# The Influence of Social Connectedness Stimulation on Prosocial Behavior Based on Hierarchical Linear Model-Taking Universities in Guangxi, China as an Example

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#### **Abstract**

The results of the study indicate that the more social support a student gets, the higher the interpersonal trust, the more harmonious interpersonal relationship, and the higher the willingness to conduct prosocial behavior. The objective of this study is to examine the sense of social connectedness (SSC) and prosocial behavior (PB) of students in Guangxi higher education institutions in China and to further understand the factors influencing PB of students in higher education. In this study, a total of 1,007 students were sampled from eight Guangxi higher vocational schools through purposive sampling using questionnaires, of which 676 (67.1%) were male students and 331 (32.9%) were female students. This study further enriches self-determination theory by exploring the effects of teachers' character, teaching behaviors, and social support on PB, using SSC as an intrinsic motivation. In addition, the study results revealed that SSC, perceived teacher character, teaching behaviors, and perceived social support (PSS) were positively related to students' PB. SSC affects PB not only directly but also indirectly through the mediating role of perceived teacher character teaching behavior and perceived teacher support. Teacher character, teaching behaviors, and PSS also play a chain mediating role in the relationship between SSC and PB. Finally, this study provides strategies to optimize school character management for higher education students to meet their basic psychological needs and thus promote the production of PB.

**Keywords:** Social connectedness, Teachers' moral teaching behavior, Prosocial behavior, Value theory

#### 1. Introduction

Prosocial behavior plays a vital role in improving interpersonal communication and promoting the development of a harmonious society (Su et al., 2019). It is also an important part of individual social development (Rose et al., 2022). Therefore, it is very important to train college students in prosocial behavior in their interpersonal relationships and ability to adapt to society (Meehan et al., 2019; Son & Padilla-Walker, 2020), which has also gradually made research on the social behaviors of college students more valuable (Xiaoping et al, 2019). However, despite much research on prosocial behavior in academia, there is still a lack of prosocial phenomena among teenagers in various countries (Shin & Lee, 2021). For Chinese villages, a large number of talents with prosocial behavior quality are needed to promote rural revitalization, especially because Guangxi is located in western China, and its economic level and level of higher education lag behind other developed regions (Wen & Xu, 2018). Thus, cultivating Guangxi college students' awareness of the need to serve local economic and cultural development has become urgent (Lai & Su, 2022; Bekkers & de Graaf, 2005; Li & Xiong, 2013). In terms of altruistic behaviour, college students in Guangxi colleges and universities have outstanding characteristics such as imperfect policy support mechanisms, social disapproval and college students not making strong altruistic behaviour (Dong & Peng, 2021). Therefore, college students at Guangxi universities are this study's research object, with the goal of strengthening their altruistic tendencies.

Studies have shown that humans have a basic need for a sense of belonging (Weaver et al., 2022). Close interaction between people results in specific relationships and norms, provides opportunities for prosocial behavior (Amato, 1990), and effectively achieves social benefits (Pavey et al., 2011). That is, the social relationship between people

can affect the social behavior of individuals, through compassion and friendship (contact, companionship, psychological control), which are closely related to prosocial behavior (Liu et al., 2020; Padilla-Walker & Carlo, 2015). De et al. (2012) indicated that when individuals are in a close interpersonal relationship, they have a strong sense of belonging, thus promoting prosocial behavior. Accordingly, the higher the sense of social connection, the higher the possibility of engaging in prosocial behavior (Armstrong-Carter et al., 2021).

Teachers are role models for students in that they emphasize moral education in class, which has an impact on students' thoughts and behaviors in the long term (Kaur, 2015). An important prerequisite for teachers to cultivate students' moral behavior is that teachers themselves must already be moral (Kralik & Mahrik, 2019). Hansen (2002), who was the first to study how teachers teach moral behavior, is a top researcher in this field (Campbell, 2015), Hansen (2002) described teaching as a moral activity with a complex connection to complex interpersonal relationships, thus focusing researchers' attention on teacher behavior, character, perception, judgment, and understanding. There is literature showing that the moral behavior of teachers influences students' prosocial behavior (Campbell, 2015; Konow, 2019; Kralik & Mahrik, 2019).

Social connectedness refers to an individual's various interpersonal relationships, such as those with strangers, friends, family members, and classmates (Lee et al., 2001), The interaction between teachers and students, the interaction between students themselves, and classroom interactions involving teachers and students are also within the scope of the study of social connectedness (Lin et al., 2022). Some studies point out that basic characteristics such as social connectedness are the main determinants of prosocial behavior (Caprara et al., 2012; Graziano & Eisenberg, 1997), which suggests interrelated influences among social connectedness, teachers' moral teaching behavior, and student prosocial behavior. However, in most such studies, teachers' teaching behavior appeared as an intermediary (Han et al., 2015; Kim, 2020) or a dependent variable (Liu & Wang, 2019), Khun-Inkeeree et al. (2021) studied the student participation with teachers' teaching perspective as a regulatory variable and concluded that teachers' teaching behavior would affect students' behavior through the interactions between teachers and students. Therefore, teachers' moral teaching behavior may strengthen or weaken college students' prosocial behavior. Based on this, this study discusses whether teachers' moral teaching behavior regulates the influence of college students' social connectedness and prosocial behavior.

Students come from different classes and receive different influences of teacher moral teaching behavior. Because a single-level analysis ignores the influence of individual levels (classes), the study may be biased (Koth et al., 2008; Stormshak et al., 1999). In addition to influence at the individual level, prosocial behavior is also affected at the collective level (Koth et al., 2008; Pizzi & Stanger, 2019), Caprara et al. (2014) believes that individuals promote prosocial behavior in the school environment and class environment. In terms of inter-individual level, studies have mostly focused on the impact of school environment on the individual level (Konishi et al., 2021; Sullivan et al., 2021) Koth et al. (2008) reported that student-level and classroom-level factors tend to have a greater impact on students' perception of the school environment than school-level factors. Therefore, this study adopts the hierarchical linear model (HLM) (Subedi et al., 2011) to verify the relationship between college students' prosocial behavior and other variables and to further understand the adjustment effect of teachers' moral teaching behavior and the relationship between prosocial motivation and prosocial behavior. To understand the relationship between different levels of variables and the prosocial behavior of college students, the study of prosocial behavior of college students can have different levels among and within individuals (Asif et al., 2020).

#### 2. Theory and Hypotheses

Values, as guidance, assessments, or expectations (Schwartz & Bilsky, 1990), play an important role in maintaining individual identity and continuity of behavior (Caprara et al., 2006). Simply, individual values have a vital function in the individual's integration into society (Duriez et al., 2012; Prince-Gibson & Schwartz, 1998; Schwartz, 2006). Sagiv et al. (2017) claimed that values are important to corresponding behaviors: for instance, kindness motivates help, and valuing tradition causes one to follow tradition. Many studies (Song et al. 2021; Tabernero et al., 2020; Ye et al., 2020) have demonstrated a significant positive correlation between values and prosocial behavior. In addition, the stronger an individual's sense of belonging to the group, the more a person's behavior complies with group norms (Hogg & Reid, 2006). Altogether, the individual's values influence one's social connectedness (Jose et al., 2012). According to the value theory (Schwartz, 2006), valuing safety emphasizes society, interpersonal relationships, personal safety, harmony, and stability, whereas valuing self-transcendence emphasizes social behavior. Safety and self-transcendence influence each other, which also means that social connectedness and prosocial behavior influence each other. What is more, personal growth, education, work and culture have an important influence on the formation of values (Rokeach, 1973), especially the important influence of education on college students personal

values. For example, role play (Aghaei et al., 2020), relationships (Arthaud-day et al., 2012), curriculum, teaching techniques (Brady, 2011), and evaluation (Kahn, 2014) influence students' personal values (such as social connectedness and prosocial behavior). Therefore, teachers' moral teaching behavior would affect the relationship between college students' social connectedness and prosocial behavior.

#### 2.1 Social Connectedness and Prosocial Behavior

Scholars have long been interested in the reasons for prosocial behavior in humans. Ainsworth and Bowlby (1991) held the view that prosocial behavior is characterized by interaction with others, which occurs in the context of interpersonal communication. In other words, intimate interpersonal interaction makes people more likely to behave prosocially. Many previous studies have demonstrated (Bian & Wu, 2021; Chen et al., 2022; Pung et al., 2021) that close peer and parent—child relationships have a significant positive impact on prosocial behavior. Omoto and Packard (2016) reported that human sense of social connection can effectively predict the occurrence of prosocial behavior in the form of voluntary service. Conversely, increased levels of loneliness would inhibit the production of prosocial behaviors and increase the incidence of antisocial behavior (Chen et al., 2022; Demeter & Rad, 2020; Robertson et al., 2018). Based on the above research, this study infers the sense of social connection of college students' prosocial behavior and proposed the following hypothesis:

H1: The social connectedness among college students has a significant positive impact on the prosocial behavior.

#### 2.2 Teacher Moral Teaching Behavior and College Students Prosocial Behavior

Moral behaviors such as role rules (Zurqoni et al., 2018), harmony (Fitria et al., 2019) and autonomy (Park & Hill, 2017) have an important impact on student growth (Fogelgarn et al., 2021; Hart, 2022; Park & Hill, 2020; Richardson & Healy, 2019). Keiler (2018) has found that the role of teachers is core to guiding students' participation in activities and value formation in and outside the classroom and that changes in the role of teachers would affect a series of students' behaviors (such as prosocial behaviors). Regarding the role of teacher–student relationship, previous studies (Jadoon et al., 2022; Konow, 2019; Longobardi et al., 2021) have confirmed that there is a significant positive correlation between teacher–student relationship and prosocial behavior, namely, harmonious teacher-student relationship is an important predictor of prosocial behavior. In addition, many studies have found that teaching behavior (Hudzaifah, 2021; Mujahidin et al., 2021; Yustiana et al., 2019; Zhang & Zhang, 2021) and classroom evaluation method (Cheon et al., 2018) affect the prosocial behavior of college students. Therefore, this study reports that the moral teaching behavior of teachers and the prosocial behavior of college students are important and proposes the following research hypothesis.

H2: Teachers' moral teaching behavior has a significant positive influence on the prosocial behavior of college students.

