



Causal relationship of adversity quotient arising from bullying among junior high school ethnic minority students in upper northern Thai schools

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Article Info

Article history:

Received 8 January 2024

Revised 18 April 2024

Accepted 14 May 2024

Available online 31 March 2025

Keywords:

adversity quotient arising from bullying,
ethnic minority students,
optimism,
self-esteem,
social support

Abstract

The purpose of this research was to study the causal relationship of the adversity quotient arising from bullying among junior high school ethnic minority students. The sample consisted of 300 junior high school ethnic minority students in upper northern Thai schools; the data were derived from a multi-stage random sampling, and collected using questionnaires; lastly, they were analyzed using a causal structure relationship analysis. The results revealed that the developed model was consistent with the empirical data and that only the optimism variable had a direct effect on the adversity quotient arising from bullying, with a .80 path coefficient; furthermore, it was found that optimism could explain the 63 percent of the variance of adversity quotient arising from bullying. It can be concluded that optimism is an important variable that has direct effect on adversity quotient arising from bullying of ethnic students.

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Introduction

Bullying is defined as a repeated aggressive behavior that arises from an imbalance of power between the bully and the bullied. Bullying among students is a long-standing phenomenon, meaning that some children are regularly harassed and bullied by other children (Olweus, 1993). Moreover, it was found that everyone has the chance to be a victim of bullying, especially people who possess different characteristics from the majority (Lagan, 2003),

such as children who are shy, or that lack confidence, or that are quiet. Other examples are groups of children with diverse genders, and groups of ethnic children (Thai PBS, 2018). In addition, it was found that students of ethnic groups are more likely to be bullied than normal students (DiBlasi et al., 2018); additionally, whenever this group of students will find themselves facing the problem of bullying or cultural and ethnical discrimination, its components may have academic problems such as truancy, or difficulties in carrying out the assigned work,

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and the perception of the school as an unsafe place. They could also start to avoid duties and end up dropping out school (Smith et al., 2004, as cited in DiBlasi et al., 2018). Furthermore, according to a study by Li et al. (2021), it was found that bullying may also lead to other negative consequences, such as loneliness and depression. Especially for teenagers, particularly those in secondary school, who are in their teenage years, during the transitional age between childhood and adulthood, this period is when they forge their identities, and if they are unable to overcome challenges or crisis appropriately, not understand themselves fully, such may cause self-doubt or confusion. This, in turn, may result in an adulthood marked by a lack of clarity and stability in their personality (Erikson, 1968; Rincón Uribe et al., 2020).

Regarding the situation of bullying among children in Thailand, it was found that Thailand is the country with the highest level of bullying in the world; it also presents the highest amount of bullying occurring in educational institutions (TCIJ editorial team, 2023), and it was found that 81.7 percent of middle school students, aged 12–15 years, experienced bullying (Sakarinkul & Watcharasindhu, 2014; Evans et al., 2018). However, even though some students are able to deal with harassing by using a variety of different strategies, there are still others who are unable to cope with the problem (Puranachaikere et al., 2015; Handayani et al., 2023). Therefore, the researcher is interested in studying what factors ease students and give them the adversity quotient arising from bullying; in particular, the focus is on ethnic students, a group of hill tribe people who possess unique cultural characteristics manifested primarily in their traditions, beliefs, languages, and lifestyle. (The bureau of registration administration, 2001)

Although there has been no direct study regarding the factors that might affect the adversity quotient arising from bullying among ethnic students, several studies have found consistent evidences that social support is reducing the incidence of depression and anxiety arising from bullying in adolescents (Hellfeldt et al., 2020), as well as decreasing the psychological effects of it (Chailaisathaporn et al., 2017), and generally reducing bullying among ethnic students (Rothon et al., 2011). Moreover, social support is also preventing ethnic students from dropping out of school (Trieu & Jayakody, 2019), and helps them to realize their self-worth (Hanchana et al., 2014) and to develop a greater adversity quotient (Aziz & Nurwardani, 2021).

