General

Emotional - Behavioral Difficulties and Prosocial Behaviour among Vietnamese Adolescents: the Role of Social Support

Nguyen Thi Thuy, Ph.D¹

¹ Tra Vinh University

Keywords: adolescents, behavioural problems, social support, emotional difficulties, prosocial behaviours https://doi.org/10.52965/001c.116967

Health Psychology Research

Vol. 12, 2024

Background

In recent decades, a high prevalence of mental health problems among adolescents has been reported worldwide. In Vietnam, mental health problems such as emotional and behavioural difficulties are relatively common in the adolescent age group.

Objective

This study aimed to estimate the prevalence of emotional-behavioural problems and prosocial behaviours in Vietnamese adolescents and identify the role of social support in these adolescents' strengths and difficulties.

Methods

A population sample of 582 adolescents from sixth to ninth grade from four secondary schools in Vietnam voluntarily participated by completing the Strengths and Difficulties Questionnaire (α = .64) and the Social Support Scale (α = .90).

Results

The research results revealed that Vietnamese adolescents suffered from considerable levels of emotional-behavioural difficulties and prosocial behaviour problems. Through multible regression analysis, support from their families significantly predicted to decrease students' emotional and behavioural symptoms (β < 0; p< .05) and increasing prosocial behaviours (β > 0; p < .05). In contrast, friend support only contribute to protecting adolescents from behavioural problems (β = -.18; p < .05) and encouraged prosocial behaviours (β = .22; p < .05)

Discussion

Family support had a central role in its positive contribution to reducing emotional-behavioural and prosocial behaviour problems. Friend support only decreased behavioural problems and encouraged prosocial behaviours. These results are interpreted that educators could limit adolescents' emotional-behavioural difficulties and encourage prosocial behaviours through social support from their families and friends.

1. INTRODUCTION

EMOTIONAL - BEHAVIORAL PROBLEMS AND PROSOCIAL BEHAVIORS IN VIETNAMESE ADOLESCENTS

In recent decades, a high prevalence of mental health problems among adolescents has been reported worldwide. $^{1-3}$ Mental health problems affect 10 - 20% of children and adolescents. 4 According to the World Health Organization, approximately 1 in 7 adolescents aged 10 to 19 experience mental health conditions. 3 The roots of most mental health problems are emotional and behavioural difficulties. 5

Emotional difficulties refer to symptoms of depression or anxiety, while behavioural problems involve disruptive be-

haviours such as engaging in fights, behaving impulsively, disobeying, losing self-control, lying or stealing. Pathak et al. reported the high prevalence of behavioural and emotional problems to be 29.5%. However, in a recent investigation of 1881 students aged from 14 to 19 from many different nationalities, Fonseca-Pedrero et al. showed that the ratio of adolescents' emotional-behavioural difficulties was lower, with 13.5% presented with risk in emotional problems and 8.5% in the behavioural problems section. In Vietnam, emotional and behavioural difficulties are relatively common in the adolescent age group. A study conducted by Hoang surveyed 1727 adolescents in Hanoi and found that between 15% and 25% of students exhibited diverse psychological disorders including behavioral disorder,

bipolar disorder, and emotional disorder, and emotional disorder. Dang et al. indicated that 16.3% of adolescents had emotional problems, and 3.8% of them had behavioural problems. Another study showed that 13.7% of adolescents had emotional issues, and 8.9% of them had behavioural problems. During the COVID-19 time, Nguyen et al. found a high percentage of middle school students in Vietnam relating to the risk of emotional problems (20.6%) and behavioural problems (15.6%). These previous studies suggest that adolescents in Vietnam have been faced with several emotional-behavioural problems in which problem in emotion has been more than in behaviours. The impact of these emotional-behavioural problems on a personal family or educational attainment was also proven in previous studies. 12,13