# 2.3 College Students' Social Connectedness, Teachers' Moral Teaching Behavior and College Students' Prosocial Behavior

In close interpersonal relationships, it is easier to share behaviors with others and build personal social resources (Gable et al., 2018). In a classroom, the teacher can encourage and accept students, create a comfortable atmosphere for their expression, promote their sense of connection, and, accordingly, produce strong behaviors of sharing with others (Keiler, 2018). The teacher–student relationship is an important relationship in the school environment, and a positive and close teacher–student relationship increase students' sense of social connection (Chamizo-Nieto et al., 2021), and promote prosocial behaviors such as sharing and reciprocity (Ibrahim & El Zaatari, 2020). In other words, the strength of the teacher–student relationship can make the social connection sense to share the strength of the relationship with others.

Curriculum, teaching and teaching evaluation are all important contents of college education. Ibrahim and El Zaatari (2020), in a single case study of 650 students and 65 teachers in the United Arab Emirates, found that rigid courses, interpersonal communication, lack of effective support, punishment, existential relationships with friends or peers, changes in course, teaching, and evaluation by the teacher (such as support and punishment behavior in teaching) affect the relationship between students' sense of social connection and prosocial behavior (De Bruin, 2021; Van Ryzin et al.,2020)). In addition, during daily classroom management, teachers usually implement various norms and policies (Abbasi, 2021). Teachers are classroom leaders, and they share their moral teaching behavior with all students in the class (Nemr & Liu, 2021). Students regard teachers as instructors and as symbolic of the class organization (Kim & Ko, 2021). Different teachers' moral teaching behavior and the influence of social connection on the prosocial behavior may be quite different. Based on the above research, this study has inferred that teachers

moral teaching behavior would affect the relationship between college students' feeling of social connection and their prosocial behavior, resulting in the following hypothesis:

H3: Teachers' moral teaching behavior has a regulatory role in the relationship between college students' social connectedness and prosocial behavior.

Based on the 10 values of the values theory (Schwartz, 1969), circular interactive changes (Myyry, 2021), and the above research hypotheses, we propose the following research framework (Figure 1).

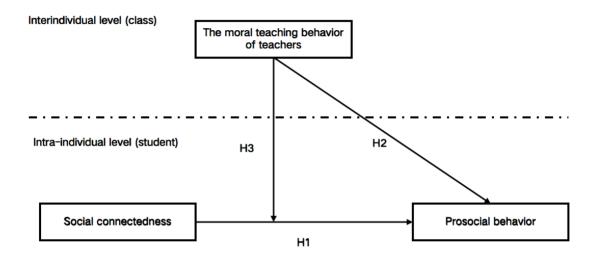


Figure 1. Research framework

# 3. Materials and Methods

# 3.1 Participants and Procedures

According to Guangxi Statistical Yearbook (2021), there are 82 undergraduate colleges and junior colleges in Guangxi, which can be divided into four types according to how the schools are run: 25 public undergraduate colleges, 13 private undergraduate colleges, 31 public junior colleges, and 13 private junior colleges. In this study, questionnaires were collected by stratified convenience sampling, and students from ten colleges were selected in these four categories of colleges. Questionnaires were distributed to each school through the Chinese questionnaire survey platform wjx.cn; 1130 questionnaires were then collected. After 47 questionnaires with short answer times were excluded, 1083 valid questionnaires were obtained, with an effective rate of 95.8%. The formal questionnaire data are divided into teachers and students. The students surveyed comprise 539 boys, accounting for 50.2% of the total, and 544 girls, accounting for 49.8%. First year students totaled 301 (27.8%), second-year students numbered 260 (24%), there were 298 in the third year (27.5%), and there were 224 in the fourth year (20.7%). For the teacher sample, there were 101 classes and thus 101 teachers, 41 of whom were female and 60 of whom were male. Regarding years of teaching, the largest number of teachers had taught for less than 5 years (42.6%), followed by 10–20 years (25.7%), 5–10 years (19.8%), and finally, more than 20 years (11.9%).

# 3.2 Questionnaire

The social connectedness scale and the prosocial behavior scale were originally developed in English and translated into Chinese for use in this study. To improve the accuracy of translation, a back-translation method was used (Brislin, 1970). In this study, two professional translators were hired. One translator translated the English version of the scale into a Chinese version, and the other translated the original English version to English, then corrected it to determine that there was no deviation in the connotation of the scale in the Chinese version. At the same time, this study invited 40 Chinese college students to fill in the questionnaire, review the content of the questionnaire, and, finally, improve and revised the questionnaire according to the feedback.

#### 3.3 Measures

#### 3.3.1 Social Connectedness

The social connectedness scale was based on the Rabelo and Pilati (2021) scale, which captures the subjective experience of belonging, namely the sense of having a positive and meaningful relationship. The scale has a single dimension and consists of seven items, two of which are negative and are scored on five points, from "completely disagree" to "completely agree". The original scale is Cronbach's alpha coefficient equals 0.81, indicating that the scale has high reliability. In addition, the test value of the model adaptation index RMR is 0.033, which meets the reference value of less than 0.080. The index values of GIF, RMR, RFI, NFI, NFI, NNFI, CFI and IFI were respectively 0.974, 0.033, 0.980, 0.975, 0.983, 0.971, and 0.983, all meet the reference value as greater than 0.080. (Barrett, 2007). The RMR of the model adaptation index of social connectedness is 0.052, which meets the reference value as less than 0.080; CR value equals 0.925; and AVE equals 0.640. The CR and AVE values in each dimension meet the corresponding criteria. Therefore, the scale has a good validity. In this study, the reliability of this questionnaire was 0.924.

# 3.3.2 The Moral Teaching Behavior of Teachers

The scale of the moral teaching behavior of teachers has been adapted by Huang Weiqi (2013). The scale mainly includes four dimensions, such as teacher role, teacher-student relationship, curriculum and teaching, and teaching evaluation. There are 18 items in total. All the items in the scale adopt the five-point Likert scale. 1 means "completely failed," and 5 means "completely unfailed." Regarding the teliability of each dimension of the original scale, the teacher's role was 0.705, the teacher-student relationship was 0.794, curriculum and teaching was 0.799, the teaching evaluation volume was 0.88, and the overall Cronbach's alpha coefficient was 0.918, indicating that the dimensions of the scale and scale have high reliability. In addition, the test value of the model fitting the index RMR of this scale was 0.052, which meets the requirement that the reference value is less than 0.080. The index values of GIF, RMR, RFI, NFI, NFI, NNFI, CFI, and IFI were respectively 0.867, 0.052, 0.866, 0.973, 0.977, 0.841, and 0.978, all consistent with reference values greater than 0.080 (Barrett, 2007). The CR values for each dimension were 0.958, 0.888, 0.885, and 0.813, and AVE = 0.684, 0.614, 0.607, and 0.593, respectively. The CR and AVE values in each dimension meet the corresponding criteria. The scale has a good test of validity. In this study, the reliability of this questionnaire was 0.871.

#### 3.3.3 Prosocial Behavior

The New Adult Prosocial Behavior Scale, compiled by Caprara et al. (2005), was adopted for this study. The main feature of the scale, a widely used measurement tool for prosocial behavior, is that it can distinguish individual differences in prosocial behavior among adults (Martinez-Pampliega et al., 2018). The 16 prosocial items included in the adult prosocial tool are divided into four dimensions: sharing with others, helping, caring, and emphasizing others and their needs or requirements. It used a 5-point Likert scale, from 1 ("completely disagree") to 5 ("completely agree"). The Cronbach's alpha coefficient of the original scale is 0.91, indicating that the scale has high reliability. In addition, the test value of the model adaptation index RMR of this scale is 0.023, which meets the required reference value and is less than 0.080. The index values of GIF, RMR, NFI, NFI, NNFI, CFI, and IFI were respectively 0.971, 0.974, 0.023, 0.979, 0.983, 0.968, 0.983, all meet the reference value greater than 0.080 (Barrett, 2007). The CR values for each dimension were 0.925, 0.828, 0.832, and 0.819, and the AVE values for each dimension were 0.638, 0.616, 0.622, and 0.601, respectively. The CR and AVE values in each dimension meet the corresponding criteria. The scale has a good validity. In this study, the reliability of this questionnaire was 0.933.

#### 3.3.4 Statistical Analysis

In this study, Cronbach's alpha coefficient, descriptive statistics, and inter-item correlation were analyzed using SPSS24.0 for 1083 questionnaires and for the relationship between HLM 7.0 independent, regulatory and dependent variables.

#### 4. Results

#### 4.1 Correlation Analysis

Descriptive statistics and correlation analysis results are shown in Table 1. The results show a positive correlation between social connectedness, teachers' moral teaching behavior, and prosocial behavior of college students, with the correlation coefficient of 0.396 to 0.646 (p<0.001), which is necessary to further reveal the internal relationship between elements.

Table 1. Verification form for correlation analysis

	X	Y1	Y2	Y3	Y4	M11	M12	M13	M14
X	.80								
Y1	.448***	.80							
Y2	.418***	.874***	.78						
Y3	.517***	.878***	.860***	.79					
Y4	.454***	.863***	.885***	.874***	.78				
M11	.151	.492***	.475***	.455***	.458***	.83			
M12	.103	.464***	.455***	.393***	.419***	.254*	.78		
M13	.300**	.602***	.622***	.552***	.583***	.319***	.286**	.78	
M14	.277**	.498***	.459***	.413***	.555***	.184	.096	.294**	.77

Note 1: \*p<.05,\*\*p<.01,\*\*\*p<.001

Note 2: The diagonal line is the AVE square root

Note 3: X. social connectedness; Y1. share with others; Y2. help; Y3.care; Y4.compassionate attention; M11. teacher role; M12. teacher-student relationship; M13. curriculum and teaching; M14. teaching evaluation

# 4.2 Statistics of Correlation Coefficient

Before the data are analyzed, the calculation must confirm the intraclass correlation coefficient (ICC) in an empty mode. If the standard above 5.9% is met (Cohen, 1988), the discussion is in a hierarchical linear mode. Therefore, the four dimensions of prosocial behavior should be tested in the nothingness hypothesis pattern, and ICC (1) is known respectively as 0.490, 0.498, 0.460, and 0.479, all above the standard of 0.059, showing high variation between groups.

# 4.3 Random Parametric Regression Model

Based on the previous literature, the internal level (students) and individual level (class) would have an impact on students' prosocial behavior. In this study, the number of variations (prosocial behavior) was divided into within-group variation components ( $\sigma$ 2) and between group variation components ( $\tau$ 00), Then again, the study verified whether the prosocial behavior differed between the teacher and the class through the null model to test this study's cross-level effect. The specific analysis is provided as follows.