In addition, several studies found that many factors may affect students' adversity quotient arising from

bullying, such as optimism; in particular, this is because being optimistic helps people in dealing with obstacles by having a positive outlook (Goleman, 2001); moreover, it helps people cope with stress and difficult situations, resulting in reducing depression and anxiety (Hanssen et al., 2015) as well as helping people to achieve mental health and to have a good quality of life (Ghalibaf, 2017). In addition, as well as influencing the adversity quotient arising from bullying in students, optimism was also found to be related to self-esteem (Tan & Tan, 2014).

Self-esteem, besides being found to be related to optimism, is considered another factor that directly affects students' adversity quotient (Pangma et al., 2009; Chaiyakham et al., 2017); more specifically, it represents an internal motivation that pushes students to have specific thoughts and behaviors in order to cope with problems effectively (Tangpun & Khieowwichai, 2015), and which can lead to develop determination, and to act successfully according to one's own goals (Jumareng & Setiawan, 2021); finally, it was found that it helps individuals to accept themselves and to grow up appropriately (Rahmawati et al., 2017).

Based on what is mentioned earlier, the researcher is interested in using the variables previously discussed to study the causal relationship of adversity quotient arising from bullying among junior high school ethnic minority students in upper northern Thai schools. This area was particularly selected because it was found that is where many ethnic groups live, especially highland ethnic groups: the so-called "Hill tribe Thai people", such as Pga K'nyaw, Hmong, Mien, Akha, Lahu, Lisu, Lua, Khamu, and Malabri. It is expected that this study will help determining the level of social support, optimism, self-esteem, and adversity quotient arising from bullying among ethnic students, both in groups and in subgroups, which were classified by gender, grade level, living arrangements and perception of bullying. Another goal of the study is to create awareness around the important factors that affect the adversity quotient arising from bullying of ethnic students, attending the lower secondary school level, in Northern Thailand schools. The final aim is to get important information in order to set guidelines and to assist groups that need urgent care and assistance.

Objectives

To study the causal relationship of adversity quotient arising from bullying among junior high school ethnic minority students in upper northern Thai schools.

Literature review

In this study, the researcher reviewed the literature on various topics as follows:

The Adversity Quotient Arising from Bullying

The adversity quotient arising from bullying implies the ability to effectively manage and respond to bullying situations with a positive mindset. This allows a person to see the bullying situation that they encounter as challenging in life; so, it is an opportunity to change and develop toward a better life. The adversity quotient arising from bullying consists of 4 components: (1) the ability to control the problem of being bullied (Control), (2) the ability to analyze the causes of bullying and take responsibility (Origin and Ownership), (3) the ability to recognize the escalation of bullying situations (Reach), and (4) the ability to understand the persistence of bullying problems (Endurance) (Jenny, 1978; Stoltz, 2008).

Social Support

Social support is the interaction among individuals within a society aimed at mutual assistance in problem-solving, resulting in making the recipients feel loved, cared for, respected, and valued. It is divided into 4 types: (1) emotional support, (2) instrumental support, (3) informational support, and (4) appraisal support (House, 1981; Haber, 2003).

Several studies have found that social support from family and teachers reduces the incidence of depression and anxiety resulting from bullying in adolescents; therefore, it appears that having more support from one's own family will help adolescents who are victims of bullying to have better mental health (Hellfeldt et al., 2020), and this was consistent also with the study by Chailaisathaporn et al. (2017). It was also found that the support, and the encouragement from people such as family, close friends, teachers, and others, are important factors that may help Thai children and teenagers face the problem of bullying effectively; moreover, these were proven to help reducing the psychological impact, and creating encouragement as well as self-confidence.

Optimism

Optimism refers to a person's style or perspective in explaining the events they encounter (Explanatory style). It was found that the style of explaining events is

different between optimistic and pessimistic people. An optimist believes that bad events are temporary, specific, and caused by external factors; while good events tend to be viewed by the optimist as permanence, universal, and caused by internal factors. There are 3 dimensions of optimism: (1) permanence, (2) pervasiveness, and (3) personalization (Seligman, 2006).