Previous research has focused on emotional-behavioural difficulties during adolescence, while other studies 14,15 have highlighted the crucial role of fostering adolescents' prosocial behaviours. Prosocial behaviour is voluntary behaviour which helps or benefits others, for instance, sharing, donating, cooperating with minority groups, and helping and comforting peers. 14 This behaviour is a precondition for shaping ideal interpersonal relationships, which is crucial in developing a person's social competence.16 Previous studies showed that teenagers who engage in such helping activities are more likely to have better socioemotional adjustment, ¹⁷ tend to be less aggressive, and get along better with their peers. Prosocial behaviour was also found to be associated with higher self-esteem. 18 These findings emphasise the need to enhance and promote adolescents' prosocial behaviour. 17 However, a small ratio of adolescents had difficulties in prosocial behaviour found in previous studies. 19,20 Keyho et al. 20 showed that adolescents' prosocial behaviour was abnormal in 5.1%, even though the borderlines of this behaviour were more than triple (16.1%). In Vietnam, the prosocial behaviour problem was higher. Vu et al. found that 8.6 % of adolescents¹¹ and Nguyen et al. showed 15.9% of them had prosocial behaviour problems.¹⁹ Adolescents in Vietnam have been faced with some emotional-behavioural problems, including prosocial behaviour.

Regarding gender, statistically significant differences in emotional-behavioural problems and prosocial behaviour were found in the previous studies. A common trend during adolescence is for females to report more significant emotional problems than males, while males report higher behavioural problems. S,11,21 However, several studies have also failed to find gender differences in emotional and behavioural problems. Regarding adolescent strength, females were found to have higher prosocial behaviour than males. 11,22

IMPORTANCE OF SOCIAL SUPPORT FOR ADOLESCENTS' MENTAL HEALTH

Social support positively influences health, and behavioural outcomes have been reported in several studies. Heerde and Hemphill²³ showed that social support was associated with decreased depressive symptoms, psychological distress, anxiety symptoms, withdrawal, emotional problems and

bullying perpetration and victimisation. High social support was closely related to better mental health, and low levels of social support were more likely to lead to mental health problems when individuals were exposed to stress 24 ; social support can be a valuable predictor of mental health status. In the study of Qi et al., 2 a negative correlation between the levels of social support and the severity of depression and anxiety symptoms was found in which more than half of the adolescents with lower social support experienced depression and anxiety disorder. Qi et al. showed that adolescents with low social support had a 3.2 times greater risk of anxiety symptoms and a 4.2 times greater risk of depression symptoms compared to those with high social support.² Therefore, an increased level of social support (peer support) was linked negatively with youth vulnerable to internalising problems (e.g. withdrawal, emotional problems) and externalising difficulties (e.g. aggression, impulsiveness). 25 From a scoping review, Bjørlykhaug et al.²⁶ explored that social support is crucial for preventing mental health problems and maintaining good mental health. Social support has been recognised as a critical protective factor for positive adolescent mental health.

Meanwhile, previous studies have demonstrated a positive correlation between social support and prosocial behaviour. ^{27,28} The result indicated that the more social support a student gets, the higher the interpersonal trust, the better interpersonal relationship, and the higher the willingness to conduct prosocial behaviour. ²⁷ Support from various sources, including parents, teachers, peers, and specific individuals, serves as a protective factor for adolescents, shielding them from typical risks and enhance their prosocial behaviour. ²⁸ Social support is a significant social factor accounting for prosocial behaviours.

OBJECTIVES AND RESEARCH QUESTIONS

In light of the preceding literature review, knowledge of the prevalence of emotional-behavioural difficulties, prosocial behaviours, and the role of social support can be used to design effective intervention strategies. Very few studies on these issues have been conducted in the Vietnamese context. Especially until now, there has yet to be any systematic or in-depth academic work on the role of social support in relationship with adolescents' emotional-behavioural difficulties and prosocial behaviours in Vietnam. Therefore, this study aimed to estimate the prevalence of emotional-behavioural problems and prosocial behaviours in Vietnamese adolescents and identify the role of social support in these adolescents' strengths and difficulties. In this research, three research questions are proposed:

Question 1. What are the emotional-behavioural difficulties and prosocial behaviour levels among Vietnamese adolescents?

Question 2. Does social support reduce emotional and behavioural difficulties among Vietnamese adolescents?

Question 3. Does social support increase prosocial behaviour among Vietnamese adolescents?

2. MATERIALS AND METHODS

PARTICIPANTS

The present study uses a quantitative cross-sectional research approach. The data was collected by using the convenience sampling method. A sample population involved 582 sixth to ninth-grade students at four secondary schools in the Mekong River Delta of Southern Vietnam who voluntarily participated in the study. Of these students, 287 (49.3%) were male and 295 (50.7%) were female. The Participants ranged from 12 to 15 years old.