A. The intercept prediction pattern of Sharing with others

Level-1: Share with others<sub>ij</sub> =  $\beta_{0j} + \gamma_{ij}$ 

Level-2:  $\beta_{0i} = \gamma_{00} + u_{0i}$ 

B. The intercept prediction pattern of Care

Level-1: Care<sub>ii</sub> =  $\beta_{0i} + \gamma_{ii}$ 

Level-2:  $\beta_{0i} = \gamma_{00} + u_{0i}$ 

C. The intercept prediction pattern of Help

Level-1:Help<sub>ij</sub> =  $\beta_{0j} + \gamma_{ij}$ 

Level-2:  $\beta_{0i} = \gamma_{00} + u_{0i}$ 

D. The intercept prediction pattern of Compassionate attention

Level-1: Compassionate attention<sub>ij</sub> =  $\beta_{0j} + \gamma_{ij}$ 

Level-2:  $\beta_{0j} = \gamma_{00} + u_{0j}$ 

As shown in Table 2 and Table 3, the inter-group variation component of sharing with others, care, help, and compassionate attention toward others (Sharing with others  $\tau_{00}$  = .638; Care  $\tau_{00}$ =.708; Help  $\tau_{00}$ =. 678; Compassionate concern,  $\tau_{00}$ =. 697) differs significantly from 0 ( $\chi^2$ =1128.25, df = 99, p<.001;  $\chi^2$ =1169.64,df=100,p<.001; $\chi^2$ =1017.26,df=100,p<.001; $\chi^2$ =1092.81,df=100,p<.001), while within-group variation ( $\sigma^2$ )

is respectively .408, .502, .540, .528, indicating that different college students have significant differences in sharing, care, helping and compassionate attention toward others.

As shown in Table 2 and Table 3, the inter-group variation component of sharing with others, care, help, and compassionate attention with others (Share with others  $\tau_{00}$  =.638; Care $\tau_{00}$ =.708; Help  $\tau_{00}$ =.678; Compassionate attention  $\tau_{00}$ =.697) differs significantly from 0 ( $\chi^2$ =1128.25, df=99, p<.001;  $\chi^2$ =1169.64, df=100, p<.001;  $\chi^2$ =1017.26, df=100, p<.001;  $\chi^2$ =1092.81 df=100, p<.001), while within-group variation component( $\sigma^2$ ) is respectively 0.408, 0.502, 0.540, 0.528, indicating that different college students have significant differences in sharing with others, care, help and compassionate attention. Based on the analysis, the ICC (1) is respectively 0.490, 0.498, 0.460, and 0.479, showing that the differences in sharing with others, care, help, and compassionate attention between different classes cannot be ignored (Cohen, 1988). It also shows that 61.0%, 50.2%, 46.0%, and 48.1% of the total variants, respectively, are caused by different classes. According to the ICC (1), there was both between-group and within-group variation in sharing with others, care, help, and compassionate attention. The difference between different classes and different degrees can effectively explain the four dimensions of prosocial behavior, reported in the overall level of interval difference proportion in the variation of four dimensions, so not general regression method to analyze, and should consider individual difference between classes, accordingly across hierarchical way to analyze the data.

Table 2. Null mode-Summary of fixed effects

fixed	effects	Share with others	Care	Help	Compassionate attention
γ <sub>00</sub>	coefficient	3.573	3.59	3.637	3.652
	S.E.	.067	.074	.071	.073
	p	.000	.000	.000	.000

Table 3. Null mode-Summary of random effects

rando	om effects	Share with others	Care	Help	Compassionate attention
	variant components	.638	.506	.460	.490
$U_{0j}$	df	100	100	100	100
,	$\chi^2$	1128.25	1169.64	1017.26	1092.81
	p	.000	.000	.000	.000
r <sub>ij</sub>	variant components	.408	.502	.540	.528

#### 4.4 Direct Influence of Teachers' Moral Teaching Behavior

To further explore whether the individual-level teacher's moral teaching behavior at the class level would have a direct impact on sharing with others, care, help, and compassionate attention in college students' prosocial behavior, this study discusses the influence of teachers' moral teaching behavior on college students with the intercept prediction mode.

 $\gamma_{01}$ ,  $\gamma_{02}$ ,  $\gamma_{03}$ ,  $\gamma_{04}$  are the direct effects of the class level (teachers' moral teaching behavior) on the variable term. The influence of teachers' moral teaching behavior on college students' prosocial behavior is analyzed as follows.

A. The intercept prediction pattern of Sharing with others

Level-1: Share with others<sub>ij</sub> =  $\beta_{0j} + \beta_{1j}*(Social connectedness_{1j}) + \gamma_{ij}$ 

Level-2:  $\beta_{0j} = \gamma_{00} + \gamma_{01}*(Teacher\ role_j) + \gamma_{02}*(Teacher\ relationship_j) + \gamma_{03}*(Curriculum\ and\ teaching_j) + \gamma_{04}*(Teaching\ evaluation_j) + u_{0j}$ 

$$\beta_{1i} = \gamma_{10} + u_{1i}$$

B. The intercept prediction pattern of Care

Level-1: Care<sub>ij</sub> =  $\beta_{0j} + \beta_{1j}*(Social connectedness_{1j}) + \gamma_{ij}$ 

Level-2:  $\beta_{0j} = \gamma_{00} + \gamma_{01}*(Teacher role_j) + \gamma_{02}*(Teacher-students relationship_j) + \gamma_{03}*(Curriculum and teaching_j) + \gamma_{04}*(Teaching evaluation_j) + u_{0j}$ 

$$\beta_{1j} = \gamma_{10} + u_{1j}$$

C. The intercept prediction pattern of Help

Level-1:  $Help_{ij} = \beta_{0j} + \beta_{1j}*(Social\ connectedness_{1j}) + \gamma_{ij}$ 

Level-2:  $\beta_{0j} = \gamma_{00} + \gamma_{01}*(Teacher\ role_j) + \gamma_{02}*(Teacher\ students\ relationship_j) + \gamma_{03}*(Curriculum\ and\ teaching_j) + \gamma_{04}*(Teaching\ evaluation_j) + u_{0j}$ 

$$\beta_{1j} = \gamma_{10} + u_{1j}$$

D. The intercept prediction pattern of Compassionate attention

Level-1: Compassionate attention<sub>ij</sub> =  $\beta_{0j} + \beta_{1j}*(Social connectedness_{1j}) + \gamma_{ij}$ 

Level-2:  $\beta_{0j} = \beta_{0j} = \gamma_{00} + \gamma_{01}*(Teacher role_j) + \gamma_{02}*(Teacher-students relationship_j) + \gamma_{01}*(Curriculum and teaching_j) + \gamma_{03}*(Teaching evaluation_j) + u_{0j}$ 

$$\beta_{1j} = \gamma_{10} + u_{1j}$$

As Tables 4 and Table 5 show, the teacher role, teacher–student relationship, curriculum and teaching, and teaching evaluation volume all reached significant levels in the sharing section with others ( $\gamma_{01}$ =.174, SE =.048, p =.000;  $\gamma_{02}$ =.163, SE =.055, p =.004;  $\gamma_{03}$ =.194, SE =.055, p =.001;  $\gamma_{04}$ =.215, SE =.049, p =.000). In the care part, the role of teachers, teacher–student relationship, curriculum and teaching, and teaching evaluation volume all reached a significant level ( $\gamma_{01}$ =.183, SE =.049, p =.000;  $\gamma_{02}$ =.182, SE =.056, p =.004;  $\gamma_{03}$ =.164, SE =.058, p =.001;  $\gamma_{04}$ =.172, SE =.051, p =.000). In the help part, the role of teachers, teacher–student relationship, curriculum and teaching, and teaching evaluation volume all reached a significant level ( $\gamma_{01}$ =.292, SE =.054, p =.000;  $\gamma_{02}$ =.331, SE =.066, p =.004;  $\gamma_{03}$ =.032, SE =.069, p =.001;  $\gamma_{04}$ =.293, SE =.060, p =.000). In the compassionate attention section, the role of teachers, teacher–student relationship, curriculum and teaching, and teaching evaluation volume all reached significant levels ( $\gamma_{01}$ =.240, SE =.044, p =.000;  $\gamma_{02}$ =.214, SE =.050, p =.004;  $\gamma_{03}$ =.210, SE =.056, p =.001;  $\gamma_{04}$ =.363, SE =.048, p =.000). The results show that teachers' moral teaching behavior affects the level of college students' prosocial behavior.

From the perspective of inter-group variation, when increasing the inter-individual level of the class level changes (teacher moral teaching behavior), the value ( $\tau_{00}$ ) shared with others is given by 0.414 down to 0.144, the value ( $\tau_{00}$ ) of care is given by 0.510 down to 0.192, the value ( $\tau_{00}$ ) of help is given by 0.469 down to 0.232, and the value ( $\tau_{00}$ ) of compassionate attention is given by 0.493 down to 0.178. It can be seen that the inter-individual level of class level variation (teacher moral teaching behavior) can explain the difference in intercept: namely, sharing with others accounts for 14.22%, care for 18.13%, help for 17.04%, and compassionate attention for 15.53%. Therefore, it can be seen that, to a certain extent, the class atmosphere has a predictive effect on prosocial behavior. Furthermore, this study further validates the random effect variation component and found that the intergroup variation in sharing with others, care, help, and compassionate attention reached a significant level ( $\gamma_{01}$ =.144,  $\gamma_{01}$ =.2000;  $\gamma_{01}$ =.192,  $\gamma_{01}$ =.192,  $\gamma_{01}$ =.232,  $\gamma_{01}$ =.635.51,  $\gamma_{01}$ =.178,  $\gamma_{01}$ =.178,  $\gamma_{01}$ =.1000, indicating that the presence of other class-level variables was not considered in this study.

