



Predicting students' subjective well-being at school based on their coping strategies: A case study on Vietnamese adolescents

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ABSTRACT

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Numerous studies have demonstrated a strong correlation between an individual's coping abilities and their overall mental health and sense of well-being. This study seeks to examine the impact of coping strategies on the well-being of middle and high school students in Vietnam. A total of 1,268 students from various regions in Vietnam were selected as a convenience sample. The average age of the participants was 12.17 years ($SD = 1.26$). Data was collected through questionnaires utilizing the Proactive Coping Inventory (PCI) and the School Well-being Scale (SWB). The primary findings indicate that Vietnamese students exhibit a relatively high level of well-being in school and tend to employ various intertwined coping strategies, with avoidance coping being the least utilized. Furthermore, the results suggest that positive coping mechanisms are positively associated with school well-being; proactive coping, reflective coping, and emotional support-seeking strategies were identified as predictors of changes in students' well-being at school. Understanding the potential impact of coping strategies on feelings of well-being can offer valuable insights to support the development of prevention programs, training, and guidance to foster appropriate and effective coping strategies among students.

Contribution/Originality: In Vietnamese culture, male chauvinism causes more anxiety in male students than females in this study. Coping mechanisms for school-related anxiety among Vietnamese teens are lacking, with proactive strategies being the most beneficial for students' well-being in academics.

1. INTRODUCTION

The subjective well-being of students in educational settings is a complex concept that has drawn increased attention from educators, psychologists, and policymakers alike, especially in the context of adolescents' academic and personal growth.

Adolescence is a period of upheaval, characterized by significant changes in physical, cognitive, and emotional domains, as well as social roles and positions, which have profound implications for health and happiness in later life (Azzopardi et al., 2019). Changes during this phase give rise to novel, more frequent, and more challenging issues for young individuals. Research indicates that adolescents frequently experience stressors related to school, such as academic pressure and bullying, as well as stressors linked to interpersonal relationships, such as conflicts within

the family and with peers (Zammuner, 2019). These stressors have significant impacts on psychological problems, including emotional instability as well as the risk of internalizing disorders (e.g., depression, anxiety) and externalizing disorders (e.g., behavioral problems) (Donaldson, Prinstein, Danovsky, & Spirito, 2000; Hampel & Petermann, 2005; Izard & Trentacosta, 2020).

In comparison to other life stages, adolescence can be viewed as a period that demands heightened adaptability to navigate and respond to changes and challenges in both the internal and external environment. Consequently, adolescents' ability to cope with these changes and challenges is crucial, influencing their emotional and behavioral expressions (Keyes, Shmotkin, & Ryff, 2002) and, in turn, impacting their subjective well-being.

The primary objective of this research is to investigate the relationship between students' coping strategies and their subjective well-being in a school environment, focusing specifically on Vietnamese adolescents. Coping strategies refer to individuals' cognitive and behavioral efforts to manage stress, adversity, and challenges they encounter daily. Understanding how different coping strategies are associated with students' subjective well-being can provide valuable insights for educators, counselors, and policymakers in designing interventions and support systems that promote students' overall well-being and resilience.

1.1. Research Questions

1. What are the predominant coping strategies employed by Vietnamese adolescents to deal with stress and the challenges encountered in a school environment?
2. How do these coping strategies relate to students' subjective well-being at school?
3. Are there differences in coping strategies and subjective well-being based on factors such as gender, grade level, or socioeconomic status?
4. To what extent do specific coping strategies mediate the relationship between stressors and students' subjective well-being?
5. What implications do these findings have for developing interventions to enhance students' subjective well-being and resilience in Vietnamese educational settings?

