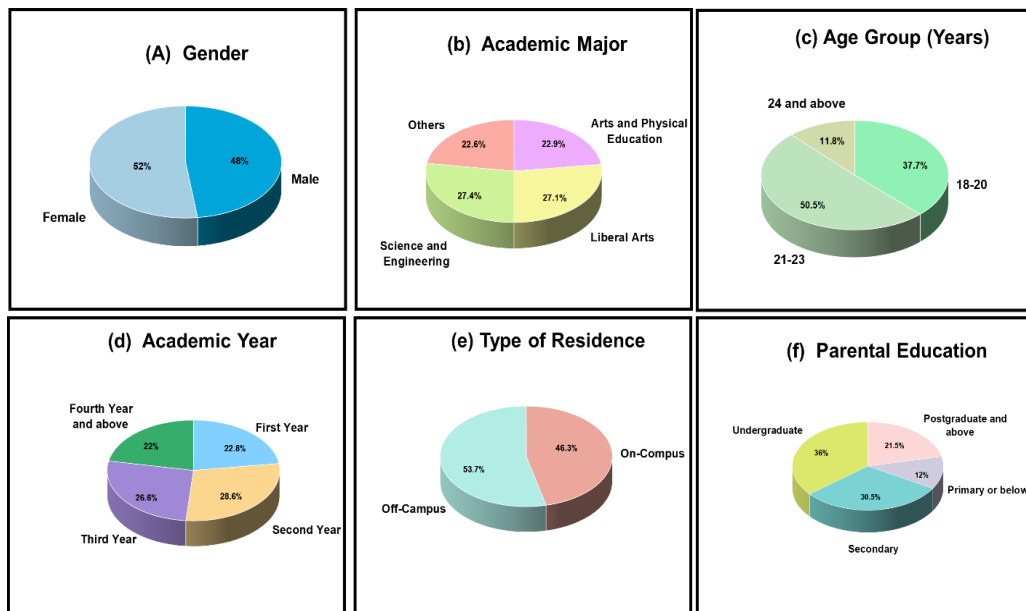


Figure 1: Participant Background Variables: (a) Gender (b) Academic Major (c) Age Group (d) Academic Year (e) Type of Residence (f) Parental Education Level.

Hypothesis Development

Perceived school moral atmosphere (X) reflects students' evaluations of the ethical standards and norms embedded within the educational setting. Moral identity (D) denotes the degree to which moral attributes are integrated into and central to an individual's self-concept. Empathy (G) captures the capacity to recognise and share the emotional states of others. Altruistic behaviour (L) encompasses prosocial actions directed towards others. The study investigates the extent to which external perceptions of X shape L through the internal mechanisms of D and G. As a contextual factor, the perceived school moral atmosphere exerts a notable influence on the moral and prosocial development of undergraduates, operating both through direct effects and through indirect pathways mediated by psychological constructs.

H1: A positive perception of the school moral atmosphere (X) significantly predicts the development of moral identity (D), as internalized ethical norms foster a stable moral self-concept.

H2: Moral identity (D) significantly predicts empathy (G); individuals with strong moral identity exhibit greater emotional sensitivity and concern for others.

H3: Perception of school moral atmosphere (X) directly predicts altruistic behaviour (L) by modelling ethical conduct and reinforcing prosocial values.

H4: Empathy (G) directly influences altruistic behaviour (L), as emotional resonance with others drives intentions to help.

H5: Moral identity (D) directly predicts altruistic behaviour (L), linking internal moral standards to external prosocial actions.

H6: Moral identity (D) mediates the relationship between school moral atmosphere (X) and altruistic behaviour (L), acting as a conduit for moral influence.

H7: Moral identity (D) and empathy (G) sequentially mediate the effect of school moral atmosphere (X) on altruistic behaviour (L), illustrating a cumulative psychological pathway.