Table 4. The intercept prediction mode-fixed effects summary of teacher moral teaching behavior

fixed	l effects	Share with others	Care	Help	Compassionate attention
	coefficient	.330	.344	.393	147
$\gamma_{00}$	S.E.	.295	.344	.367	.290
	p	.267	.320	.287	.0612
	coefficient	.174	.163	.194	.215
$\gamma_{01}$	S.E.	.048	.055	.055	.049
	p	.000	.004	.001	.000
	coefficient	.183	.182	.164	.172
$\gamma_{02}$	S.E.	.049	.056	.058	.051
	p	.000	.002	.006	.001
	coefficient	.292	.331	.032	.293
$\gamma_{03}$	S.E.	.054	.066	.069	.060
	p	.000	.000	.000	.000
	coefficient	.240	.214	.210	.363
$\gamma_{04}$	S.E.	.044	.050	.056	.048
	p	.000	.000	.000	.000
	coefficient	.205	.287	.239	.335
$\gamma_{10}$	S.E.	.045	.049	.051	.039
	p	.000	.000	.000	.000

Table 5. The intercept prediction mode-random effects summary of teacher moral teaching behavior

rand	om effects	Share with others	Care	Help	Compassionate attention
	variant components	.144	.192	.232	.178
$\mathrm{U}_{0\mathrm{j}}$	$\chi^{\stackrel{\smile}{}}$	520.738	583.73	635.51	510.26
	p	.000	.000	.000	.000
	variant components	.112	.132	.141	.052
$\mathrm{U}_{\mathrm{1j}}$	$\chi^{^{\perp}}$	249.37	252.39	245.49	155.32
	p	.000	.000	.000	.000
$r_{ij}$	variant components	.350	.411	.448	.446

<sup>4.5</sup> Regulating Effect of Teachers' Moral Teaching Behavior

Based on the above analysis, significant differences can be seen in the dimensions of sharing with others, care, help, and compassionate attention in the prosocial behavior of students in different classes. To explore the regulation effect of Level 2 inter-individual level teaching behavior in the college students' social connection on prosocial behavior, this study analyzed the slope pattern.  $\gamma_{11}$ ,  $\gamma_{12}$ ,  $\gamma_{13}$ ,  $\gamma_{14}$  are the regulatory effect of inter-individual hierarchy (class level) variables on intra-individual hierarchy. The correlation analysis is performed as follows.

# A. Slope prediction pattern of sharing with others

Level-1: Share with others<sub>ij</sub> =  $\beta_{0j} + \beta_{1j}*(Social connectedness_{1j}) + \gamma_{ij}$ 

Level-2:  $\beta_{0j} = \gamma_{00} + \gamma_{01}*$  (Teacher role<sub>j</sub>)+  $\gamma_{02}*$  (Teacher-students relationship<sub>j</sub>)+  $\gamma_{03}*$  (Curriculum and teaching<sub>j</sub>) +  $\gamma_{04}*$  (Teaching evaluation<sub>j</sub>) +  $\gamma_{0j}$ 

 $\beta_{1j} = \gamma_{10} + \gamma_{11}*(Teacher\ role_j) + \gamma_{12}*(Teacher-students\ relationship_j) + \gamma_{13}*(Curriculum\ and\ teaching_j) + \gamma_{14}*(Teaching\ evaluation_j) + u_{1j}$ 

# B. The Interception prediction pattern of Care

Level-1: Care<sub>ij</sub> = 
$$\beta_{0j} + \beta_{1j}$$
\*(Social connectedness<sub>1j</sub>)+  $\gamma_{ij}$ 

Level-2:  $\beta_{0j} = \gamma_{00} + \gamma_{01}*(Teacher role_j) + \gamma_{02}*(Teacher-students relationship_j) + \gamma_{01}*(Curriculum and teaching_j) + \gamma_{03}*(Teaching evaluation_j) + u_{0j}$ 

 $\beta_{1j} = \gamma_{10} + \gamma_{11}*(Teacher\ role_j) + \gamma_{12}*(Teacher\ students\ relationship_j) + \gamma_{13}*(Curriculum\ and\ teaching_j) + \gamma_{14}*(Teaching\ evaluation_i) + u_{1i}$ 

# C. The Interception prediction pattern of Help

Level-1: help<sub>ij</sub> = 
$$\beta_{0j}$$
 +  $\beta_{1j}$ \*(Social connectedness<sub>1j</sub>)+  $\gamma_{ij}$ 

Level-2:  $\beta_{0j} = \gamma_{00} + \gamma_{01}*(Teacher role_j) + \gamma_{02}*(Teacher-students relationship_j) + \gamma_{01}*(Curriculum and teaching_j) + \gamma_{03}*(Teaching evaluation_j) + u_{0j}$ 

 $\beta_{1j} = \gamma_{10} + \gamma_{11}*(Teacher\ role_j) + \gamma_{12}*(Teacher\ students\ relationship_j) + \gamma_{13}*(Curriculum\ and\ teaching_j) + \gamma_{14}*(Teaching\ evaluation_j) + u_{1j}$ 

### D. The Interception prediction pattern of Compassionate attention

Level-1: Compassionate attention<sub>ij</sub> =  $\beta_{0j} + \beta_{1j}*(Social connectedness_{1j}) + \gamma_{ij}$ 

Level-2:  $\beta_{0j} = \gamma_{00} + \gamma_{01}*(Teacher\ role_j) + \gamma_{02}*(Teacher-students\ relationship_j) + \gamma_{01}*(Curriculum\ and\ teaching_j) + \gamma_{03}*(Teaching\ evaluation_j) + u_{0j}$ 

 $\beta_{1j} = \gamma_{10} + \gamma_{11}*(Teacher\ role_j) + \gamma_{12}*(Teacher-students\ relationship_j) + \gamma_{13}*(Curriculum\ and\ teaching_j) \\ + \gamma_{14}*(Teaching\ evaluation_j) + u_{1j}$ 

In terms of Sharing with others, the coefficient of interaction between Social connectedness and Teachers' role, teacher-student relationship, curriculum and teaching, and teaching evaluation volume reached a significant level ( $\gamma_{01}$ =.196, SE =.033, p=.000;  $\gamma_{01}$ =.228, SE =.023, p=.000;  $\gamma_{01}$ =.156, SE =.024, p=.000;  $\gamma_{01}$ =.105, SE =.025, p=.000;  $\gamma_{01}$ =.150, SE =.031, p=.000;  $\gamma_{01}$ =.144, SE =.028, p=.000), indicating that the dimension of teachers' moral teaching behavior at the class level for teacher role, teacher-student relationship, curriculum and teaching, and teaching evaluation respectively play a regulating role in the relationship of social connection and the relationship shared with others at the individual level. Figure 2 shows the adjustment effect chart.

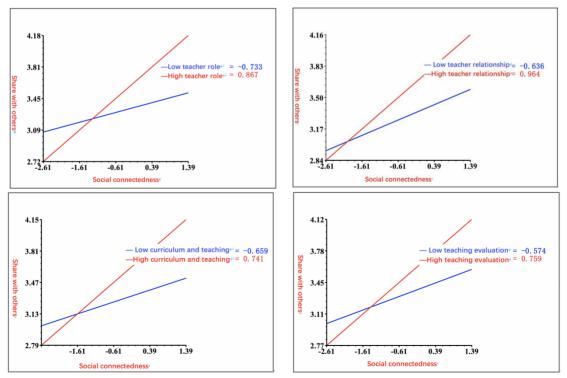
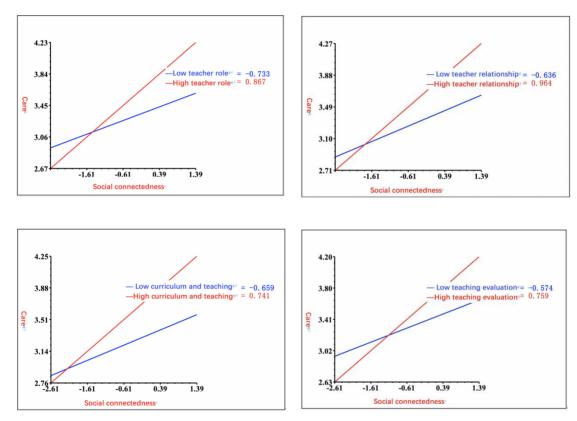


Figure 2. The adjustment effect diagram of the dimensions of teachers' moral teaching behavior between social connectedness and sharing with others

The higher the degrees of teacher role, teacher–student relationship, course and teaching, and teaching evaluation, the stronger the positive relationship between social connectedness and sharing.

In terms of care, the coefficient of the interaction between the sense of social connection and teachers' role, teacher–student relationship, curriculum and teaching, and teaching evaluation reached a significant level ( $\gamma_{01}$ =.138, SE =.029, p =.000;  $\gamma_{01}$ =.125, SE =.022, p =.000;  $\gamma_{01}$ =.138, SE =.037, p=.001;  $\gamma_{01}$ =.162, SE =.028, p =.000). The four dimensions of teachers' moral teaching behavior, including teacher role, teacher–student relationship, curriculum and teaching, respectively play a regulating role in the relationship between social connectedness and care at the individual level. The adjustment effect chart is shown in Figure 4.2.

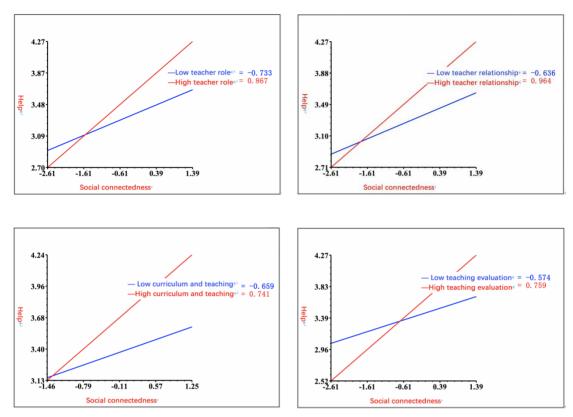
Figure 4.2 The adjustment effect diagram of the dimensions of teachers' moral teaching behavior between social connectedness and care



The higher the degree of teacher role, teacher-student relationship, course and teaching degree, and teaching evaluation, the stronger the positive relationship between social connectedness and care.

In terms of help, the coefficient of the interaction between social connectedness and the teacher's role, teacher–student relationship, curriculum and teaching, and teaching evaluation volume has reached a significant level ( $\gamma_{01}$ =.126, SE =.028, p =.000;  $\gamma_{01}$ =.135, SE =.025, p =.000;  $\gamma_{01}$ =.174, SE =.032, p=.001;  $\gamma_{01}$ =.206, SE =.028, p =.000). The teacher role, teacher-student relationship, curriculum and teaching, and teaching evaluation at the class level respectively play a regulating role in the relationship between social connectedness and help at the individual level. The adjustment effect chart is shown in Figure 4.3.

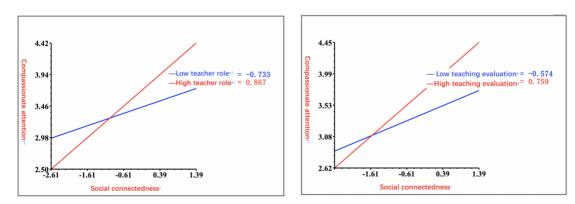
Figure 4.3 The adjustment effect diagram of the dimensions of teachers' moral teaching behavior between social connectedness and help



The higher the degree of teacher role, teacher–student relationship, course and teaching degree, and of teaching evaluation, the stronger the positive relationship between social connectedness and help.