Researchers found that optimism is an important trait that helps people in coping with obstacles by having a positive perspective, refraining from self-blame, viewing problems as opportunities, and possessing the capability to achieve goals by overcoming challenges (Goleman, 2001). In a study by Tan and Tan (2014), it was found that people with an optimistic outlook had better results in coping with stress and difficult situations. Regarding the resolution of problems, optimistic students were found not to focus on emotional distress or other physical tension from external stimuli, such as the pressure of academic expectations, but instead to strive to eliminate any stress or suffering they may be experiencing.

Self-Esteem

Self-esteem entails having a positive self-perception, confidence in abilities, satisfaction, valuing accomplishments, recognizing importance, and embracing oneself with respect, acceptance, and fondness. It includes the ability of being able to learn and correct one's own shortcomings, and can be divided into 2 dimensions: (1) self-competence, and (2) selfliking (Rosenberg, 1979; Tafarodi & Swann, 2001).

In a research study, it was found that self-esteem directly affects students' adversity quotient (Pangma et al., 2009), and this result was also consistent with a study by Chaiyakham et al. (2017) who found that self-esteem is a factor affecting students' adversity quotient. Another study led by Tangpun and Khieowwichai (2015) found that self-esteem serves as an internal motivator pushing students towards problem-focused thoughts and behaviors when confronting challenges. Moreover, people with high self-esteem were shown to have the capacity to overcome obstacles and succeed in their goals (Jumareng & Setiawan, 2021). In fact, a study by Rahmawati et al. (2017) found that people with high self-esteem are able to see positive aspects of themselves, such as the meaning of life, their potential or power, their abilities, and goodness. These four aspects will allow people to accept themselves, have good relationships with others, reach a proper level of autonomy, achieve the freedom to live in society, and be able to have goals in life; in conclusion, these characteristics will help students to reach appropriate self-growth.

Hypothesis Model

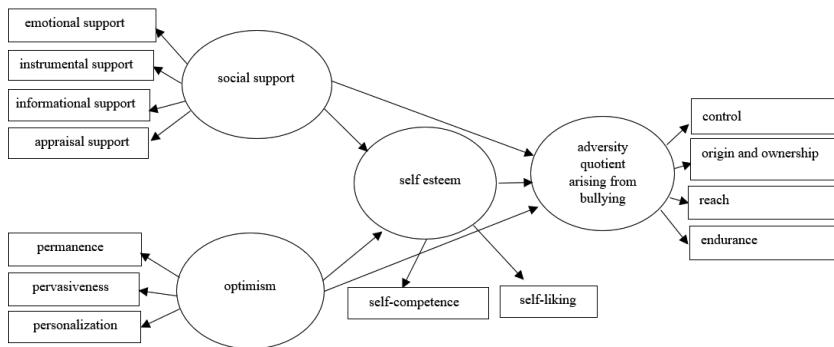


Figure 1 Research hypothesis model

Methodology

Population and Sample

The sample population consisted of students from ethnic or minority backgrounds, specifically belonging to the nine Thai hill tribe ethnic groups in Thailand. These students were enrolled in lower secondary education, attending schools across the eight upper northern provinces, including both public and private institutions. The sample was randomly drawn from the population using a multistage sampling method, for a total of 300 people. The sample size was determined utilizing the G*Power version 3.1.9.4 software, which is designed for analyzing the consistency of the Structural Equation Model (SEM), including the consideration given to the rule of thumb.

Ethics

This research received authorization from the Chiang Mai University Research Ethics Committee (COA NO. 084/65) through a process that involved explaining the objectives and details of the research project to ethnic students. Students were free to decide whether to participate or decline to participate in the research project, and consent was sought from the parents, who were granted proxy authority in deciding whether to allow their children to participate or to refuse participation in the research; furthermore, all names and identities were not included in the questionnaires, and the students' answers were analyzed as a whole.