2. LITERATURE OF REVIEW

2.1. Students Coping and Coping Strategies

Lazarus and Folkman (1984) posited that effective coping entails the adaptive and ongoing adjustment of cognitive and behavioral efforts to effectively handle internal and/or external pressures that are perceived to exceed an individual's capabilities. They delineated two primary coping mechanisms: emotion-focused and problem-focused strategies. Emotion-focused coping tends to be employed when individuals believe they are unable to alter adverse, threatening, or challenging circumstances. Skinner and Wellborn (1994) consider manifestations such as the mind going blank, feeling worthless, or feeling stupid, as ways of coping when an individual is faced with difficulties. Meanwhile, Compas, Connor-Smith, Saltzman, Thomsen, and Wadsworth (2001) consider coping as "conscious and volitional efforts to regulate emotion, cognition, behavior, physiology, and the environment in response to stressful events or circumstances". Coping is seen as a process that requires individual efforts in response to a stressful event. Coping styles or strategies refer to how individuals detect, evaluate, resolve, and learn from a stressful event (Skinner & Zimmer-Gembeck, 2016). Thus, coping strategy is a set of relatively consistent behaviors that a person uses to cope with stressful situations. Allen and Leary (2010) proposed six main coping strategies: positive cognitive restructuring, problem solving, seeking support, distraction, escape/avoidance, and proactive coping (Allen & Leary, 2010). These are strategies concretized from the two groups proposed by Lazarus and Folkman.

Many scales of coping strategies have been developed and used in research fields, including psychology. Some scales of coping strategies, such as the Ways of Coping Questionnaire (WCQ) (Folkman & Lazarus, 1988), the Coping Inventory (COPE) (Carver, Scheier, & Weintraub, 1989), the Pain Coping Inventory (Kraaimaat, Bakker, &

Evers, 1997), and the Coping Inventory for Stressful Situations (Endler & Parker, 1990, 1994), have been frequently used.

While searching and considering tools of measurement to conduct our survey on the target group of Vietnamese teenagers, the research team used the Proactive Coping Inventory (PCI) developed by Greenglass, Schwarzer, Jakubiec, Fiksenbaum, and Taubert (1999) to measure seven types of coping strategies—proactive coping, reflective coping, strategic planning, preventive coping, instrumental support seeking, emotional support seeking, and avoidance coping—among adolescents. Six of the strategies focus on positive responses involving proactive actions, envisioning and planning for potential situations in the future, and accumulating and utilizing resources that can strengthen the coping process. According to Greenglass et al. (1999) the proactive coping strategy is described as a process through which people anticipate or detect potential stressors and act in advance to prevent them. It involves establishing and implementing goals with autonomy and self-determination and proactively striving to improve oneself and the environment instead of just reacting to the adversity that has occurred. Proactive coping is not just a single reaction, but a way of looking at oneself and the world around, an existential belief that everything happens not by luck or other uncontrollable factors, but due to human impact. Proactive coping can eliminate a lot of stress and challenges before they actually happen.

In addition to proactive coping, there are five other strategies that Greenglass et al. (1999) considered to be positive. A reflective coping strategy is the simulation and contemplation of multiple possible behavioral alternatives by comparing their imagined effectiveness. According to Greenglass et al. (1999) this strategy requires individuals to think critically, analyze real problems and resources, and create hypothetical action plans. Another strategy is strategic planning, which focuses on building a goal-oriented course of action in which big tasks are broken down into smaller, more feasible and more manageable tasks.

A preventive coping strategy involves predicting and preparing for potential stressors before they develop. Preventive coping is different from proactive coping in that it targets potential future threats that are predicted through knowledge and experience, while proactive coping behaviors are not threat-based but are motivated by the desire to achieve goals related to improving personal or environmental aspects.

Greenglass and his colleagues also mentioned the instrumental support-seeking strategy, which focuses on soliciting advice, information, and feedback from one's social network when faced with stressors. In contrast, the goal of the emotional support-seeking strategy is to temporarily regulate negative emotions by sharing with others, eliciting empathy and seeking companionship. It is emotional self-regulation with support from friends and family.