In terms of compassionate attention, the interaction coefficient of social connectedness for teacher role and teaching evaluation volume reached a significant level ( $\gamma_{01}$ =.182, SE =.027, p =.000;  $\gamma_{01}$ =.177, SE =.029, p =.000). The dimension of teacher moral teaching behavior at the class level, teacher role, and teaching evaluation respectively play a regulatory role in the relationship between social connectedness and compassionate attention at the individual level. The adjustment effect chart is shown in Figure 4.4.

Figure 4.4 The adjustment effect diagram of teacher role and teaching evaluation between social connectedness and compassionate attention



The higher the degree of teacher role and teaching evaluation, the stronger the positive relationship between social connectedness and compassionate attention.

In addition to the existence of the above adjustment effect, the individual level of the teacher—student relationship and the interaction of curriculum and teaching coefficient are not significant in the teacher moral teaching behavior, which reported that it is not suitable for slope prediction pattern analysis without the influence of regulation.

Figure 5. The intercept prediction mode-fixed effects summary of teacher moral teaching behavior

fixed effects	Share with	others		Care		
	coefficient	S.E.	p	coefficient	S.E.	p
γ00	3.500	.033	.000	3.512	.038	.000
γ01	.196	.033	.000	.200	.044	.000
γ02	.212	.034	.000	.223	.043	.000
γ03	.242	.047	.000	.298	.056	.000
γ04	.201	.038	.000	.181	.042	.000
γ10	.228	.023	.000	.269	.025	.000
γ11	.156	.024	.000	.138	.029	.000
γ12	.105	.025	.00	.125	.022	.000
γ13	.150	.031	.000	.138	.037	.001
γ14	.144	.028	.000	.162	.028	.000

fixed effects	Help	Compassionate attention						
	coefficient	S.E.	P	coefficient	S.E.	P		
γ <sub>00</sub>	3.550	.039	.000	3.600	.038	.000		
γ <sub>01</sub>	.198	.043	.000	.179	.041	.000		
γ <sub>02</sub>	.181	.042	.000	.188	.041	.000		
γ <sub>03</sub>	.238	.056	.000	.223	.050	.000		
γ <sub>04</sub>	.145	.045	.002	.278	.044	.000		
γ <sub>10</sub>	.281	.025	.000	.322	.025	.000		
γ11	.126	.028	.000	.182	.027	.000		
γ <sub>12</sub>	.135	.025	.000	.024	.028	.410		
γ <sub>13</sub>	.174	.032	.000	023	.039	.561		
γ <sub>14</sub>	.206	.028	.000	.177	.029	.000		

Figure 6. The slope prediction mode-random effects summary of teacher moral teaching behavior

rando	om effects	Share with others	Care	Help	Compassionate attention
	variant components	.082	.114	.121	.118
$\mathrm{U}_{0\mathrm{j}}$	$\chi^{^{\!$	216.80	278.83	273.62	273.44
	p	.000	.000	.000	.000
	variant components	.004	.005	.000	.002
$U_{1j}$	$\chi^{^{\!$	91.89	122.97	92.58	93.10
	p	>.500	.033	>.500	>.500
r <sub>ij</sub>	variant components	.346	.418	.444	.442

#### 5. Discussion

# 5.1 The Influence of Social Connectedness on Prosocial Behavior

The results are consistent with previous studies, where the social connectedness was significantly positively associated with prosocial behavior of sharing with others (Zuo et al., 2021), care (Lee & Min, 2022), help (Sabato et al., 2021), and compassionate attention (Janicke & Oliver, 2017). This study holds the view that social connectedness is the driving force for individuals to participate in society. Under the influence of the sense of belonging and intimacy, it would stimulate the desire of interdependence between themselves and others and form the internal needs of individuals to get close to society and others. In addition, individuals have a stronger tendency to promote prosocial behavior, driven by the dual drive and internal need (Piam et al., 2019). The higher the social connectedness, the friendlier an individual is towards others and society. Otherwise, individuals would be more likely to experience social alienation and social discomfort. Because the social connectedness is classified as a self-attribute, it can persistently influence individual behavior. Therefore, the social connectedness among college students in this study sample showed a positive prediction of prosocial behavior.

# 5.2 The influence of teachers' moral teaching behavior on college students' prosocial behavior

In dimension, the results are consistent with previous studies. Teachers' moral teaching behavior and prosocial behavior present a positive impact on sharing with others, care, help and compassionate attention (Keiler, 2018). The teacher–student relationship also positively affects sharing with others, care, help, and compassionate attention (Jadoon et al., 2022; Longobardi et al., 2021). Curriculum and teaching present a positive impact on sharing with others, care, help and compassionate attention (Fogelgarn et al., 2021). Teaching evaluation presents a positive impact on sharing with others, care, help and compassionate attention (Cheon et al., 2018). This study found that the personal role, teacher–student relationship, curriculum and teaching, and teaching evaluation of teachers' moral teaching behavior have an impact on the prosocial behavior of college students, indicating that teachers' moral teaching behavior is very important to the growth of college students (Hart, 2022). Teachers must fully understand the role they play, shoulder the responsibility of cultivating students' good moral character, actively participate in the professional growth of moral education, provide college students with role models for moral learning, cultivate students' good moral education from life, build care, respect, mutual class atmosphere (Puyo, 2021), active care students, timely guidance and assistance, accordingly students would follow model of moral behavior, shape its moral values (Nejati & Shafaei, 2017), and produce more prosocial behavior (Manzano-Sanchez, 2019).

# 5.3 A Regulating Effect of Social Connectedness of College Students for Prosocial Behavior on Teachers' Moral Teaching Behavior

The adjustment effect of teachers' moral teaching behavior in the social connectedness and the prosocial behavior has been proved. When relationships are closer, it is easier to share with others to build personal and social resources (Gable et al., 2018). In the class, the role of teacher can inspire students and create a comfortable atmosphere for students' expression, promote social connectedness among college students, and generate strong sharing with others (Keiler, 2018), care (Martin et al., 2019), help (Pommier et al., 2020), and compassionate behavior (Seppala, 2013). The relationship between teachers and students is an important relationship in the school environment, while positive and close relationship between teachers and students can increase social connection (Chamizo-Nieto et al., 2021), power sharing, and reciprocity, thus developing student character (Ibrahim & El Zaatari, 2020). In other words, the relationship between teachers and students can affect the social connection to share with others, care, help and compassionate attention (Ang et al., 2020). Curriculum and teaching and teaching evaluation are all important contents of college education. Rigid courses, interpersonal communication, lack of effective support, punishment, existential relationships with friends or peers, changes in course teaching, and teaching evaluation (e. g. support and punishment behavior in teaching), would affect the students' sense of social connection to share with others (De Bruin, 2021; Ibrahim & El Zaatari, 2020), care (Busching & Krahe, 2020), help, and compassionate concerns (Casmana et al., 2021).

The adjustment effect of teachers' moral teaching behavior on the social connectedness and help has reported. First, the role of teachers plays a regulatory role between the social connectedness and help, which is positively correlated with prosocial helping behavior (Pommier et al., 2020). Teachers, as class administrators, have an impact on all classes of college students and might influence the relationship between college students' social connectedness to help in the form of organizational atmosphere (Cheon et al., 2018). Second, the teacher–student relationship plays a regulating role in the social connectedness to help. Social connectedness is negatively correlated with aggression and violent behavior, and the positive teacher–student relationship can affect the strength of the relationship between social connectedness and students' aggressive and violent behavior (Ang et al., 2020). Again, curriculum and

teaching play a regulating role between social connectedness and help. Supriyanto et al. (2020) adopted the qualitative research method, investigated 20 subjects, and found that different media teaching tools and teaching methods, which would affect the students' linking the relationship between social connectedness and care, namely different courses and teaching differences would affect the relationship between social connectedness and help. Finally, teaching evaluation plays a regulating role between social connectedness and help. In the teaching evaluation, students' helping behavior is usually a goal of school training (Casmana et al., 2021). According to Schwartz's (1992) value theory, teaching evaluation, like traditional norms, affects the individual's safety value (such as the need of social connection) to the behavior of kindness (help); that is, the strength of teaching evaluation can influence the change in the sense of social connection to the relationship of help behavior. The results of this study are consistent with the present study.

The adjustment effect of each dimension of teachers' moral teaching behavior between social connectedness and compassionate attention also has been reported. First, the teacher plays a regulatory role in the relationship between social connectedness and compassionate attention. The relationship of social connectedness and compassionate attention is very close, and positive compassionate concerns can increase social connection and positive effects (such as compassionate concerns) (Seppala, 2013). According to Kohlberg's (1958) moral development theory, moral education is an important measure of individual moral development. In school education, teachers' education is for all the students in the class, and the teacher's role level affects college students' social connectedness and compassionate attention. Second, the teacher-student relationship has a regulatory effect on social connectedness and compassionate attention. Previous studies have found that a positive teacher-student relationship influences the establishment of students' intimate relationships in the form of atmosphere (Rawal, 2022), and compassionate concerns (Wenardjo & Panggabean, 2022). In addition, there was a positive association between social connectedness and compassionate attention (Seppala, 2013). It can be seen that the strength of the teacher-student relationship can affect the change of the social connectedness to compassionate attention. Curriculum and teaching have a regulating effect on social connectedness and compassionate attention. Previous studies have found that curriculum and teaching are an important part of school education, which can promote the expression of college students' thoughts and the interaction of self-awareness and interpersonal intimacy (Jdaitawi, 2019). The capacity for compassionate concern is plastic, educating students and influencing the level of compassionate concern in curriculum and teaching, and according to the positive correlation between social connection and compassionate concern (Seppala, 2013); that is, the strength of curriculum and teaching can influence social connection and compassionate concern. Finally, teaching evaluation plays a regulating role in the relationship of social connectedness to compassionate attention. Teaching evaluation is the evaluation of teaching effect, which has the role of guiding the direction of education. Studies have pointed out that social connectedness and compassionate attention are important components in the cultivation of students' moral values, and there is an important link between the two (Asif et al., 2020). When the teaching evaluation changes, college students' relationships and compassion content would be affected (Aldridge, 2019): namely the strength of the teachers rating would affect compassion in interpersonal relationships. In conclusion, the results of this study are consistent with the above-mentioned findings.

Based on the above discussion, the role of teachers, the teacher–student relationship, the strength of curriculum and teaching, and teaching evaluation would affect college students' social connectedness and prosocial behavior. It can be seen that teachers' moral teaching behavior plays a role in regulating the relationship between college students' social connection and prosocial behavior, and these research results are consistent with those of previous studies.