Measures

The tool used in this research was a questionnaire, consisting of 5 parts as follows.

Part 1: General characteristics of the sample including gender, grade level, ethnicity type, educational institutions, living arrangements, and perception of bullying.

Part 2: The adversity quotient arising from bullying questionnaire was developed by the researcher based on the definition derived from a review of the concept of adversity quotient as outlined by Stoltz (2008). This questionnaire was specifically designed to measure the adversity quotient arising from bullying. The questionnaire has 16 items, and it is a 5-point rating scale (from not at all true to very true). The item-total correlation was seen to be between .211 to .586, and reliability was .765.

Part 3: Regarding the social support questionnaire, the researcher used the social support questionnaire of Pontanya (2011). The questionnaire has 20 items, and it is a 5-point rating scale (from not received at all to received very much). The item-total correlation was seen to be between .424 to .874, and reliability was .950.

Part 4: The optimism questionnaire is a tool created by the researcher based on definitions derived from Seligman (2006). The questionnaire has 22 items, and it is a 5-point rating scale (from not at all true to very true). The item-total correlation was seen to be between .331 to .669, and reliability was .881.

Part 5: Regarding the self-esteem questionnaire, the researcher used the self-esteem questionnaire of Thongkambunjong (2010), which was adapted from the Coopersmith Self-Esteem Inventory. The questionnaire

has 12 items, and it is a 5-point rating scale (from not at all true to very true). The item-total correlation was seen to be between .234 to .669, and reliability was .810.

Data Collection

The researcher wrote a letter requesting permission to collect data from ethnic minority students residing in schools or dormitories housing over 20 students of diverse ethnic backgrounds. Then, thanks to the collaboration with teachers and dormitory staff, the research project was introduced to these students in order to facilitate data collection. Participation invitations, along with parental consent (Proxy Consent) were provided freely to them and their parents. Once the data collection was complete, the researcher verified the data with questionnaires that were then returned for further statistical analysis.

Data Collection Duration

This research collected data from May to June 2023, a total of 2 months.

Data Analysis

The data analysis was done using causal structural modeling analysis to verify the consistency of the hypothesis model with empirical data, and considering the consistency from the fit index (Bollen, 1989; Byrne, 1998; Diamantopoulos & Siguaw, 2000) following the criteria outlined below.

1. Chi-square statistics (χ^2) should not be statistically significant. However, in samples of more than 250 people, statistical significance is often found, if other fit indexes meet the criteria. In such cases, this significance is deemed acceptable.

2. Relative chi-square (χ^2/df) should have a value between 2.00–5.00
3. Root Mean Square Error of Approximation (RMSEA) should be less valuable than .10
4. Standardized Root Mean Square Residual (SRMR) should be less valuable than .05
5. Goodness-of-fit index (GFI) and Adjusted goodness-of-fit index (AGFI) should be more valuable than .90
6. Critical N (CN) more valuable than 200

Results

The results have been obtained by testing the consistency model of causal relationship of adversity quotient arising from bullying according to the conceptual framework and research hypothesis model; after adjusting the model, it was found that it was consistent with the empirical data, and the path coefficients were statistically significant at .05 for all variables. The consistency test values were found to be within the acceptable criteria for all values as follows: $\chi^2 = 122.40$, $df = 60$, $\chi^2/df = 2.04$, RMSEA = .059, SRMR = .044, GFI = .94, AGFI = .91, CN = 215.54, where social support had a direct effect on self-esteem (The path coefficient was at .21). Optimism had a direct effect on self-esteem and the adversity quotient arising from bullying (the path coefficient was at .57 and .80, respectively). Self-esteem had a squared multiple correlation coefficient (R^2) at .52, indicating the 52 percent of the variance of self-esteem could be explained by social support and optimism. The adversity quotient arising from bullying had a squared multiple correlation coefficient (R^2) at .63, indicating the 63 percent of the variance of adversity quotient arising from bullying could be explained by optimism, as shown in Figure 2 as follows.