The only negative coping subscale mentioned in the PCI is avoidance coping, which is also the only subscale shown to be negatively correlated with proactive coping (Greenglass et al., 1999). Avoidance coping involves avoiding stressful situations or delaying actions.

2.2. Students' Well-being in School

Well-being is considered a sense of fulfillment, including physical and mental health and material security for one's existence. Well-being can be divided into internal/subjective and external/objective. Subjective well-being is a subjective psychological phenomenon and has different meanings for different people. According to Diener (1984) subjective well-being is defined as the way that people perceive their lives, both in the present and in the past. This includes people's emotional reactions to events, their moods, and the judgments they form about their life satisfaction, and satisfaction with domains such as marriage and work (Diener, Oishi, & Lucas, 2003). Subjective well-being is a multidimensional construct including both positive emotional experiences and cognitive components (Diener, 1984, 2001).

Research into children's subjective well-being has only recently progressed, largely due to developments in theories of childhood, children's rights legislation and positive social science (Savahl et al., 2015). Researchers say that children's happiness cannot be measured by a single domain or indicator. Children's lives include many

domains and each has an impact on their well-being (Bradshaw & Mayhew, 2005; Hanafin & Brooks, 2005). According to Jonathan Bradshaw, Keung, Rees, and Goswami (2011) children's subjective well-being is expressed in three dimensions—personal well-being, relationship well-being (interpersonal relationship), and school well-being (environment). Thus, it can be said that school well-being is one of the factors of overall well-being in children because for a long time before adulthood, children's activities and experiences are closely related to their schools. Konu, Lintonen, and Rimpelä (2002) and Konu and Rimpelä (2002) proposed the "School Well-being Model", which comprises four factors that impact children's school well-being: physical conditions at school, social relationships, means for self-fulfillment, and health status. Hascher (2008) also attempted to define and measure well-being at school based on six dimensions: Positive attitudes and emotions toward school; enjoyment in school; positive academic self-concept; (absence of) physical complaints in school; (absence of) social problems in school; and (absence of) school worries. In this study, children's well-being at school includes having positive and supportive relationships with teachers, friends and other adults at school; feeling safe, valued and respected; feelings of morality in school community; participating actively and meaningfully in academic and social activities; feelings of belonging, as well as satisfied with school life.

Inheriting the views of Diener (1984) and Randolph, Kangas, and Ruokamo (2009) supposed that overall well-being (a quality life) includes positive assessments of life satisfaction as well as a lack of negative assessments about oneself, family, school, friends, and living environment. Accordingly, school well-being is considered as the level of students' satisfaction across all dimensions, including overall school satisfaction, school climate, intelligence and ability grouping, and academic achievement.

Although the concept of children's subjective well-being at school is still new and unclear in different approaches, Randolph, Kangas and Ruokamo's definition of school well-being based on a psychological approach has emphasized its subjectivity and multidimensionality. Therefore, the research team chose the following concept as the theoretical basis of the current study: *Students' school well-being is considered as the level of their satisfaction across all dimensions, including overall school satisfaction, school climate, and academic achievement. In particular, school climate includes aspects of relationships, feelings of safety, and school activities.*

Based on this concept, in a study in Vietnam, Tran, Ngo, and Nguyen (2019) built and adapted a scale to evaluate students' well-being at school – the School Well-being questionnaire (SWB) – which comprises 39 items. To evaluate the internal consistency of the sub-scales and the overall scale of the SWB, the authors conducted factor analysis using principal component analysis with varimax rotation using SPSS software. The statistical analysis results showed nine factors on the SWB scale, explaining 61.27% of the variation of the variables. However, when considering the variables in each factor, the authors found that the internal consistency of some factors was quite low. Therefore, they re-implemented the factor analysis and chose to extract six factors, with loading coefficients from 0.40, and found that the six factors explained 52.88% of the variation of the variables, with factor loadings varying from 0.401 to 0.781.