RESEARCH INSTRUMENTS

Emotional-behavioural difficulties and prosocial behaviour. The study used the Strengths and Difficulties Questionnaire (SDQ) by Goodman²⁹ to measure emotional-behavioural problems and prosocial behaviour in Vietnamese adolescents. The SDQ is a screening instrument for evaluating children and adolescents' social, emotional, and behavioural functioning, including a 25-item questionnaire. From the 25-item questionnaire, only three out of five scales were used for the present study: emotional difficulties (e.g., "I worry a lot"), conduct problems (e.g., "I get very angry and often lose my temper") and prosocial behaviour (e.g., "I try to be nice to other people. I care about their feelings"). Respondents were requested to indicate how much the attribute applies to them on a threepoint Likert scale from 0 "not true" to 2 "certainly true". Each subscale calculated scores for borderline, "abnormal" to "normal". The Cronbach alpha coefficients for these subscales were 0.64.

Social support. The Multi-Dimensional Scale of Perceived Social Support³⁰ was used in this study. This inventory is comprised of 12 items. Each item is answered on a 5-point Likert-type scale ranging from 1 "strongly disagree" to 5 "strongly agree". There are three subscales represented three sources of support: Significant Other (e.g., "There is a special person who is around when I need"), Family (e.g., "My family really tries to help me") and Friends (e.g., "My friends really try to help me"). The higher the score, the better the social support the adolescents obtained. In this study, Cronbach's alpha coefficient for these subscales was 0.90.

PROCEDURE

This study used a cross-sectional design with self-reported data from a convenient sample. The study was approved by the Science and Education Council of Tra Vinh University (No. 273/QD-DHTV dated 29.8.2022). The Science and Education Council of Tra Vinh University thoroughly assessed the research's benefits, fairness, and all possible sources that might harm the participants and approved the authors' conducting the research.

The consent form was sent to students' parents after permission and approval from the Science and Education Council of Tra Vinh University. Upon receiving the signed consent form, the survey was carried out. Participants have clearly explained the purposes of the research and its contents. Participants were guaranteed that refusing to participate in the study would not harm them, and they could refuse any answers or withdraw from the research at any time. All participants' personal information and answered questionnaires were kept confidential in a secure place and used only for the study.

DATAL ANALYSIS

All the data were processed using SPSS version 22.0. This study used the mean and standard deviation to determine adolescents' emotional-behavioural problems and prosocial behaviour. The correlation was used to assess the significance of the relationship between emotional-behavioural problems and prosocial behaviour and social support. To determine significant differences between males and females and among senior students in emotional-behavioral problems and prosocial behaviour, the study used a T-test and One–way ANOVA. Finally, the study used multiple regression analyses to examine the exact contribution of each specific social support to the criterion of Emotional-behavioral problems and prosocial behaviour.

3. RESULTS

It was observed in Figure 1 that 15.9% presented with high resources in the possible risk of emotional problems, followed by prosocial behaviour problem count for 11.3%. The conduct problems were abnormal in 6.3%. In comparison to the abnormal, the borderlines of behavioural difficulties and prosocial behaviour problems in contrast with emotional issues were found to be higher (13.0% and 15.3%, respectively).

In terms of gender, the independent sample t-test showed that emotional symptoms and prosocial behaviour differed by gender, as female students reported higher compared with male students. Meanwhile, there were no significant gender differences in behavioural difficulties.

About grade, one-way ANOVA analyses in <u>Table 1</u> showed a significant effect of graders on behavioural difficulties; however, follow–up post hoc analyses indicated that eighth and ninth graders had more risk of behavioural problems than sixth and seventh graders (p<0.05). No significant difference in gender was found among emotional symptoms and prosocial behaviour (p>0.05).

The findings of the relationship between emotional-behavioural problems, prosocial behaviour, and social support are presented in <u>Table 2</u>.

The results showed significant correlation coefficients (r) ranging from -0.29 to 0.56 among variables. There were negative correlations between social support and emotional-behavioural difficulties, r < 0.00, p < 0.05 and positive correlation between social support and prosocial behaviour, r > 0.00, p < 0.05.