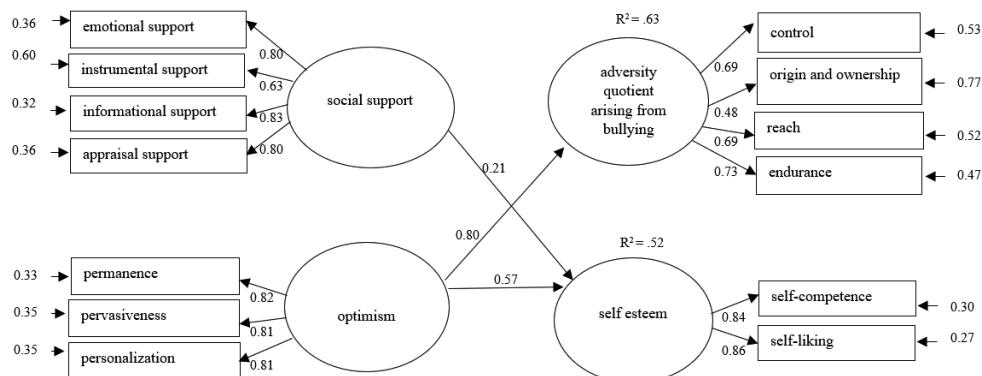


Figure 2 Results from testing the consistency of the research hypothesis model after adjusting the model.

From **Table 1**, by considering path coefficients of the causal variables that had an effect on the effect variables, it was found that social support had a direct effect on self-esteem (The path coefficient was at .21). Optimism had a direct effect on self-esteem and the adversity quotient arising from bullying (the path coefficient was at .57 and .80, respectively).

When considering the squared multiple correlation coefficient (R^2), it was found that self-esteem had a squared multiple correlation coefficient (R^2) at .52, indicating the 52 percent of the variance of self-esteem could be explained by social support and optimism. The adversity quotient arising from bullying had a squared multiple correlation coefficient (R^2) at .63, indicating the 63 percent of the variance of adversity quotient arising from bullying could be explained by optimism.

Table 1 Path coefficients of direct effects (DE), indirect effects (IE), total effects (TE)

causal variables	effect variables					
	self-esteem			adversity quotient arising from bullying		
	DE	IE	TE	DE	IE	TE
social support	.21	-	.21	-	-	-
Optimism	.57	-	.57	.80	-	.80
R^2		.52			.63	

Discussion

1. According to the first hypothesis, “Social support has a direct effect on the adversity quotient arising from bullying and self-esteem, and it has an indirect effect on the adversity quotient arising from bullying through self-esteem”, the results showed that social support had a direct effect on ethnic students’ self-esteem, while there was no direct effect and no indirect effect on the adversity quotient arising from bullying. This indicates that the ethnic student sample’s self-esteem tends to increase with greater levels of social support they receive; but, on the other hand, social support did not have a sufficient effect on the adversity quotient arising from bullying.

The results show that ethnic students’ social support had a statistically significant effect on their self-esteem, and this may be because receiving social support helps ethnic students to feel loved, understood, and accepted as themselves, ultimately leading to feelings of self-satisfaction and self-worth. Furthermore, the study by Cui et al. (2021, as cited in Shi, 2022) found that social support increases children’s life satisfaction

and psychological well-being, as children receive love and care from society; additionally, also in Sevari et al.’s study (2020), it was found out that social support promotes hope, positivity and makes individuals more satisfied with their lives. This was consistent with a study led by Wang and Xie (2020, as cited in Shi, 2022) that found social support to be necessary for individuals in order to face difficult situations: so, when people receive social support, they end up having higher self-esteem and feeling more satisfied. Ultimately, in Shi’s study (2022), it was found that the perception of social support affects the self-esteem of children. Therefore, it is logical to conclude that increased social support for ethnic students affects higher levels of self-esteem.