Thus, the six subscales of the SWB include four positive aspects (satisfaction with school facilities; satisfaction with teachers and school rules; satisfaction with activities; and satisfaction with peer relationships) and two negative aspects (academic anxiety and anxiety about school safety).

2.3. Coping Strategies and Subjective Well-being in Students

Research has investigated the impact of coping strategies on mental health in general, and subjective well-being in particular. Fierro-Hernández and Rodríguez (2002) surveyed a sample of college students and found that coping responses correlated with subjective well-being. According to them, students' subjective well-being negatively correlates with passive or emotion-focused coping strategies. Similarly, Barrón, Castilla, Casullo, and Verdú (2002) reported that well-being is significantly positively correlated with problem-focused coping and social support-seeking and negatively correlated with emotion-focused strategies.

Korpela et al. (2018) studied the correlation between subjective well-being and the frequency and effectiveness of coping strategies in regulating emotions in general, and sadness in particular. The authors found a positive correlation between pleasant activities, positive thinking, problem-directed action and cognitive reappraisal with aspects of well-being. Similarly, in the Asian population, positive reinterpretation of stressful events, proactive coping and strategic planning were the coping responses positively correlated with life satisfaction and positive emotions. In contrast, mental disengagement, denial, and behavioral disengagement were found to be negatively related to subjective well-being (Chang et al., 2020).

Mayordomo-Rodríguez, Meléndez-Moral, Viguer-Segui, and Sales-Galán (2015) found that teenagers' coping strategies can significantly predict the variation of well-being levels. They also found that problem-focused coping strategies positively predict well-being, while emotion-focused coping strategies have a negative impact on subjective well-being. Zammuner (2019) confirmed that the tendency to use coping strategies is significantly related to adolescents' level of well-being. Avoidance coping was found to be a strategy negatively correlated with most health indicators, predicting higher levels of loneliness and lower health perceptions. Conversely, social support-seeking and problem-solving strategies were considered predictors for lower levels of perceived social loneliness and higher levels of positive emotions and overall satisfaction with life.

Using the PCI, a study by Kumar and Bharti (2018) on a group of Indian students showed that proactive coping, strategic planning, preventive coping, instrumental and emotional support-seeking strategies were all positively correlated with well-being in general, and some aspects in particular. Proactive coping significantly predicted different aspects of well-being. In contrast, the avoidance coping strategy was negatively related to several aspects of subjective well-being, including purpose in life and self-acceptance. Vaculíková and Soukup (2019) conducted a study on a sample of students and found that proactive coping directly contributed to improving students' well-being while also acting as a mediating variable in the relationship between social support and subjective well-being. Proactive coping has also been shown to be a mediator in the association between subjective well-being and students' environmental engagement (Bogdan, Rioux, & Negovan, 2012).

As can be seen, determining which coping strategies are considered predictive factors for well-being could help develop more practical, more scientific, and more appropriate propositions for coping responses in adolescents. However, few studies have delved into the relationship between these two factors in Vietnam. Therefore, the current study aims to find and clarify the coping strategies among Vietnamese secondary school students, their school well-being, and the relationship between them. Some independent variables, such as age, gender, grade, and academic achievements, were also included to examine their influence on the coping responses and school well-being of the research participants and to construct a predictive model for school well-being. It is hypothesized that higher levels of positive coping strategies will be related to higher levels of school well-being in students.

3. METHOD

3.1. Study Design

The study has a cross-sectional design and uses a convenient sampling method, with the sample group selected from secondary school students in several provinces of Vietnam. All data was collected in September 2023. The research team contacted the administrators of secondary schools in the study area to ask for their assistance to connect with homeroom teachers who would then send invitations to participate in the research to the students. The students were requested to ask for their parents' permission to participate in the survey. Students who were given permission by their parents were sent confirmation of participation through the teacher, and then the authors sent the survey accompanied by an empty envelope for them to return the completed questionnaire, ensuring anonymity and confidentiality. The surveys were collected through the homeroom teachers. The teachers were also required to emphasize to the students the importance of supplying truthful answers.