Multiple regression analysis was used to determine the exact contribution of each social support resource to the criterion of students' emotional-behavioural problems and prosocial behaviour. Table 3 presents the results of mul-

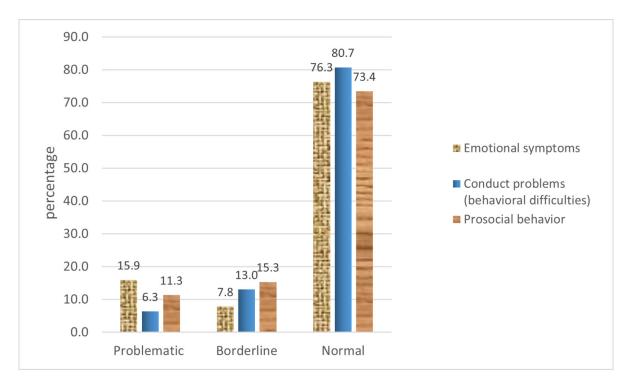


Figure 1. Prevalence of Various Psychological Problems

Table 1. Mean, Standard Deviation, T-Test or ANOVA

Variable		Emotional symptoms			Behavioral difficulties			Prosocial behavior			
		М	SD	t/F	М	SD	t/F	М	SD	t/F	
Gender	Male	2.97	2.15	-7.42**	1.93	1.48	73	6.61	2.02	-2.08*	
	Female	4.42	2.52		2.02	1.49		6.96	1.98		
Grade	6	3.48	2.30	1.03	1.78	1.47	2.80*	6.80	2.18	0.92	
	7	3.69	2.41		1.80	1.53		6.89	1.99		
	8	3.63	2.45		2.13	1.50		6.78	2.05		
	9	4.00	2.62		2.17	1.47		6.73	1.83		
Total		3.69	2.45		1.99	1.50		6.79	2.00		

^{*}p value <.05; **p value <.01

Table 2. Correlation Between Emotional-Behavioural Problems, Prosocial Behaviour and Social Support

Variables	1	2	3	4	5	6
Emotional symptoms (1)	1	.37**				
Conduct problems (2)	.37**	1				
Prosocial behavior (3)	.07	22**	1			
Support from significant others (4)	10 [*]	20**	.34**	1		
Support from friends (5)	17**	29**	.36**	.56**	1	
Support from family (6)	27 ^{**}	34**	.31**	.53**	.50**	1

^{*}p value <.05; **p value <.01

tivariate linear regression on social support affecting adolescents' strengths and difficulties. The results of the regression analysis showed that the models had statistical significance (p<0.05), no multi-collinearity was checked (the tolerance > 0.5, VIF < 2.0), and auto-correlation

(Durbin - Watson statistics ranging from 1.73 to 2.02). Therefore, there was no multi-collinearity and no autocorrelation among social support. Such results confirmed that all models fit the data.

Table 3. Multivariate linear regression to predict adolescents' emotional-behavioural problems and prosocial behaviour

	Model 1. Emotional symptom				Model 2. Behavioral problem				Model 3. Prosocial behavior			
	В	SE	β	t	В	SE	β	t	В	SE	β	t
Support from Significant others	.20	.12	.09	1.74	.05	.07	.04	.77	.28	.09	.16	3.28**
Support from friends	23	.15	08	-1.56	31	.09	18	-3.57**	.50	.11	.22	4.46**
Support from family	75	.13	28	-5.61**	45	.08	27	-5.67**	.25	.10	.12	2.45*
F	16.34					29.5	6		38.46			
R ²	.08				.14				.17			
Durbin - Watson	1.90				1.73				2.02			

^{*}p value <.05; **p value <.01

Model 1 predicted emotional symptoms. There is 8% of the variance in emotional symptoms, which could be explained by resources of social support (R^2 = .08; p < 0.05). Among these predictors, only resources from Family significantly predicted to decrease students' emotional symptoms (β = -.28; p < 0.05). In other words, if students get more support from their Family, their emotional symptoms will be minimized. Resources from significant others and friends failed to achieve statistical significance in order to have effects on emotional symptoms (p > 0.05).

Model 2 predicted behavioural problems. The result showed that 14% of the variance of behavioural problems could be explained by social support (R² = .14; p < 0.05) in which friends and Family had negative influences (β = -0.18, β = -0.27, respectively), which means that support from friends and Family contribute to protecting adolescents from behavioural problems. The resource of significant others did not affect the subscale (p > 0.05).

Model 3 predicted prosocial behaviour. In this model, all resources from friends, Family and specific others significantly predicted to increase students' prosocial behaviour ($\beta > 0.00$; p < 0.05) in which support from friends was the most vital factor associated with students' prosocial behaviour. There was a 17.0% variance in prosocial behaviour that could be explained by this resource ($R^2 = 0.17$; p < 0.05).