However, this study did not find evidence of social support impacting the adversity quotient arising from bullying among ethnic minority students. This may be because the ethnic minority students participating in this study received insufficient social support, especially from their family and parents; in fact, often ethnic minority students do not receive any emotional support from their families, which can be primarily expressed through positive words and physical affection such as hugging. Instead, some misguiding behaviors may be present, such as comparing them to others, which does not make the children feel loved, understood, and motivated. Additionally, the family might fail in providing encouragement and support to the children, and this is largely due to the fact that the parents of ethnic minority students have had limited educational opportunities, and they got married and had children at a young age: this results in lacking appropriate ways to support and encourage their children. Moreover, it is a common practice among ethnic minority groups to focus more on the physical growth rather than mental well-being in child-rearing. In the study by Trieu and Jayakody (2019), it was found that parents with a lower level of schooling and who were less involved in the education of their children were considered to be a significant challenge for the success in the studies of ethnic minority students. Therefore, it is possible to assume that ethnic minority students participating in this study did not receive sufficient social support in order to develop an adversity quotient arising from bullying.

The results showed no evidence of any indirect effect of social support on the adversity quotient arising from bullying through ethnic students’ self-esteem, and this is linked also to the absence of any direct effect of self-esteem on the adversity quotient arising from bullying, which the researcher will discuss subsequently in hypothesis 3.

2. According to the second hypothesis, “optimism has a direct effect on the adversity quotient arising from bullying and self-esteem, and it has an indirect effect on the adversity quotient arising from bullying through self-esteem”, the results of the test found that optimism had a direct effect on ethnic students’ adversity quotient arising from bullying and their self-esteem, while there was no indirect effect on the adversity quotient arising from bullying through self-esteem; moreover, it was shown that the more optimistic the ethnic students were, the more they will have adversity quotient arising from bullying and increase self-esteem.

The results of the study showed that ethnic students’ optimism had a statistically significant effect on their adversity quotient arising from bullying. This may be because having optimism helps ethnic students to not dwell on the difficulties of being bullied, and to be able to recognize that the bad events they face are temporary; moreover, it helps them in coping with problems by having a positive perspective and not to use such obstacles to blame themselves. In conclusion, optimism enables students to perceive obstacles as opportunities and motivates them to overcome various challenges in pursuit of their goals (Goleman, 2001). This is consistent with a study led by Wigomwayagon (2023) that found that optimism is positively related to the adversity quotient; so, a person with high levels of optimism is more likely to have positive energy that can create the development of behaviors conducive to increasing their adversity quotient. This is also in line with the research by Chomjungwat et al. (2021), that found that optimism is positively related to the adversity quotient; therefore, it is reasonable to conclude that ethnic students’ optimism has an effect on their adversity quotient arising from bullying.

Moreover, from the results of the test, it appears that optimism has a direct effect on the self-esteem of ethnic students. This may be because optimistic ethnic students are able to see the good in themselves, and to not compare themselves with others; furthermore, they are usually more satisfied with their individuality. This is consistent with the research by Sevari et al. (2020), and the research by Wani and Dar (2017), both of which found that being optimistic results in people being more satisfied with their lives, and therefore, that optimism was positively related to self-esteem. Ultimately, it is reasonable to conclude that ethnic students’ perceived optimism influences their self-esteem.

The results showed no evidence of any indirect effect of optimism on the adversity quotient arising from bullying through ethnic students’ self-esteem, and

this is linked also to the absence of any direct effect of self-esteem on the adversity quotient arising from bullying, which the researcher will discuss subsequently in hypothesis 3.