3.2. Participants

The study was conducted on 1,268 secondary school students randomly sampled in Hanoi city (three schools) and Vinh Yen province (three schools) in Vietnam, of which 39.6% were male ($N = 502$) and 60.4% were female ($N = 766$). The average age of the participants was 12.17 ($SD = 1.26$), ranging from 10 to 16 years old, of which 27.3% were 6th grade students ($N = 346$), 21.8% were 7th grade students ($N = 276$), 23.2% were in the 8th grade ($N = 294$), and 27.8% were in the 9th grade ($N = 352$).

3.3. Measurements

3.3.1. Proactive Coping Inventory

The Proactive Coping Inventory (PCI) consists of a 55-item scale developed by Greenglass et al. (1999). This self-administered measure includes seven distinct subscales: Proactive coping, reflective coping, strategic planning, preventive coping, instrumental support seeking, emotional support seeking, and avoidance coping. The participants rated each item on a 4-point Likert scale, with responses ranging from "not at all true" to "completely true." Some items were reverse scored, with ratings of 1 corresponding to 4, 2 to 3, 3 to 2, and 4 to 1. The average score for each subscale was calculated based on the individual item scores, reflecting the frequency of strategy use in response to daily challenges. A higher average score indicates a greater utilization of coping strategies, while a lower score suggests the opposite.

The PCI was translated into Vietnamese by two independent translators, a psychologist and a professional translator. Next, the two translations were discussed and integrated, then used for a pilot survey on 50 randomly selected secondary school students. After the pilot survey, the research team discovered several items that were not suitable for Vietnamese culture and/or for the target participants, including item 35: "*I develop my job skills to protect myself against unemployment*" and item 39: "*I try to manage my money well in order to avoid being destitute in old age*." The two items were respectively revised to "*I develop my study skills to help me adapt to the school environment*" and "*I try to manage my money well to prepare for unexpected situations*." After editing and adjusting, the team continued the trial with 50 new subjects. This time, the scale had no problems, and this version was used for the study.

In this study, the Cronbach's alpha values of the subscales range from 0.783 to 0.928 (see Table 1), and the item-total correlation coefficients range from 0.741 to 0.926, showing that the subscales of the proactive coping scale is highly reliable and can be used for analysis.

Table 1. Reliability of subscales in the proactive coping inventory.

Subscale	Number of items (N)	α
Proactive coping (PC)	14	0.783
Reflective coping (RC)	11	0.928
Strategic planning (SP)	4	0.881
Preventive coping (PrC)	10	0.928
Instrumental support seeking (ISS)	8	0.905
Emotional support seeking (ESS)	5	0.878
Avoidance coping (AC)	3	0.824

3.3. School Well-being Questionnaire

The School Well-being Questionnaire is a scale built and applied to a group of Vietnamese students to evaluate children's satisfaction and quality of life in the school environment (Tran et al., 2019). The SWB comprises 39 items, with three fillers and 36 others assessing students' well-being at school in six aspects: (1) satisfaction with school facilities; (2) satisfaction with teachers and school rules; (3) academic anxiety; (4) satisfaction with activities; (5) anxiety about school safety; (6) satisfaction with peer relationships. Each item is rated on a 5-point Likert scale: 1 – Strongly disagree, 2 – Disagree, 3 – Partly agree, 4 – Agree, 5 – Strongly agree. The level of students' feeling in relation to each aspect is evaluated by the average score of the items constituting that aspect. The overall student

satisfaction score is the average of all items, in which the items of two subscales (academic anxiety and anxiety about school safety) are reversed.

The data analysis results presented in Table 2 show that the Cronbach's alpha of the whole scale and the subscales measured on Vietnamese secondary school students is generally high, with overall reliability coefficients reaching $\alpha = 0.894$, α values of the subscales ranging from 0.756 to 0.938, and item-total correlation coefficients ranging from 0.593 to 0.942.