# 6. Conclusion

College students' social connectedness has a positive predictive effect on all dimensions of prosocial behavior. Social connectedness has a positive predictive effect on sharing with others, care, help and compassionate attention in prosocial behavior. Teachers' moral teaching behavior has a positive prediction effect on the social behavior of college students. That is, the teacher's role, the teacher–student relationship, curriculum and teaching, and teaching evaluation of teachers' moral teaching behavior have a positive prediction effect on sharing with others, care, help, and compassionate attention in college students' prosocial behavior.

Teacher's moral teaching behavior plays a regulating role in the relationship between college students' social connectedness and prosocial behavior in sharing with others. The results show that in the part shared with others, the role of teachers, the teacher–student relationship, curriculum and teaching, and teaching evaluation in their moral teaching behavior have a regulatory effect between social connectedness and sharing with others. In the care part, the role of teachers, the teacher–student relationship, curriculum and teaching, and the teaching evaluation in moral

teaching behavior have a regulating effect between the sense of social connection and care. In the help part, the role of teachers, the teacher–student relationship, curriculum and teaching, and teaching evaluation have a regulating effect between the sense of social connection and help. In the compassionate attention part, the role of teachers and teaching evaluation in the moral teaching behavior have a regulatory effect between the social connectedness and compassionate attention.

# 7. Research Limitations and Perspectives

This study used a questionnaire survey to collect data for the students in the class and the corresponding teachers in the class. In the process of data collection, the number of students in the class could not reach the number of studies, and the time for filling in the questionnaire was too short, which greatly increased the difficulty of data collection. The reasons for this were that the subjects thought it took too much time to fill in the questionnaire, did not want to fill it in, or even ignored it. It is suggested that more incentives could be used in subsequent research to strengthen the motivation of subjects to participate in the study, such as issuing research commemorative gifts or WeChat small red envelopes if funding permits. In addition, this study was limited in time and funding resources. This study used only part of the Guangxi university teachers and college students as a research sample, did not cover all universities and students in Guangxi, and failed on the sample selection. Subsequent research could target schools in different regions, especially economically developed areas such as Beijing, Shanghai, and Guangdong, where results could differ significantly from those of the Guangxi region. Therefore, if funding and time allow, the research area and scope could be expanded in future research on related issues, so as to make the results more representative.

#### References

- Abbasi, S. G., Abbas, M., Pradana, M., Al-Shammari, S. A. S., Zaman, U., & Nawaz, M. S. (2021). Impact of organizational and individual factors on knowledge sharing behavior: Social capital perspective. *SAGE Open, 11*(4), Article e21582440211054504. https://doi.org/10.1177/21582440211054504
- Aghaei, P., Bavali, M., & Behjat, F. (2020). An in-depth qualitative study of teachers' role identities: A case of iranian EFL teachers. *International Journal of Instruction*, 13(2), 601-620. https://doi.org/10.29333/iji.2020.13241a
- Ainsworth, M. S., & Bowlby, J. (1991). An ethological approach to personality. development. *American psychologist*, 46(4), 333-341. https://doi.org/10.1037/0003-066X.46.4.333
- Aldridge, J. M., Fraser, B. J., Taylor, P. C., & Chen, C.-C. (2000). Constructivist learning environments in a crossnational study in Taiwan and Australia. *International Journal of Science Education*, 22(1), 37-55. https://doi.org/10.1080/095006900289994
- Amato, P. R. (1990). Personality and social network involvement as predictors of helping behavior in everyday life. *Social Psychology Quarterly*, *53*(1), 31-43. https://doi.org/10.2307/ 2786867
- Ang, R. P., Ong, S. L., & Li, X. (2020). Student version of the Teacher–Student Relationship Inventory (S-TSRI): Development, validation and invariance. *Frontiers in Psychology*, 11, Article e1724. https://doi.org/10.3389/fpsyg.2020.01724
- Armstrong-Carter, E., Bibby, E. S., Burroughs, M., Flannery, J. E., Nelson, B. W., Duell, N., Prinstein, M. J., & Telzer, E. H. (2021). Adolescents are more likely to help others on days they take risks and crave social connections. *Journal of Adolescent Research*, 32(4), 1421-1432. https://doi.org/10.1111/jora.12705
- Arthaud-Day, M. L., Rode, J. C., & Turnley, W. H. (2012). Direct and contextual effects of individual values on organizational citizenship behavior in teams. *Journal of Applied Psychology*, 97(4), 792-807. https://doi.org/10.1037/a0027352
- Asif, T., Guangming, O., Haider, M. A., Colomer, J., Kayani, S., & Amin, N. U. (2020). Moral education for sustainable development: Comparison of university teachers' perceptions in china and pakistan. *Sustainability*, 12(7), Article e3014. https://doi.org/10.3390/su12073014
- Barrett, P. (2007). Structural equation modelling: Adjudging model fit. *Personality and Individual Differences*, 42(5), 815-824. https://doi.org/10.1016/j.paid.2006.09.018
- Bekkers, R. H. F. P., & De Graaf, N. D. (2005). Field of education and prosocial behavior. *Marktdag Sociologie*, 1-23, Article e10714. https://dspace.library.uu.nl/bitstream/handle/1874/10714/Bekkers\_05\_field-of-education-and-prosocial-behavior.pdf?sequence=2

- Bian, F., & Wu, D. (2021). The impact of family socioeconomic status on prosocial behavior: A survey of college students in China. *Current Psychology*, 1-10. https://doi.org/10.1007/s12144-021-02611-9
- Brady, S. A. (2011). Efficacy of phonics teaching for reading outcomes: Indications from post-NRP research. In S. A. Brady, D. Braze, & C. A. Fowler (Eds.), Explaining individual differences in reading: Theory and evidence (pp. 69–96). Psychology Press.
- Brislin, R. W. (1970). Back-translation for cross-cultural research. *Journal of cross-cultural psychology*, 1(3), 185-216.
- Busching, R., & Krahé, B. (2020). With a little help from their peers: The impact of classmates on adolescents' development of prosocial behavior. *Journal of Youth and Adolescence*, 49(9), 1849-1863. https://doi.org/10.1007/s10964-020-01260-8
- Campbell, E. (2015). The ethics of teaching as a moral profession. *Curriculum Inquiry*, *38*(4), 357-385. https://doi.org/10.1111/j.1467-873X.2008.00414.x
- Caprara, G. V., Alessandri, G., & Eisenberg, N. (2012). Prosociality: the contribution of traits, values, and self-efficacy beliefs. *Journal of Personality and Social Psychology*, 102(6), 1289-1303. https://doi.org/10.1037/a0025626
- Caprara, G. V., Kanacri, B. P. L., Gerbino, M., Zuffianò, A., Alessandri, G., Vecchio, G., Caprara, E., Pastorelli, C., & Bridglall, B. (2014). Positive effects of promoting prosocial behavior in early adolescence. *International Journal of Behavioral Development*, 38(4), 386-396. https://doi.org/10.1177/0165025414531464
- Caprara, G. V., Schwartz, S., Capanna, C., Vecchione, M., & Barbaranelli, C. (2006). Personality and politics: Values, traits, and political choice. *Political Psychology*, 27(1), 1-28. https://doi.org/10.1111/j.1467-9221.2006.00447.x
- Caprara, G. V., Steca, P., Zelli, A., & Capanna, C. (2005). A new scale for measuring adults' prosocialness. European Journal of Psychological Assessment, 21(2), 77-89. https://doi.org/10.1027/1015-5759.21.2.77
- Casmana, A. R., Dewantara, J. A., Timoera, D. A., Kusmawati, A. P., & Syafrudin, I. (2021). Global citizenship: Preparing the younger generation to possess pro-environment behavior, mutual assistance and tolerance awareness through school engagement. *Globalisation, Societies and Education, 21*(1) 15-32. https://doi.org/10.1080/14767724.2021.2013167
- Chamizo-Nieto, M. T., Arrivillaga, C., Rey, L., & Extremera, N. (2021). The role of emotional intelligence, the teacher-student relationship, and flourishing on academic performance in adolescents: A moderated mediation study. *Frontiers in Psychology*, Article e695067. https://doi.org/10.3389/fpsyg.2021.695067
- Chen, W., Li, X., Huebner, E. S., & Tian, L. (2022). Parent—child cohesion, loneliness, and prosocial behavior: Longitudinal relations in children. *Journal of Social and Personal Relationships*, Article e02654075221091178. https://doi.org/10.1177/02654075221091178
- Cheon, S. H., Reeve, J., & Ntoumanis, N. (2018). A needs-supportive intervention to help PE teachers enhance students' prosocial behavior and diminish antisocial behavior. *Psychology of Sport and Exercise*, *35*, 74-88. https://doi.org/10.1016/j.psychsport.2017.11.010
- China Guangxi Statistical Yearbook (2021). Basic situation of all kinds of schools in Guangxi in the main years. http://tjj.gxzf.gov.cn//tjsj/tjnj/material/tjnj20200415/2021/zk/indexch.htm
- Cohen, J. (1988). Set correlation and contingency tables. *Applied Psychological Measurement*, 12(4), 425-434. https://doi.org/10.1177/014662168801200410
- De Bruin, L. R. (2021). Instrumental music educators in a COVID landscape: A reassertion of relationality and connection in teaching practice. *Frontiers in Psychology*, 11, Article e624717. https://doi.org/10.3389/fpsyg.2020.624717
- De, Guzman, M. R., Jung, E., & Do, K.-A. T. (2012). Perceived social support networks and prosocial outcomes among Latino/a youth in the United States. *Interamerican Journal of Psychology*, *3*(46), 413–424. http://digitalcommons.unl.edu/famconfacpub
- Demeter, E., & Rad, D. (2020). Global life satisfaction and general antisocial behavior in young individuals: The mediating role of perceived loneliness in regard to social sustainability—a preliminary investigation. *Sustainability*, *12*(10), Article e4081. https://doi.org/10.3390/su12104081