4. DISCUSSION

EMOTIONAL AND BEHAVIOURAL DIFFICULTIES AND PROSOCIAL BEHAVIOUR

The results showed that Vietnamese adolescents experienced a level of mental health problems, including behavioural and prosocial problems, which is in line with previous studies. ^{5,6,11} In the current study, emotional problems were the highest, even more than double behavioural difficulties. Also, the prevalence of emotional problems in

the current study seems more elevated than in previous studies. 11,30 Faizi et al. found that the prevalence of conduct problems was 5.56%, and emotional problems were 5.42%.³¹ Another study conducted in Vietnam by Vu et al. also showed the emotional problem to be 13.7% while the behavioural problem was lower (8.9 %).11 An explanation for this result is that at the time of the survey, in Vietnamese education, there was a curriculum reform at the secondary level meeting Circular No. 32/2018/TT-BGDDT of the Minister of Education and Training, 32 which challenged both teachers and students. In addition, students were also in the midterm exam preparation phase, which made adolescents more vulnerable to engaging in risky emotions. A noticeable result in this study is that the behavioural difficulty borderlines were more than double. It is a vital area of concern as previous research has shown that apart from the abnormal score, most of the others found to be false negatives belonged to the borderline score.³³ Regarding prosocial behaviour, although this behaviour is a strength of adolescents, ^{17,18} the prevalence of adolescents' prosocial behaviour in this study was found to be relatively high, which is consistent with previously conducted in Vietnam. 11,19 The borderlines of prosocial behaviour were also higher compared to abnormality.

As far as the emotional-behavioural and prosocial behavioural abnormalities are concerned, the prevalence of the borderlines in these issues should also be followed up and reviewed further for the prevalence and management of mental health problems. Also, the borderline category is essential in the sense that it can be used to intervene for counselling before the adolescents' problem becomes more severe.

GENDER DIFFERENCES

It is important to note that the mental problem of adolescents was relatively different by gender. In line with the ex-

isting previous in the field, the current study revealed that females have significantly higher emotional disorders than males.^{5,11,21} It has been suggested that girls can be vulnerable to emotional problems due to earlier pubertal timing³⁴ and more problems in relationships with parents and peers.³⁵ An explanation for this difference is that female adolescents tend to demonstrate greater interpersonal sensitivity, display more emotional reactions, and had more depressive and anxious temperaments.³⁶ Although females have more emotional difficulties, they have better prosocial behaviour than males, consistent with previous studies.^{11, 22} The evidence supports that females care more about the social context.³⁶

With regards to behavioural problems, no significant difference was found between males and females, which is not in agreement with the existing research, 11,21,37 which males have higher scores on both emotional and behavioural disturbances than female did.

SENIOR STUDENT DIFFERENCE

The literature suggested that during the transition to secondary school, there is an increase in aggression and behavioural difficulties in boys. The current study showed that the more senior students (eighth and ninth graders), the more behavioural problems they got, both male and female. In Vietnam, eighth grade is 13 years old. In this time, boys had voice breaks and girls had menarche. Pubertal timing leads to prevalent psychological crises and disorders. Another reason for the increasing behavioural difficulties in eighth and ninth grade is that middle school students in Vietnam have suffered more psychological difficulties in academic activity, ³⁹ and senior students face more complex and more significant problems as they advance in their education.

THE ROLE OF SOCIAL SUPPORT ON EMOTIONAL BEHAVIORAL DIFFICULTIES AND PROSOCIAL BEHAVIOR

In terms of emotional-behavioural problems, at present, all resources of support have a negative correlation with emotional symptoms and behavioural issues. It suggests that adolescents who lack social support will have difficulties with emotions and behaviours. Considering specific issues, family support uniquely reduces adolescents' emotional symptoms. At the same time, in the behavioural model, friends and Family were predictors of decreased creasing students' conduct problems in the regression model. Pössel et al. found that support from Family is related to depressive symptoms in adolescence, and Family is the most stable source of support throughout adolescence.⁴⁰ In our study, 100% of the subjects lived with their families. In Vietnam, Family is always a shield for children, supporting them from material to spiritual. Family support always seems to be the primary support on which the individual relies. These findings indicate that despite potential decreases in dependence on parents, they retain significant roles in adolescents' lives. These findings support previous literature demonstrating that parental support is essential

for adolescents and crucial in children's positive development and safety promotion. $^{25}\,$

In addition to family support, peer support has an essential impact on building strong relationships and reducing behavioural problems. Attar-Schwartz et al.²⁵ showed that the greater the students' perception of receiving support from their classmates, the lower their exposure to traditional bullying victimisation. However, peer support is less significant than parental support; it is still high and vital.