Table 2. Reliability of subscales in the school well-being questionnaire.

Subscale	Number of items (<i>N</i>)	α
Overall school well-being	36	0.894
Satisfaction with school facilities	10	0.938
Satisfaction with teachers and school rules	7	0.927
Academic anxiety*	9	0.904
Satisfaction with activities	3	0.890
Anxiety about school safety*	4	0.809
Satisfaction with peer relationships	3	0.756

Note: * Reversed subscale.

3.4. Data Analysis and Statistical Methods

The dimensions of the coping strategies and perceived school well-being were examined and tested according to the original scales. The level of coping responses and the level of overall school well-being and its components were considered based on the mean score (*M*). The research team used canonical correlation analyses to evaluate the overall strength of the relationship between coping strategies and students' school well-being. A linear regression model with enter statistics was used to analyze the variance in students' school well-being when their coping strategies influenced this dependent variable.

The study has three related hypotheses as follows:

H₁: When facing stressful situations at school, Vietnamese students often use positive rather than negative coping strategies.

H₂: Vietnamese students have a relatively high level of school well-being.

H₃: Positive coping strategies positively correlate with students' school well-being and predict an increase of this variable.

4. RESULTS

4.1. Secondary School Students' Self-Assessment of Coping Strategies

In general, the coping responses used by the research participants were relatively uniform. The Pearson correlation results also showed positive pairwise correlations between all subscales of the PCI. This shows that the secondary school students in the study used several different coping strategies simultaneously. Among them, the AC strategy was used the least ($M = 2.68$, $SD = 0.86$); on the contrary, the RC ($M = 3.08$, $SD = 0.64$) and PrC strategies ($M = 3.07$, $SD = 0.65$) were the most used (see Table 3).

Table 3. Students' self-assessment of coping strategies.

Measure	M	SD	PC	RC	SP	PrC	ISS	ESS	AC
Proactive coping (PC)	2.90	0.45	-						
Reflective coping (RC)	3.08	0.64	0.718**	-					
Strategic planning (SP)	2.96	0.78	0.751**	0.768**	-				
Preventive coping (PrC)	3.07	0.65	0.769**	0.863**	0.832**	-			
Instrumental support seeking (ISS)	2.96	0.68	0.611**	0.725**	0.699**	0.781**	-		
Emotional support seeking (ESS)	2.88	0.80	0.572**	0.607**	0.644**	0.664**	0.804**	-	
Avoidance coping (AC)	2.68	0.86	0.274**	0.481**	0.421**	0.470**	0.593**	0.572**	-

Note: ** $p < 0.01$.

In addition, when analyzing the mean difference with the t-test, ANOVA and Pearson correlation, the research team did not find any statistically significant difference in the level of use of coping strategies between students divided by gender, grade, academic ability or age.

4.2. Secondary School Students' Self-Assessment of School Well-Being

Table 4 presents the level of well-being at the school among the sample. Accordingly, the students self-assessed their well-being at school at an average level ($M = 3.49$, $SD = 0.50$). In particular, their satisfaction with activities, satisfaction with teachers and school rules, satisfaction with school facilities, and satisfaction with peer relationships were all at a relatively high level. In addition, students' anxiety at school was at an average level. The students were somewhat more worried about safety at school ($M = 3.37$, $SD = 0.99$) than about academic problems ($M = 2.98$, $SD = 0.93$) (see Table 4).

Table 4. Students' self-assessment of school well-being.

Measure	M	SD
Overall school well-being (SWB)	3.49	0.50
Satisfaction with school facilities	3.79	0.81
Satisfaction with teachers and school rules	3.85	0.79
Academic anxiety*	2.98	0.93
Satisfaction with activities	3.95	0.87
Anxiety about school safety*	3.37	0.99
Satisfaction with peer relationships	3.72	0.85

Note: * Reversed subscale.