Conceptual Framework

The framework depicts the hypothesised relationships among the principal constructs: perceptions of school moral climate, moral identity, empathy, and altruistic conduct. Grounded in Social Cognitive Theory, it incorporates both direct and indirect developmental pathways, enabling the examination of sequential processes. The model establishes a foundation for formulating hypotheses and subjecting them to empirical validation through SEM. It further elucidates how moral cues embedded in the educational environment shape internalised moral dispositions and subsequent behaviour. Figure 2 presents the proposed pathways and mediating variables within the model.

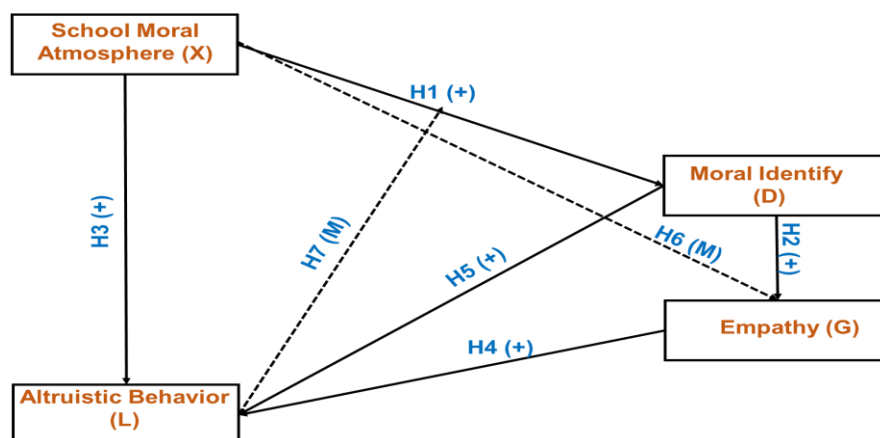


Figure 2: Conceptual Framework Linking Moral Atmosphere to Altruism.

Statistical Analysis

IBM SPSS Statistics 29.0 was employed to generate descriptive indicators, including means and standard deviations. Independent-sample t-tests were conducted to examine gender-based differences in the core variables, while one-way ANOVA with post hoc comparisons assessed variations across academic majors. Measurement reliability and construct validity were confirmed through Cronbach's alpha, Composite Reliability (CR), and Average Variance Extracted (AVE). SEM with bootstrapping procedures was then applied to test the proposed mediation pathways. A significance threshold of $p < .05$ was adopted for all statistical tests, ensuring a rigorous evaluation of the hypothesised relationships.

Results and Discussion

Significant variations were identified across gender and academic majors in students' perceptions of school moral atmosphere, moral identity, empathy, and altruistic behaviour. SEM confirmed that moral identity and empathy sequentially mediated the relationship between school moral atmosphere and altruistic behaviour, thereby supporting all proposed hypotheses with robust statistical significance. Table 2 presents the independent-sample t-test outcomes, indicating that female students scored significantly higher than males on all constructs. These gender-based differences highlight the potential influence of demographic factors on moral cognition and prosocial tendencies. Collectively, the results emphasize the importance of considering demographic characteristics when interpreting the interplay between institutional moral climate, psychological mechanisms, and altruistic behaviours.

Table 2: *T-Test Analysis of Gender Differences Across Core Study Variables.*

Variable	Boys		Girls		<i>t</i>	<i>p</i>
	M	SD	M	SD		
Perception of School Moral Atmosphere (X)	3.403	.727	3.542	.865	-2.114	.000
Moral Identity (D)	3.235	.772	3.465	.898	-3.361	.000
Empathy (G)	3.275	.768	3.501	.834	-3.464	.000
Altruistic Behaviour (L)	3.429	.662	3.583	.828	-2.505	.000

Note: $p < 0.001$ indicates statistically significant gender differences across all four variables.

The ANOVA results in Table 3 compare moral identity and altruistic behaviour among students from four academic disciplines. Significant differences emerged, particularly between liberal arts majors and arts/physical education majors, with liberal arts students reporting higher levels of moral identity and altruistic behaviour. These findings suggest that academic disciplines shape, or at least reflect, distinct trajectories of moral development. They also emphasise the importance of examining the educational context as a background factor influencing prosocial orientations and internal moral schemas.