- Dong, X. Y., & Peng, Z. Y. (2021). The advantages, dilemmas and ways out of youth volunteering in grassroots social governance: A case study of Guangxi students volunteering in the western region. *Journal of Taiyuan City Vocational and Technical College*. 237(04), 14-16. https://doi.org/10.16227/j.cnki.tycs.2021.0198.
- Duriez, B., Meeus, J., & Vansteenkiste, M. (2012). Why are some people more susceptible to ingroup threat than others? The importance of a relative extrinsic to intrinsic value orientation. *Journal of Research in Personality*, 46(2), 164-172. https://doi.org/10.1016/j.jrp.2012.01.003
- Fitria, H., Kristiawan, M., & Rasyid, A. (2019). The educational character on instruction. *Opción: Revista de Ciencias Humanas y Sociales*, (21), 964-979.
- Fogelgarn, R. K., Burns, E. A., & Lewis, R. (2021). Hinting as a pedagogical strategy to promote prosocial behaviour. *Educational Action Research*, 29(5), 755-771. https://doi.org/10.1080/09650792.2020.1743333
- Gable, S. L., Reis, H. T., Impett, E. A., & Asher, E. R. (2018). What do you do when things go right? The intrapersonal and interpersonal benefits of sharing positive events. In *Relationships, Well-Being and Behaviour* (pp. 144-182). Routledge.
- Graziano, W. G., & Eisenberg, N. (1997). Agreeableness: A dimension of personality. *Handbook of personality psychology* (1st Eds., pp. 795-824). Academic Press. https://doi.org/10.1016/B978-012134645-4/50031-7
- Han, J., Yin, H., & Wang, W. (2015). The effect of tertiary teachers' goal orientations for teaching on their commitment: the mediating role of teacher engagement. *Educational Psychology*, 36(3), 526-547. https://doi.org/10.1080/01443410.2015.1044943
- Hansen, D. T. (2002). The moral environment in an inner-city boys' high school. *Teaching and Teacher Education*, 18(2), 183-204. https://doi.org/10.1016/S0742-051X(01)00063-4
- Hart, P. (2022). Reinventing character education: The potential for participatory. character education using MacIntyre's ethics. *Journal of Curriculum Studies*, 54(4), 486-500. https://doi.org/10.1080/00220272.2021.1998640
- Hogg, M. A., & Reid, S. A. (2006). Social identity, self-categorization, and the communication of group norms. *Communication Theory*, *16*(1), 7-30. https://doi.org/10.1111/j.1468-2885.2006.00003.x
- Huang, W. Q., Liao, B., Zhang, W. X., (2013). Research on moral education environment, teachers' moral education belief and moral education behavior in primary schools: Take Taidong County as an example.[Doctoral thesis, National Tainan University], Taiwan doctoral master thesis knowledge plus value system. https://hdl.handle.net/11296/t9uevv
- Hudzaifah, H. (2021). Relationship between prososial behavior and intensity of class teachers social snteractions to special needs in inclusive schools. *IJDS: Indonesian Journal of Disability Studies*, 8(01), 155-160. https://doi.org/10.21776/ub.ijds.2021.008.01.12
- Ibrahim, A., & El Zaatari, W. (2020). The teacher–student relationship and adolescents' sense of school belonging. *International Journal of Adolescence and Youth*, 25(1), 382-395. https://doi.org/10.1080/02673843.2019.1660998
- Jadoon, A. I., Khan, F., Syeda Tehmina Naz Bukhari, N. T. S., Gilani, S. Z., Ishfaq, U., & Ullah, M. (2022). Effect of teacher-student relationship on pro-social behavior and academic achievement of secondary school students. *Indian Journal of Economics and Business*, 21(1), 331-337. http://www.ashwinanokha.com/IJEB.php
- Janicke, S. H., & Oliver, M. B. (2017). The relationship between elevation, connectedness, and compassionate love in meaningful films. *Psychology of Popular Media Culture*, 6(3), 274–289. https://doi.org/10.1037/ppm0000105
- Jdaitawi, M. (2019). The effect of flipped classroom strategy on students learning outcomes. *International Journal of Instruction*, 12(3), 665-680. https://doi.org/10.29333/iji.2019.12340a
- Jose, P. E., Ryan, N., & Pryor, J. (2012). Does social connectedness promote a greater sense of well-being in adolescence over time?. Journal of research on adolescence, 22(2), 235-251. https://doi.org/10.1111/j.1532-7795.2012.00783.x
- Kahn, L. G., Lindstrom, L., & Murray, C. (2014). Factors contributing to preservice teachers' beliefs about diversity. *Teacher Education Quarterly*, *41*(4), 53-70. https://www.jstor.org/stable/teaceducquar.41.4.53

- Keiler, L. S. (2018). Teachers' roles and identities in student-centered classrooms. *International Journal of STEM Education*, 5(1), 1-20. https://doi.org/10.1186/s40594-018-0131-6
- Khun-Inkeeree, H., Pimjan, L., & Adelaja, A. A. (2021). Moderating effect of that teachers' perspective on the relationship between teaching perspectives, students' engagement. *International Journal of Instruction*, 14(1), 631-646. https://doi.org/10.29333/iji.2021.14138
- Kim, J., & Ko, S. (2021). The effect of university organizational culture on organizational silence and faculty–student interaction. *Management Science Letters*, 11(7), 2151-2162. https://doi.org/10.5267/j.msl.2021.2.013
- Kim, K. (2020). The effect of preschool teachers creativity on creativity-fostering teaching: Focusing on mediating effect of teaching efficacy. *Journal of Korean Child Care and Education*, 16(2), 47-65. https://doi.org/10.14698/jkcce.2020.16.02.047
- Kohlberg, L. (1958). *The Development of Modes of Thinking and Choices in Years 10 to 16.* [Ph. D. Dissertation, University of Chicago]. https://www.proquest.com/openview/c503bf59d762abe5818e1b24c484d41a/1?pq-origsite=gscholar&cbl=1875 0&diss=y
- Konishi, C., Hymel, S., Wong, T. K. Y., & Waterhouse, T. (2021). School climate and bystander responses to bullying. *Psychology in the Schools*, 58(8), 1557-1574. https://doi.org/10.1002/pits.22512
- Konow, J. (2019). Can ethics instruction make economics students more pro-social? *Journal of Economic Behavior & Organization*, 166, 724-734. https://doi.org/10.1016/j.jebo.2019.08.012
- Koth, C. W., Bradshaw, C. P., & Leaf, P. J. (2008). A multilevel study of predictors of student perceptions of school climate: The effect of classroom-level factors. *Journal of Educational Psychology*, *100*(1), 96-104. https://doi.org/10.1037/0022-0663.100.1.96
- Králik, R., & Máhrik, T. (2019, November 11-13). *Interpersonal relationships as the basis of student moral formation* [paper session]. In ICERI 2019: Proceedings of the 12thInternational Conference of Education, Research and Innovation, Seville, Spain. https://doi.org/10.21125/iceri.2019.2129
- Lai, Y. R., Su, N. G., (2022). Research and practice of local undergraduate students serving rural revitalization strategy.university, (07), 137-140. https://kns.cnki.net/kcms/detail/detail.aspx?dbcode=CJFD&dbname=CJFDLASN2022&filename=DXYP20220 7034&uniplatform=NZKPT&v=OCQf\_UOoALQaF4qOkBbgxkMU84rB2Cd8byABUKErNLV-x-z5Bx9Rth07 O0K0YzWJ
- Leach, M., Rockström, J., Raskin, P., Scoones, I., Stirling, A. C., Smith, A., Thompson, J., Millstone, E., Ely, A., Arond, E., Folke, C., & Olsson, P. (2012). Transforming innovation for sustainability. *Ecology and Society*, 17(2). http://dx.doi.org/10.5751/ES-04933-170211
- Lee, R. M., Draper, M., & Lee, S. (2001). Social connectedness, dysfunctional interpersonal behaviors, and psychological distress: Testing a mediator model. *Journal of Counseling Psychology*, 48(3), 310-318. https://doi.org/10.1037/0022-0167.48.3.310
- Lee, S., & Min, D. (2022). Sensory stimuli to sustainable social wellbeing: A multimodal approach based on warm scent. *Behavioral Sciences*, *12*(5), Article e146. https://doi.org/10.3390/bs12050146
- Li, Y., & Xiong, L. (2013). Moral education from the perspective of moral belief. *Asian Social Science*, 9(3), 107-111. http://dx.doi.org/10.5539/ass.v9n3p107
- Lin, G.-Y., Wang, Y.-S., & Lee, Y. N. (2022). Investigating factors affecting learning satisfaction and perceived learning in flipped classrooms: The mediating effect of interaction. *Interactive Learning Environments*, 1-22. https://doi.org/10.1080/10494820.2021.2018616
- Liu, H. Y., & Wang, I. T. (2019). Creative teaching behaviors of health care school teachers in Taiwan: mediating and moderating effects. *BMC Medical Education*, 19(1), Article e186. https://doi.org/10.1186/s12909-019-1641-8
- Liu, W., Su, T., Tian, L., & Huebner, E. S. (2020). Prosocial behavior and subjective well-being in school among elementary school students: The mediating roles of the satisfaction of relatedness needs at school and self-esteem. *Applied Research in Quality of Life*, 16(4), 1439-1459. https://doi.org/10.1007/s11482-020-09826-1