Using the independent sample t-test on the level of school well-being as well as its aspects on the sample group, the research obtained some significant results, presented in Table 5. The results show that the male students have a higher level of academic anxiety than the females, with the mean difference (MD) reaching 0.25. At the same time, male students are also more worried about safety at school than female students; however, the difference in this aspect is not as large as anxiety about academic problems ($MD = 0.15$). The study did not find significant differences between the male and female student groups in the remaining aspects as well as well-being at school.

Table 5. Differences in well-being at school among secondary school students by gender.

Measure	Male (N = 502)		Female (N = 766)		t(1266)	MD
	M	SD	M	SD		
Academic anxiety	3.13	1.04	2.88	0.84	4.659*	0.25
Anxiety about school safety	3.46	0.99	3.31	0.99	2.683	0.15

Note: * $p < 0.001$; MD = Mean difference.

The Pearson correlation analysis presented in Table 6 shows correlations between age and the level of well-being at school as well as some component aspects. It can be seen that students' age had a relatively weak positive correlation with academic anxiety as well as anxiety about school safety. This means that the older a student is, the more worried he/she is about academic problems and safety at school. In contrast, the overall well-being at school has a weak, negative correlation with students' age, which means that older students have lower levels of well-being and satisfaction at school.

Table 6. Correlation between age and school well-being.

Variable	Age
Academic anxiety	0.342**
Anxiety about school safety	0.181**
Overall school well-being	-0.134**

Note: ** $p < .01$.

4.3. Predictive Ability of Coping Strategies on School Well-being of Middle-High School Students

The results in Table 7 show that, except for the AC strategy, all remaining strategies positively correlate with students' school well-being, with r values ranging from 0.296 to 0.471 ($p < 0.01$).

Table 7. Correlation between coping strategies and school well-being.

Measure	Overall school well-being
Proactive coping	0.471**
Reflective coping	0.296**
Strategic planning	0.351**
Preventive coping	0.366**
Instrumental support seeking	0.324**
Emotional support seeking	0.387**
Avoidance coping	0.029

Note: ** $p < 0.01$.

Linear regression was used to understand the predictive ability of coping strategies for well-being at school among secondary school students in the study. When considering the six coping strategies measured by the PCI simultaneously (except avoidance coping), multiple linear regression (see Table 8) shows that these six strategies could explain 25.5% of the variation in students' school well-being. Among them, three strategies can directly explain this variation: Proactive coping, reflective coping and emotional support seeking. The proactive coping strategy had the most significant impact on students' well-being, with $\beta = 0.464$. In contrast, the reflective coping strategy had a negative impact on students' well-being, with $\beta = -0.185$.

Table 8. Linear regression model with the dependent variable (students' school well-being).

Variable	B	SE	β	t	p
PC	0.512	0.045	0.464	11.461	0.000
RC	-0.143	0.039	-0.185	-3.713	0.000
SP	-0.034	0.030	-0.053	-1.128	0.260
PrC	0.074	0.047	0.097	1.569	0.117
ISS	-0.057	0.036	-0.078	-1.568	0.117
ESS	0.165	0.026	0.266	6.336	0.000
R				0.508	
R ²				0.258	
aR ²				0.255	
F (6, 1261)				73.232**	
Durbin-Watson				1.895	

Note: aR² stands for adjusted R-squared.

PC = Proactive coping; RC = Reflective coping; SP = Strategic planning; PrC = Preventive coping; ISS = Instrumental support seeking; ESS = Emotional support seeking; ** $p < 0.001$.

5. DISCUSSION

The current study's results show that secondary school students used several coping strategies in parallel, and the level of use of coping strategies was at an average level. There were no differences between the male and female groups in the level of use of each strategy. This result is different from the study of Greenglass et al. (1999) which found that female students scored higher than male students on both the ISS and ESS subscales, meaning that when facing stress, female students are more likely than males to seek advice, information, practical support and emotional support from others.