Regarding prosocial behaviour, in the current study, all social support from friends, Family, and specific others was significantly predicted to increase students' prosocial behaviour, which was consistent with relevant research results. 16,27 It is explained that when students receive good social support, they are more confident leading to an increase in prosocial behaviors. In the current study, support from friends was the most vital factor associated with prosocial behaviour in students. One explanation for this finding is possibly that adolescence is a time of increased sensitivity to peer influence, which treats vulnerabilities and opportunities. Feedback provided by peers is crucial in an actuating change in prosocial behaviour. Moreover, adolescents tend to reduce their dependence on adults while and increasingly seek support from peers. 25 Therefore, peer group support becomes crucial in adolescence. Young people tend to talk and to seek emotion, instruments and other forms of support from friends. Moreover, being surrounded by prosocial peers who offer help is likely to encourage individuals to exhibit prosocial behavior towards others.

5. CONCLUSION

The emotional-behavioural and prosocial behaviour problems were highly prevalent among the adolescent population in Vietnam. Female students tend to have more emotional disorders and better prosocial behaviour than male students. Family support had a central role in its positive contribution to reducing emotional-behavioural and prosocial behaviour problems. The findings in this study demonstrated that adolescents who receive more support from families reduce a range of emotional and behavioural difficulties, and those who have more support from friends decrease only behavioural problems. All resources of social support are predicted to increase students' prosocial behaviours. These findings suggest that school and community mental health in Vietnam awareness programs need to be organized to reduce emotional-behavioural difficulties and encourage prosocial behaviours of adolescents through social support from their families and friends.

LIMITATIONS

Despite the above valuable findings on emotional-behavioural difficulties and prosocial behaviour in Vietnamese adolescents and the role of social support in the Vietnamese context, the current study has some limitations. As the sample of adolescents was selected from four selected schools in a province, the study results can only be generalized to this population and culture. There is a need for more

studies in this area. Future studies should use larger samples with an expansion to a larger population from other provinces in Vietnam. In addition, a convenience sampling procedure could lead to biases in research results. Therefore, future studies should focus on random sampling and use multiple evaluation methods (both students and teachers) to avoid self—report biases.

.....

CONFLICTS OF INTEREST

The authors declare that they have no conflicts of interest.

FUNDING

This study was fully funded by Tra Vinh University under grant contract number 274/2022/HD.HDKH&DT-DHTV

Submitted: March 01, 2024 EST, Accepted: April 22, 2024 EST

REFERENCES

- 1. van Dalen M, Dierckx B, Pasmans SGMA, et al. Anxiety and depression in adolescents with a visible difference: a systematic review and meta-analysis. *Body Image*. 2020;33:38-46. doi:10.1016/j.bodyim.2020.02.006
- 2. Qi M, Zhou SJ, Guo ZC, et al. The effect of social support on mental health in Chinese adolescents during the outbreak of COVID-19. *Journal of Adolescent Health*. 2020;67(4):514-518. doi:10.1016/j.jadohealth.2020.07.001
- 3. World Health Organization (WHO). Mental health of adolescents. 2021. https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health
- 4. Kieling C, Baker-Henningham H, Belfer M, et al. Child and adolescent mental health worldwide: evidence for action. *The Lancet*. 2011;378(9801):1515-1525. doi:10.1016/S0140-6736(11)60827-1
- 5. Fonseca-Pedrero E, Ortuño-Sierra J, Perez-Albeniz A. Emotional and behavioural difficulties and prosocial behaviour in adolescents: A latent profile analysis. *Revista de Psiquiatría y Salud Mental (English Edition)*. 2020;13(4):202-212. doi:10.1016/j.rpsmen.2020.01.003
- 6. Rosenberg ER, Burt KB, Forehand RL, Paysnick AA. Youth self-views, coping with stress, and behavioral/emotional problems: The role of incremental self-theory. *Journal of Child and Family Studies*. 2016;25:1713-1723. doi:10.1007/s10826-015-0346-9
- 7. Pathak R, Sharma RC, Parvan UC, Gupta BP, Ojha RK, Goel NK. Behavioural and emotional problems in school going adolescents. *The Australasian medical journal*. 2011;4(1):15-21. doi:10.4066/AMJ.2011.464
- 8. Tran TLT, Nguyen TP, Giang H. Overview of mental health issues of middle and high school students through studies from 2007 to 2017. *Journal of psychology*. 2018;8(233):1-16.
- 9. Hoang CT, Cao VH, Quach TM, Nguyen TT, Trang TN, Nguyen TMH. Mental health of adolescent. In: *Proceedings of the International Conference of Intervention and Prevention of Mental Health of Vietnamese Children*. Vietnam National university press; 2007:194-203.
- 10. Dang HM, Bahr W, Nguyen CM. Mental health of Vietnamese children: current status of risk factors. In: *Proceedings of the International Conference of Health Functioning and Challenges among Vietnamese Children*. Vietnam National university press; 2013.