Table 3: *ANOVA Summary of Moral Variables by Academic Major Group.*

Variable	Levene's Test	Major	Average	Standard Deviation	Brown-Forsythe	Games-Howell
Morality Identification (D)	3.298 *	Science and Engineering	3.233	.802	3.477 *	2 > 1
		Liberal Arts	3.482	.890		
		Arts and Physical Education	3.272	.826		
		Others	3.331	.762		
		Science and Engineering	3.642	.666		
Altruism Behaviour (L)	50.080 ***	Liberal Arts	3.623	.867	10.804 ***	1 > 3
		Arts and Physical Education	3.265	.615		1 > 4
		Others	3.326	.683		2 > 3

Note: * $p < .05$ *** $p < .001$

Table 4 extends the analysis of school moral atmosphere and empathy through ANOVA with Scheffé post hoc comparisons across disciplines. The results revealed significant differences: students in the liberal arts reported stronger perceptions of school morality and higher levels of empathy than those in arts and sports. These

findings highlight the influence of academic context on students' interpretations of the moral climate and their emotional responsiveness, aligning with the conceptual model that treats the educational environment as an exogenous factor shaping psychological and behavioural outcomes.

Table 4: ANOVA and Scheffé Results for Moral Variables by Discipline.

Variable	Major	Average	Standard Deviation	F	Scheffe
Perception of School Moral Atmosphere (X)	Science and Engineering	3.514	.737	4.339 *	2 > 3
	Liberal Arts	3.581	.792		
	Arts and Physical Education	3.295	.834		
	Others	3.442	.846		
	Science and Engineering	3.365	.796		
Empathy (G)	Liberal Arts	3.524	.772	3.854 *	2 > 3
	Arts and Physical Education	3.266	.846		
	Others	3.257	.803		

Note: * $p < .05$

Table 5 details the factor loadings, Cronbach's alpha, CR, and AVE for all constructs. Each exceeded the accepted benchmarks, confirming robust internal consistency and convergent validity. These outcomes verify the soundness of the measurement model, ensuring that the indicators for school moral atmosphere, moral identity, empathy, and altruism reliably reflect the latent structures necessary for structural modelling.

Table 5: Construct Reliability and Validity Metrics from Factor Analysis.

Variable	Item Code	Factor Loading	Cronbach's α	CR	AVE
Perception of School Moral Atmosphere (X)	X1	0.78	0.82	0.84	0.64
	X2	0.81			
	X3	0.83			
Morality Identification (D)	D1	0.74	0.80	0.83	0.60
	D2	0.79			
	D3	0.81			
Empathy (G)	G1	0.76	0.83	0.85	0.63
	G2	0.80			
	G3	0.85			
Altruism Behaviour (L)	L1	0.77	0.84	0.86	0.65
	L2	0.82			
	L3	0.88			

Table 6 summarises the mediation analysis using bootstrapped estimates of direct and indirect effects among the key constructs. The results indicate significant mediation pathways linking school moral atmosphere to altruistic behaviour via moral identity and empathy, both independently and sequentially. These findings substantiate the theoretical claim that moral cognition and affective responses mediate the translation of environmental moral cues into prosocial action. The evidence thus reinforces the explanatory value of indirect mechanisms in shaping moral behaviour within educational contexts.

Table 6: Bootstrap Mediation Analysis of Direct and Indirect Effect Pathways.