- Longobardi, C., Settanni, M., Lin, S., & Fabris, M. A. (2021). Student-teacher relationship quality and prosocial behaviour: The mediating role of academic achievement and a positive attitude towards school. *Journal of Electrical Engineering & Education*, 91(2), 547-562. https://doi.org/10.1111/bjep.12378
- Manzano-Sanchez, D., & Valero-Valenzuela, A. (2019). Implementation of a model-based programme to promote personal and social responsibility and its effects on motivation, prosocial behaviours, violence and classroom climate in primary and secondary education. *International Journal of Environmental Eesearch and Public Health*, 16(21), Article e4259. https://doi.org/10.3390/ijerph16214259
- Martin, F., Budhrani, K., Kumar, S., & Ritzhaupt, A. (2019). Award-winning faculty online teaching practices: Roles and competencies. *Online Learning*, 23(1), 184-205. https://doi.org/10.24059/olj.v23i1.1329
- Martinez-Pampliega, A., Cormenzana, S., Sanz, M., Barni, D., Simon, J., Alomar, E., & Perez, C. (2018). Metric goodness of the adult prosocialness scale. comparative study of italy and spain. *The Spanish Journal of Psychology*, (21), 1-10. https://doi.org/10.1017/sjp.2018.26
- Meehan, A. J., Hawes, D. J., Salekin, R. T., & Barker, E. D. (2019). Shared and unique variances of interpersonal callousness and low prosocial behavior. *Psychological Assessment*, 31(3), 376-388. https://doi.org/10.1037/pas0000675
- Mujahidin, E., Bahagia, B., Wibowo, R., Rangkuti, Z., Alwahid, M. A., & Siswanty, K. (2021). Building pro-social behavior in nursery student. *Jurnal Basicedu*, *5*(4), 1778-1786. https://doi.org/10.31004/basicedu.v5i4.1009
- Myyry, L., Helkama, K., Silfver-Kuhalampi, M., Petkova, K., Valentim, J. P., & Liik, K. (2021). Explorations in reported moral behaviors, values, and moral emotions in four countries. *Frontiers in Psychology, 12*, Article e661172. https://doi.org/10.3389/fpsyg.2021.661172
- Nejati, M., & Shafaei, A. (2017). Leading by example: The influence of ethical supervision on students' prosocial behavior. *Higher Education*, 75(1), 75-89. https://doi.org/10.1007/s10734-017-0130-4
- Nemr, M. A. A., & Liu, Y. (2021). The impact of ethical leadership on organizational citizenship behaviors: Moderating role of organizational cynicism. *Cogent Business & Management*, 8(1), Article e1865860. https://doi.org/10.1080/23311975.2020.1865860
- Omoto, A. M., & Packard, C. D. (2016). The power of connections: Psychological sense of community as a predictor of volunteerism. *The Journal of Social Psychology*, 156(3), 272-290. https://doi.org/10.1080/00224545.2015.1105777
- Padilla-Walker, L. M., & Carlo, G. (2015). Prosocial development: A multidimensional approach. Oxford University Press. https://doi.org/10.4324/9781315807287
- Park, H., & Hill, R. B. (2017). Development and validation of a short form of the occupational work ethic inventory. *Journal of Career and Technical Education*, 32(1), 9-28. https://doi.org/10.21061/jcte.v32i1.1588
- Pavey, L., Greitemeyer, T., & Sparks, P. (2011). Highlighting relatedness promotes prosocial motives and behavior. *Personality and Social Psychology Bulletin, 37*(7), 905-917. https://doi.org/10.1177/0146167211405994
- Pian, Q. Y., Jin, H., & Li, H. (2019). Linking knowledge sharing to innovative behavior: the moderating role of collectivism. *Journal of Knowledge Management*, 23(8), 1652-1672. https://doi.org/10.1108/JKM-12-2018-0753
- Pizzi, G., & Stanger, N. (2019). Consequences of teammate moral behaviour: Linking team moral norms with cohesion and collective efficacy. *International Journal of Sport and Exercise Psychology*, 18(4), 437-453. https://doi.org/10.1080/1612197x.2019.1593215
- Pommier, E., Neff, K. D., & Tóth-Király, I. (2020). The development and validation of the Compassion Scale. *Assessment*, 27(1), 21-39. https://doi.org/10.1177/1073191119874108
- Prince-Gibson, E., & Schwartz, S. H. (1998). Value priorities and gender. *Social Psychology Auarterly*, 49-67. https://doi.org/10.2307/2787057
- Pung, P.-W., Koh, D. H., Tan, S. A., & Yap, M. H. (2021). Mediating role of interpersonal relationships in the effect of emotional competence on prosocial behavior among adolescents in malaysia. *Makara Human Behavior Studies in Asia*, 25(2), 137-144. https://doi.org/10.7454/hubs.asia.1281121
- Rabelo, A. L. A., & Pilati, R. (2021). Translation and adaptation of the social connectedness scale to portuguese. *Psico-USF*, 26(1), 1-12. https://doi.org/10.1590/1413-82712021260101

- Rawal, S. B. (2022). The role of teacher-student relationship in motivation. *AMC Multidisciplinary Research Journal*, *3*(1), 11-23. https://doi.org/10.30564/jpr.v4i3.4828
- Richardson, M., & Healy, M. (2019). Examining the ethical environment in higher education. *British Educational Research Journal*, 45(6), 1089-1104. https://doi.org/10.1002/berj.3552
- Robertson, J., Dionisi, A. M., & Barling, J. (2018). Linking attachment theory to abusive supervision. *Journal of Managerial Psychology*, 33(2), 214-228. https://doi.org/10.1108/jmp-11-2017-0399
- Rokeach, M. (1973). The nature of human values. Free press. https://doi.org/10.1007/s10745-016-9877-y
- Rose, A. J., Borowski, S. K., Spiekerman, A., & Smith, R. L. (2022). Children's friendships. *The Wiley-Blackwell Handbook of Childhood Social Development*, (pp. 487-502). https://doi.org/10.1002/9781119679028.ch26
- Sabato, H., Abraham, Y., & Kogut, T. (2021). Too lonely to help: Early adolescents' social connections and willingness to help during COVID-19 lockdown. *Journal of Research on Adolescence*, 31(3), 764-779. https://doi.org/10.1111/jora.12655
- Sagiv, L., Roccas, S., Cieciuch, J., & Schwartz, S. H. (2017). Personal values in human life. *Nature Human Behaviour*, *1*(9), 630-639. https://doi.org/10.1038/s41562-017-0185-3
- Schwartz, J. T. (1969). Nonlinear functional analysis (Vol. 4). CRC Press.
- Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. *Advances in Experimental Social Psychology*, 25, 1-65. Academic Press. https://doi.org/10.1016/S0065-2601(08)60281-6
- Schwartz, S. H., & Bilsky, W. (1990). Toward a theory of the universal content and structure of values: Extensions and cross-cultural replications. *Journal of Personality and Social Psychology*, 58(5), Article e878. https://doi.org/110.1037/0022-3514.58.5.878
- Schwartz, S.H. (2006). A theory of cultural value orientations: Explication and applications. *Comparative Sociology*, 5(2-3), 137-182. https://doi.org/10.1163/156913306778667357
- Seppala, E. (2013). The compassionate mind. *APS Observer*, 20(1), 97-103. https://doi.org/10.1080/09515070701194823
- Shin, J., & Lee, B. (2021). The effects of adolescent prosocial behavior interventions: A meta-analytic review. *Asia Pacific Education Review*, 22, 565-577. https://doi.org/10.1007/s12564-021-09691-z
- Silke, C., Brady, B., Boylan, C., & Dolan, P. (2018). Factors influencing the development of empathy and pro-social behaviour among adolescents: A systematic review. *Children and Youth Services Review*, *94*, 421-436. https://doi.org/10.1016/j.childyouth.2018.07.027
- Son, D., & Padilla-Walker, L. M. (2020). Happy helpers: A multidimensional and mixed-method approach to prosocial behavior and its effects on friendship quality, mental health, and well-being during adolescence. *Journal of Happiness Studies*, 21(5), 1705-1723. https://doi.org/10.1007/s10902-019-00154-2
- Song, Y., Malhotra, S., Broekhuizen, M., Wang, Y., Chen, B. B., & Dubas, J. S. (2021). Prosocial behavior in young preschoolers: A cross-cultural study across the netherlands, India, and China. *The Journal of Genetic Psychology*, 182(3), 129-148. https://doi.org/10.1080/00221325.2021.1891857
- Stormshak, E. A., Bierman, K. L., Bruschi, C., Dodge, K. A., & Coie, J. D. (1999). The relation between behavior problems and peer preference in different classroom contexts. *Child Development*, 70(1), 169-182. https://doi.org/10.1111/1467-8624.00013
- Su, T., Tian, L., & Huebner, E. S. (2019). The reciprocal relations among prosocial behavior, satisfaction of relatedness needs at school, and subjective well-being in school: A three-wave cross-lagged study among Chinese elementary school students. *Current Psychology*, 40(8), 3734-3746. https://doi.org/10.1007/s12144-019-00323-9
- Subedi, B. R., Swan, B., & Hynes, M. C. (2011). Are school factors important for measuring teacher effectiveness? a multilevel technique to predict student gains through a value-added approach. *Education Research International*, Article e532737. https://doi.org/10.1155/2011/532737
- Sullivan, K., Zhu, Q., Wang, C., & Boyanton, D. (2021). Relations among peer victimization, aggression, and school climate among elementary school students in china. *School Psychology Review*, 1-13. https://doi.org/10.1080/2372966x.2021.1898290

- Supriyanto, A., Hartini, S., Irdasari, W. N., Miftahul, A., Oktapiana, S., & Mumpuni, S. D. (2020). Teacher professional quality: Counselling services with technology in Pandemic Covid-19. *Counsellia: Jurnal Bimbingan Dan Konseling*, 10(2), 176-189. https://doi.org/10.25273/counsellia.v10i2.7768
- Tabernero, C., Castillo-Mayén, R., Luque, B., & Cuadrado, E. (2020). Social values, self-and collective efficacy explaining behaviours in coping with Covid-19: Self-interested consumption and physical distancing in the first 10 days of confinement in Spain. *Plos One*, 15(9), Article e0238682. https://doi.org/10.1371/journal.pone.0238682
- Van Ryzin, M. J., Roseth, C. J., & Biglan, A. (2020). Mediators of effects of cooperative learning on prosocial behavior in middle school. *International Journal of Psychology*, 5(1-2), 37-52. https://doi.org/10.1007/s41042-020-00026-8
- Weaver, R. H., Sano, Y., Lanigan, J., Parker, L., Eddy, L., Power, T. G., & Houghten, M. (2022). Perceived changes in social connectedness across the life course: A mixed method approach. *The International Journal of Aging and Human Development*, 96(2), Article e00914150221077955. https://doi.org/10.1177/00914150221077955
- Wen, X., & Xu, J. (2018). Evaluation and Analysis of competitiveness of regional higher education in China based on individual advantage characteristic. *Educational Sciences: Theory & Practice*, 18(5), 1459-1472. https://doi.org/10.12738/estp.2018.5.043
- Wenardjo, E., & Panggabean, H. (2022). Influence of caring and empathy on students' multiculturalism mediated by christianity: Role of university core values. *Psychological Research on Urban Society*, 4(1), 54-64. https://doi.org/10.7454/proust.v4i1.120
- Xiaoping, P., Xizhou, T., & Xiaodong, G. (2019). Prosocial behavior in organizations: A literature review and prospects. *Foreign Economics & Management*, 41(05), 114-127. https://doi.org/10.16538/j.cnki.fem.2019.05.009
- Ye, S., Lee, J. A., Sneddon, J. N., & Soutar, G. N. (2020). Personifying destinations: A personal values approach. *Journal of Travel Research*, 59(7), 1168-1185. https://doi.org/10.1177/0047287519878508
- Yustiana, Y. Y. R., Yustiana, Y. R., Atma, H. W., & Solehuddin, M. S. M. (2019). Profile of pro-social behavior and the implication of guidance and counseling. *Education and Humanities Research*, 382(5), 540-543. https://dx.doi.org/10.2991/icet-19.2019.136
- Zhang, Q., & Zhang, Y. (2021). Emotional contagion and pro-social behavior of student teachers: The mediating effect of moral judgment. *Science Insights Education Frontiers*, 10(1), 1341-1352. https://doi.org/10.15354/sief.21.or059
- Zurqoni, Z., Retnawati, H., Arlinwibowo, J., & Apino, E. (2018). Strategy and implementation of character education in senior high schools and vocational high schools. *Journal of Social Studies Education Research*, 9(3), 370-397. https://dergipark.org.tr/en/pub/jsser/issue/43625/534243

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