- 11. Vu TL, Luong XH, Le TH, Thanh NM, Do MH. Reality of Mental Health of Hanoi Secondary Students According to SDQ Scale in 2015. *Ho Chi Minh City Journal of Medicine*. 2018;22(4):266-272.
- 12. Levesque RJR. Externalizing and internalizing symptoms. In: Levesque R, ed. *Encyclopedia of Adolescence*.; 2011:903-905. doi:10.1007/978-1-4419-1695-2
- 13. von Simson K, Brekke I, Hardoy I. The impact of mental health problems in adolescence on educational attainment. *Scandinavian Journal of Educational Research*. 2022;66(2):306-320. doi:10.1080/00313831.2020.1869077
- 14. Flouri E, Sarmadi Z. Prosocial behavior and childhood trajectories of internalizing and externalizing problems: The role of neighborhood and school contexts. *Developmental Psychology*. 2016;52(2):253-258. doi:10.1037/dev0000076
- 15. Mesurado B, Richaud MC. The relationship between parental variables, empathy and prosocial-flow with prosocial behavior toward strangers, friends, and family. *Journal of Happiness Studies*. 2017;18:843-860. doi:10.1007/s10902-016-9748-7
- 16. Fu W, Wang C, Chai H, Xue R. Examining the relationship of empathy, social support, and prosocial behavior of adolescents in China: A structural equation modeling approach. *Humanities and Social Sciences Communications*. 2022;9(1):1-8. doi:10.1057/s41599-022-01296-0
- 17. Martela F, Ryan RM. Prosocial behavior increases well-being and vitality even without contact with the beneficiary: Causal and behavioral evidence. *Motivation and emotion*. 2016;40:351-357. doi:10.1007/s11031-016-9552-z
- 18. Fu X, Padilla-Walker LM, Brown MN. Longitudinal relations between adolescents' self-esteem and prosocial behavior toward strangers, friends and family. *Journal of Adolescence*. 2017;57:90-98. doi:10.1016/j.adolescence.2017.04.002
- 19. Nguyen MT, Tran TTM, Nguyen HTL, et al. Mental health situation and related factors among secondary school students in Hue city. *Vietnam Journal of Public Health*. 2022;61:31-44. doi:10.53522/ytcc.vi61.03
- 20. Keyho K, Gujar NM, Ali A. Prevalence of mental health status in adolescent school children of Kohima District, Nagaland. *Ann Indian Psychiatry*. 2019;3(1):39-42. doi:10.4103/aip.aip 52 18