Path	Effect (β)	P-Value	95% Confidence Interval
X $\rightarrow$ D	0.700	0.000	[0.612, 0.782]
D $\rightarrow$ G	0.746	0.000	[0.648, 0.833]
X $\rightarrow$ L	0.242	0.006	[0.076, 0.393]
G $\rightarrow$ L	0.248	0.022	[0.036, 0.430]
D $\rightarrow$ L	0.321	0.008	[0.093, 0.583]
X $\rightarrow$ D $\rightarrow$ L	0.256	0.000	[0.169, 0.363]
X $\rightarrow$ D $\rightarrow$ G $\rightarrow$ L	0.355	0.006	[0.244, 0.509]

Table 7 reports the SEM results, including standardised path coefficients, t-values, and significance levels for each hypothesised relationship. All proposed paths were statistically supported, confirming robust predictive links from school moral atmosphere to moral identity, empathy, and altruistic behaviour, both directly and through mediation. These findings validate the conceptual model and offer empirical confirmation of the proposed causal mechanisms, underscoring the layered influence of environmental and psychological factors on prosocial behaviour in higher education. Figure 3 illustrates these pathways, depicting how the moral atmosphere of the institution shapes altruistic action through the combined roles of moral identity and empathy.

Table 7: Structural Equation Model Results for Hypothesis Path Validation.

Hypothesis	Path Description	Standardized Estimate (β)	T-Value	P-Value	Decision
H1	$X \rightarrow D$	0.700***	14.0	< 0.001	Supported
H2	$D \rightarrow G$	0.746***	14.9	< 0.001	Supported
H3	$X \rightarrow L$	0.242**	3.03	0.006	Supported
H4	$G \rightarrow L$	0.248*	2.29	0.022	Supported
H5	$D \rightarrow L$	0.321**	2.67	0.008	Supported
H6	$X \rightarrow L$	0.256***	5.12	< 0.001	Supported
H7	$X \rightarrow L$	0.355**	5.07	0.006	Supported