The study group's self-assessment of well-being at school was at an average level, in which all aspects of satisfaction were relatively high, and two subscales measuring student anxiety scored at an average level, similar to the study by Tran et al. (2019). The independent sample t-test shows that male students have a higher level of anxiety about safety at school than female students. In Vietnam, the problem of school violence seems to occur more

commonly among male students than among female students, leading to more safety concerns among males when going to school.

The study also shows differences in academic anxiety levels by gender, in which male students have higher anxiety levels than female students. Students' academic anxiety in relation to gender has been the focus of many studies. [Attri \(2013\)](#) concluded that female students have higher academic anxiety and, therefore, higher academic performance than male students. Research by [Hill et al. \(2016\)](#) also showed that female students have higher levels of academic anxiety than male students, and this result is true for both elementary and secondary school students. On the other hand, in several other studies on secondary school students ([Bihari, 2014](#)) and high school students ([Banga, 2014](#)) the authors did not find any differences between gender groups regarding academic anxiety. Previous studies have shown different, even contradictory, results to this study. This can be explained from a cultural perspective. In Vietnamese culture in particular and Eastern cultures in general, the views of "male chauvinism" and "bearing sons to perpetuate the family lineage" are still quite popular. These views are used by parents when educating their children, especially boys. From there, male students unintentionally feel more pressure than female students to achieve high academic results, and therefore have higher levels of academic anxiety.

Students' age has a relatively weak positive correlation with academic anxiety and anxiety about school safety. The increase in academic anxiety with age can be explained by the fact that older students are getting closer to the transition exam (high school entrance exam) – an exam considered quite "fierce" in many provinces/cities of Vietnam. Therefore, older students often have more worries about learning. In addition, witnessing and/or experiencing school safety problems, such as bullying, may be the reason for increased levels of anxiety about safety at school over time.

On the contrary, overall, the well-being at school of the students in the study decreased with age. This is similar to some previous studies. [Casas, Tiliouine, and Figuer \(2014\)](#) conducted a comparative analysis with samples of adolescents aged 13–20 in Algeria and Spain and found that subjective well-being decreased significantly in both countries according to age. Research by [Casas and González-Carrasco \(2019\)](#) also showed that children's well-being begins to decline at around age 10 in most countries or even earlier in others ([Casas & González-Carrasco, 2019](#)). According to the hypothesis of [Goldbeck, Schmitz, Besier, Herschbach, and Henrich \(2007\)](#) this is a normal developmental phenomenon; this decrease can begin around age 10 depending on the micro environment (i.e., family, school) and macro environment (i.e., country, cultural context).

Correlation analysis shows that secondary students' school well-being is positively correlated with all of the positive coping subscales, including PC, RC, SP, PrC, ISS and ESS. This is similar to previous studies ([Chang et al., 2020](#); [Kumar & Bharti, 2018](#)). However, while the AC strategy is thought to be negatively correlated with well-being ([Kumar & Bharti, 2018](#); [Zammuner, 2019](#)) this study found no correlation between students' school well-being and the use of AC.

Linear regression analysis shows that PC, RC and ESS can predict the variation well-being at school, in which the PC and ESS strategies have a positive impact, while the RC strategy has a negative impact. The PC strategy is the most impactful strategy in this model. This result is similar to the study of [Kumar and Bharti \(2018\)](#) on a group of Indian students.

6. CONCLUSION

The main research findings presented above confirm that knowing how coping strategies impact well-being at school can support the development of training programs and guidance in relation to highly adaptive coping strategies for students.

This study has some limitations. First, the convenience of the research sample was not large and representative enough, so the results must be generalized cautiously. Also, because this is a cross-sectional study, the data only reflect results over a certain period of time. Meanwhile, coping strategies and well-being at school can change over

time and with circumstances and events, so a longitudinal study could be carried out to gain a deeper understanding.

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