3. According to the third hypothesis “self-esteem has a direct effect on the adversity quotient arising from bullying”, while in this study no evidence was found that self-esteem has a direct effect on the adversity quotient arising from bullying among ethnic minority students. This may be because the ethnic minority students participating in this study do not have sufficient self-esteem to develop adversity quotient arising from bullying. Generally, ethnic minority students perceive themselves as belonging to a minority or a marginalized group, which leads to a division between ‘them’ and ‘us’; additionally, they are often discriminated and not accepted by people in society (Kaewtankham, 2018), and such perceptions have great impact on their self-esteem (Julanos et al., 2023). This is consistent with the findings by Özdemir and Stattin (2014), which found that adolescents facing racial discrimination tend to have lower self-esteem as they are repeatedly bullied or teased during class presentations. Therefore, the ethnic minority students who participated in this study have a different language and lifestyle, which led them to feel insecure and to compare themselves with others, resulting in feeling that they are different from the majority in society. These feelings may stem from the parenting environment, where parents mostly do not appreciate or encourage enough ethnic minority students, resulting in feeling that they do not have enough self-esteem and feel less confident to assert themselves and cope with bullying.

Conclusion

Optimism is an important variable, that has a direct effect on the adversity quotient arising from bullying among ethnic minority students (the path coefficient was at .80); moreover, optimism has also a direct effect on self-esteem (the path coefficient was at .57). While regarding social support, it has a direct effect on self-esteem (the path coefficient was at .21). Additionally, while optimism could explain 63 percent of the variance of adversity quotient arising from bullying, social support and optimism together could explain 52 percent of the variance of self-esteem.

Recommendations

Recommendations for Use

1. The study found that optimism is an important variable that directly affects both adversity quotient arising from bullying and the self-esteem of ethnic middle school students. Therefore, relevant agencies such as schools, student dormitory centers, child welfare centers, temples, churches, teachers, counselors, and parents, should give importance to promoting ethnic students' optimism. In particular, this might be done through a form of supervision, training or through the organization of various activities/projects.

2. In the study, it was found that the ethnic students in the sample had a moderate level of self-esteem in terms of self-liking; while on the other hand, they had a high level of self-competence. Consequently, relevant agencies should increase space or activities for ethnic students in order to show their potential and to have more opportunities to appreciate themselves. In particular, female students were found to have less self-esteem than males.

3. In the study, although it was found that the sample group received informational support at a high level, it was also found that they received emotional support, instrumental support, and appraisal support only at a moderate level; so, it is still important and necessary that relevant agencies provide adequate social support in all its aspects.

4. The study found that the sample who were living with their parents had less adversity quotient arising from bullying and self-esteem than the sample who were living in a charity organization; consequently, relevant agencies should give importance in encouraging parents to participate for the promotion of their children's adversity quotient arising from bullying and self-esteem.

5. In the study, it was found that the Mathayom 1 sample had less adversity quotient arising from bullying, social support, optimism, and self-esteem than the Mathayom 2 and 3 samples; It was also found that the Mathayom 1 sample had limitations in the using and understanding of the Thai language at a level that was not as expected. Therefore, relevant agencies must assist and closely monitor such samples.

Recommendations for Next Research

1. This research found that the sample group living with their parents had less adversity quotient arising

from bullying and self-esteem than the sample group living in a charity organization. Therefore, in the next research, we aim to achieve a deeper understanding of this issue in order to provide sufficient information to help parents support their children in overcoming bullying and boosting their self-esteem through building their adversity quotient.

2. This research found that ethnic students have limited ability to use and understand Thai language, especially after having to study online during the COVID-19 outbreak. Therefore, in the next research on a sample of ethnic students attending the lower secondary school level, any context and social situation that may affect the ability of reading and writing Thai of ethnic students should be considered. This suggests to consider the possibility of selecting a research design that is the most appropriate for the sample, that can be, for example choosing to conduct a qualitative research among ethnic students who have limited use and understanding of the Thai language.

Conflict of Interest

The author declares that there is no conflict of interest.

Funding

This research and innovation activity is funded by the National Research Council of Thailand (NRCT) (Grant No. N41A660461).

Acknowledgments

This research and innovation activity is funded by the National Research Council of Thailand (NRCT). We wish to thank the NRCT for their funding support. Additionally, we extend our gratitude to the ethnic minority students who participated and generously provided valuable information for this research, thus enabling us to achieve our goals.

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