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

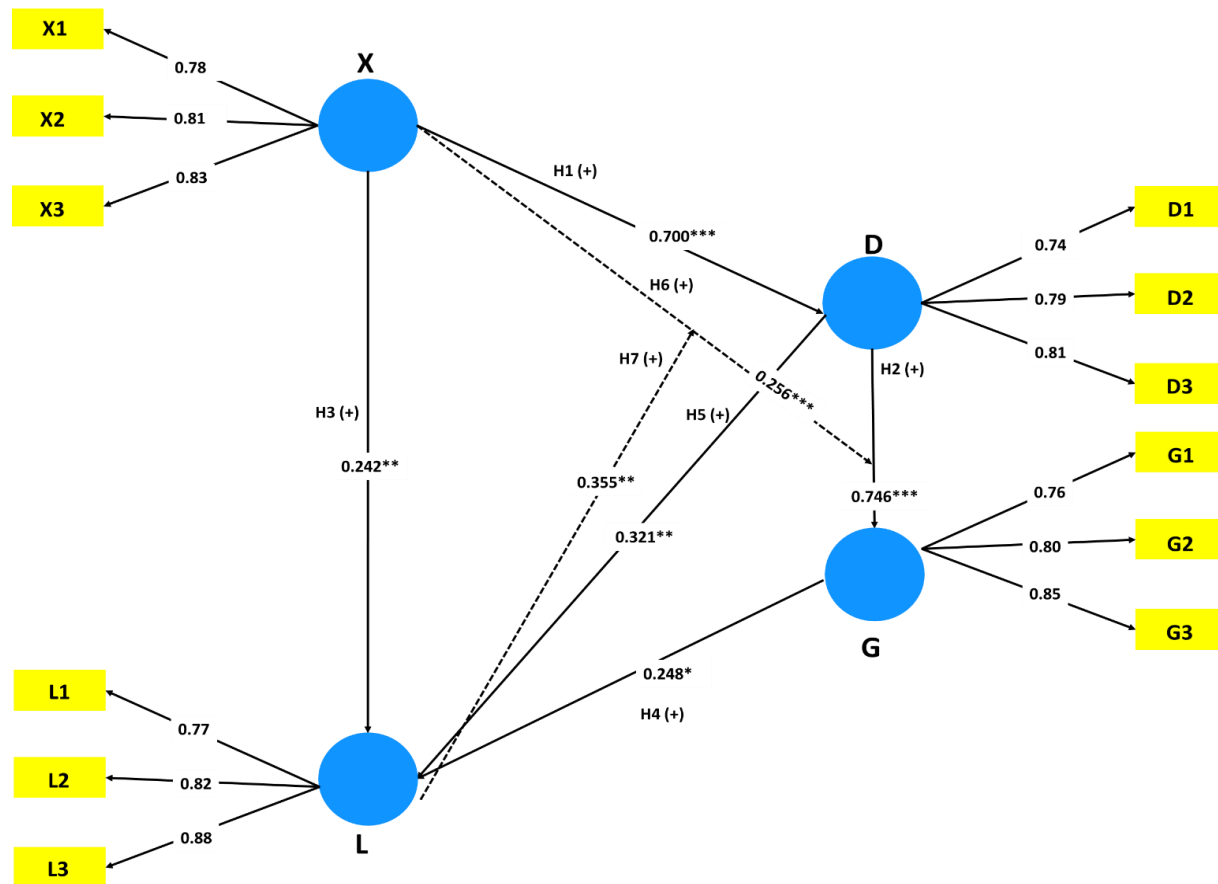


Figure 3: Hypothesized Pathways Linking Moral Atmosphere to Altruism.

The present study demonstrates that perceptions of the school's moral climate exert a significant influence on the altruistic conduct of university students, with moral identity and empathy operating as sequential mediators. Evidence derived from structural equation modelling indicates that an institutional environment supportive of moral values fosters stronger moral self-concepts, which subsequently heighten empathic concern and prosocial orientations (Su et al., 2025). Gender and academic discipline were also identified as meaningful

contextual variables, with female students and liberal arts majors reporting comparatively higher scores across moral constructs. These findings reflect the shaping of moral dispositions by demographic and educational contexts. The validated measurement framework confirmed satisfactory reliability and construct validity, further strengthening the theoretical model. Grounded in Social Cognitive Theory, the results highlight the dynamic interplay between environmental moral cues, internalised processes, and behavioural expression. This suggests that cultivating ethical academic climates can encourage the growth of moral capacities and promote altruism, thereby reinforcing institutional and educational aims.

The findings reinforce the broader consensus that a constructive ethical environment within higher education settings can elevate prosocial tendencies among students. Previous research has demonstrated that favourable perceptions of institutional morality can substantially enhance students' moral sensitivity (Liu et al., 2024), a pattern mirrored in the current study. Demographic influences—particularly those of gender and academic specialism—were shown to affect how students internalise moral signals and translate them into altruistic conduct. The sequential mediation identified here is congruent with the tenets of social cognitive development theory, which posits that internalised values and empathic awareness are fundamental drivers of altruistic motivation. The data revealed that moral identity enhances empathy, which, in turn, stimulates altruistic behaviour, thereby substantiating a sequential mediation model. This is consistent with Liu and Xin (2025), who observed significant shifts in empathy levels among undergraduates shaped by external pressures such as the market environment, thereby underscoring the power of situational contexts to influence empathic capacities and prosocial actions. Furthermore, the suggestion that altruistic actions may improve the subjective well-being of those who perform them (Lu et al., 2020) lends weight to the argument that ethically synergistic educational cultures not only strengthen moral and altruistic tendencies but also contribute positively to students' overall life satisfaction.

The nexus between empathy, interpersonal skills, and well-being provides an additional dimension to the findings. Yumi and Kazuyo (2014) argue that moral education must encompass the nurturing of emotional competencies to enhance student well-being. Learners who cultivate empathy are more likely to experience heightened psychological fulfilment, creating a reciprocal loop that further encourages altruistic conduct. Similarly, the link between self-compassion, empathy, and subjective well-being identified by Wei et al. (2011) underscores the complexity of emotional variables influencing prosociality. This suggests that nurturing empathy within educational settings can contribute not only to prosocial outcomes but also to enhanced student welfare. Collectively, these findings highlight the dual importance of moral identity and empathy as mediating mechanisms, strengthening the case for targeted moral education policies (Craig et al., 2020).