- 21. Charbonneau AM, Mezulis AH, Hyde JS. Stress and emotional reactivity as explanations for gender differences in adolescents' depressive symptoms. *Journal of youth and adolescence*. 2009;38:1050-1058. doi:10.1007/s10964-009-9398-8
- 22. Keskin G, Cam O. Adolescents' strengths and difficulties: approach to attachment styles. *Journal of psychiatric and mental health nursing*. 2010;17(5):433-441. doi:10.1111/j.1365-2850.2009.01540.x
- 23. Heerde JA, Hemphill SA. Examination of associations between informal help-seeking behavior, social support, and adolescent psychosocial outcomes: A meta-analysis. *Developmental Review*. 2018;47:44-62. doi:10.1016/j.dr.2017.10.001
- 24. Guntzviller LM, Williamson LD, Ratcliff CL. Stress, social support, and mental health among young adult Hispanics. *Family & community health*. 2020;43(1):82-91. doi:10.1097/FCH.00000000000000224
- 25. Attar-Schwartz S, Mishna F, Khoury-Kassabri M. The role of classmates' social support, peer victimization and gender in externalizing and internalizing behaviors among Canadian youth. *Journal of Child and Family Studies*. 2019;28:2335-2346. doi:10.1007/s10826-017-0852-z
- 26. Bjørlykhaug KI, Karlsson B, Hesook SK, Kleppe LC. Social support and recovery from mental health problems: A scoping review. *Nordic social work research*. 2022;12(5):666-697. doi:10.1080/2156857X.2020.1868553
- 27. Guo Y. The Influence of Social Support on the Prosocial Behavior of College Students: The Mediating Effect Based on Interpersonal Trust. *English Language Teaching*. 2017;10(12):158-163. doi:10.5539/elt.v10n12p158
- 28. Li J, Yao M, Liu H. From social support to adolescents' subjective well-being: The mediating role of emotion regulation and prosocial behavior and gender difference. *Child Indicators Research*. 2021;14(29):77-93. doi:10.1007/s12187-020-09755-3
- 29. Goodman R. Psychometric properties of the strengths and difficulties questionnaire. *Journal of the American Academy of Child & Adolescent Psychiatry*. 2001;40(11):1337-1345. doi:10.1097/00004583-200111000-00015
- 30. Zimet GD, Dahlem NW, Zimet SG, Farley GK. The multidimensional scale of perceived social support. *Journal of personality assessment*. 1988;52(1):30-41. doi:10.1207/s15327752jpa5201_2

- 31. Faizi N, Azmi SA, Ahmad A, Shah MS. Assessment of psychological problems in schoolgoing adolescents of Aligarh. *Industrial psychiatry journal*. 2016;25(2):184. doi:10.4103/ipj.ipj 65 14
- 32. Ministry of Education and Training (MOET). *Circular No. 32/2018/TT-BGDDT Promulgation of the New General Education Curriculum.*; 2018.
- 33. Goodman R, Ford T, Simmons H, Gatward R, Meltzer H. Using the Strengths and Difficulties Questionnaire (SDQ) to screen for child psychiatric disorders in a community sample. *The British journal of psychiatry*. 2000;177(6):534-539. doi:10.1192/bjp.177.6.534
- 34. Ge X, Conger RD, Elder GH Jr. Pubertal transition, stressful life events, and the emergence of gender differences in adolescent depressive symptoms. *Developmental psychology*. 2001;37(3):404-417. doi:10.1037/0012-1649.37.3.404
- 35. Leadbeater BJ, Kuperminc GP, Blatt SJ, Hertzog C. A multivariate model of gender differences in adolescents' internalizing and externalizing problems. *Developmental Psychology*. 1999;35(5):1268-1282. doi:10.1037/0012-1649.35.5.1268
- 36. Kim YH. Correlation of mental health problems with psychological constructs in adolescence: Final results from a 2-year study. *International journal of nursing studies*. 2003;40(2):115-124. doi:10.1016/S0020-7489(02)00037-8
- 37. Plenty S, Östberg V, Almquist YB, Augustine L, Modin B. Psychosocial working conditions: An analysis of emotional symptoms and conduct problems amongst adolescent students. *Journal of adolescence*. 2014;37(4):407-417. doi:10.1016/j.adolescence.2014.03.008
- 38. Yoon Y, Eisenstadt M, Lereya ST, Deighton J. Gender difference in the change of adolescents' mental health and subjective wellbeing trajectories. *European Child & Adolescent Psychiatry*. 2023;32(9):1569-1578. doi:10.1007/s00787-022-01961-4
- 39. Thuy NT, Lang NT. Coping Behaviors and Psychological Difficulties: A case study of Middle School Students in Vietnam. *Cyprus Turkish Journal of Psychiatry & Psychology*. 2023;5(4):313-321. doi:10.35365/ctjpp.23.4.03
- 40. Pössel P, Burton SM, Cauley B, Sawyer MG, Spence SH, Sheffield J. Associations between social support from family, friends, and teachers and depressive symptoms in adolescents. *Journal of youth and adolescence*. 2018;47:398-412. doi:10.1007/s10964-017-0712-6