The role of demographic and contextual factors in shaping altruism is further supported by Zheng et al. (2023a), who reported that the relationship between social class and altruistic behaviour is mediated by moral identity and self-control. Similarly, this study indicates that academic discipline shapes students' perceptions of moral climate and consequent prosocial inclinations. Zheng et al. (2023b) also identified the role of internet-based altruistic motivation, highlighting how external contexts can enhance prosocial behaviours. These converging insights support the notion that altruism is not an immutable trait but rather one that can be cultivated within supportive social and educational environments. Moreover, Sparrow and Spaniol (2018) observed that altruistic processing continues to evolve with age, emphasising that altruism is a developmental construct shaped by temporal and experiential influences. While their work focuses on ageing populations, a parallel can be drawn with moral development during higher education, where institutional climates provide fertile ground for nurturing prosocial growth. This reinforces the idea that creating ethical learning environments is an investment in future prosocial capital. At the same time, the complex interaction between psychopathy, heroism, and altruism identified by Patton, Smith and Lilienfeld (2018) raises questions about the heterogeneity of motivations underlying ostensibly altruistic actions. Within an academic setting, such findings point to the need for pedagogical strategies that cultivate authentic altruistic values rather than performative behaviours.

Further supporting evidence is provided by Leng et al. (2020), who demonstrated that moral identity moderates the relationship between empathy and online altruism, suggesting that students exposed to supportive moral climates are more likely to translate ethical self-concepts into both offline and online altruistic actions. The demographic factors observed in this study—including gender, age, and disciplinary background—complicate these processes further, aligning with Martínez, Rodríguez-Hidalgo and Zych (2020), who reported associations between empathy, social skills, and experiences of victimisation in adolescent populations. Such findings emphasise that interventions in moral education should be responsive to the specific needs of different

student groups. ÇİkrikÇİ (2019) further highlighted the importance of emotional and psychological well-being as mediators of behaviour in school contexts, consistent with the current study's emphasis on empathy as a mechanism linking moral climate to altruistic outcomes. Similarly, Su et al. (2025) identified altruism as a mediator between self-compassion and communicative capacities among nursing students, providing parallel evidence of the role of empathy and moral identity in shaping prosocial conduct.

Finally, research by Li et al. (2025) demonstrated that organisational justice and ethical leadership significantly affect moral and behavioural outcomes in educational institutions. This supports the conclusion that schools should not merely transmit moral lessons but actively cultivate ethically supportive environments that foster communal belonging and cooperation. Overall, the present study confirms that an ethically constructive institutional climate enhances moral identity and empathy, which in turn promote altruistic behaviour. These outcomes underscore the imperative for moral education strategies that integrate empathy and internalised moral values into their frameworks, enabling educational institutions to prepare students for both prosocial engagement and broader contributions to the social fabric.

Conclusion

The findings of this investigation indicate that perceptions of the school's moral climate exert a strong influence on the altruistic behaviour of undergraduates, operating through both direct and mediated pathways. Moral identity and empathy emerged as the principal mediators, providing insight into the internal psychological mechanisms by which contextual moral cues are translated into prosocial tendencies. These outcomes underscore the significance of cultivating an ethically supportive academic environment that fosters stronger moral self-concepts and empathic awareness. Such an environment can encourage students to develop greater emotional connectedness and interpersonal sensitivity, thereby increasing the likelihood of engaging in altruistic actions and contributing to the formation of a more compassionate and socially responsible university community. Despite these contributions, the study has limitations. Reliance on self-report data, the use of a cross-sectional design, and the employment of a convenience sample of students from Hebei Province restrict the generalisability of the results. To strengthen future research, longitudinal and experimental designs, alongside mixed-method approaches, should be employed. Expanding inquiry across diverse cultural and institutional settings would further enhance the robustness of findings. Incorporating behavioural measures and testing additional mediating variables would also improve both the reliability and applicability of the results, thereby advancing understanding of the mechanisms underpinning moral and prosocial development in higher education contexts.

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