

The relationship between verbal aggressiveness and mental health of students at secondary school

Dau Thanh Binh Nguyen*, Tien Van Truong

University of Education, Hue University, 34 Le Loi Street, Phu Hoi Ward, Hue City, Thua Thien Hue Province, Vietnam

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Abstract:

This study was conducted to determine the relationship between verbal aggressiveness and mental health of students in secondary school. The Verbal Aggressive Scale (VAS), introduced by D.A. Infante, et al. (1986) [1], and the Strengths and Difficulties Questionnaire (SDQ) by R. Goodman (1997) [2] were used in this study. Survey data was collected from 708 students at two lower secondary schools and two upper secondary schools in Thua Thien Hue province. The results showed that verbally aggressive behaviours are occasionally performed; mental health problems are positively associated with verbally aggressive behaviour and negatively correlated with verbally benevolent behaviour. The prosocial behaviour is positively associated with verbally benevolent behaviour and negatively correlated with verbally aggressive behaviour reversely. Although the level of verbal aggressiveness committed by secondary school students is lower than that of benevolent communication, schools should consider the construct of interventions to reduce the prevalence of verbal abuse; hence building attachment connections among adolescents. The results of this study can provide useful insights into developing nonviolent communication education programs for adolescents.

Keywords: mental health, secondary school students, verbal aggressiveness.

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1. Introduction

Mental health is fundamental to the well-being and productive functioning of individuals. According to the World Health Organization, mental health is a “state of well-being in which the individual realises his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community” [3]. Mental health is the absence of mental disorders and the ability to think, learn, and understand one’s feelings and the reactions of others.

Adolescence is a period in which health opportunities are immense, and future adult health patterns are formed [4]. According to a UNICEF report, 20% of teenagers encounter more than one mental disorder, meaning it is one of the world’s most enormous disease burdens [5].

Many social studies in recent years show that mental health illness is a severe issue in the population nowadays, especially among adolescents. H.M. Dang, et al. (2013) [6] conducted a survey using the SDQ, the Children Behavior Checklist (CBCL), and the Youth Self-Report (YSR), and determined that there were 13.2% of children ages from 6 to 16 that had mental health problems according to SDQ; this ratio was 11.9 and 12.4% according to CBCL and YSR, respectively. This is a fairly common occurrence that requires prompt consideration as psychological problems can significantly impact a student’s development, learning, and ability to live a healthy and socially helpful life if left untreated.

There are many academic and life factors that affect the mental health of secondary school students of which verbal aggressiveness, also known as verbal abuse, is an important one.

*Corresponding author: Email: daunguyen.thanhbinh@gmail.com

Verbal aggressiveness is the use of language, including spoken and written language, in order to ridicule, insult, threaten, criticise, coerce, demean, or psychologically attack others. Verbal aggressiveness is used with the purpose of damaging social relationships, causing emotional trauma, and feelings of acceptance for the victim. Many studies have shown the negative effects of verbal abuse on the mental health of casualties such as stress, fear, anxiety, depression, post-traumatic stress disorder (PTSD)... [7]. People suffering from verbal abuse might have problems with sleep or have memory impairment, tend to perform self-injurious behaviours, have difficulties with self-control, adverse health outcomes, or a propensity to commit delinquent behaviours [8].

In Vietnam, there are few studies on verbal aggression as well as in-depth investigations on the association between verbally aggressive behaviours and mental health. Based on the inheritance of previous findings, it is necessary to further clarify the association between verbal aggressiveness and well-being state by in-depth studies thereby supplementing the theoretical basis for verbal abuse among adolescents to build more effective school violence prevention programs in the future.

The goal of this study was to determine the level of verbal aggressiveness as well as the relationship between this behaviour and the mental health of secondary school students.

2. Methodology

2.1. Participants

The survey collected data from 708 secondary school students in Hue city, Thua Thien Hue province, of which 42.4% were male students and 57.6% were female students; 67.2% were upper secondary school students and 32.8% were lower secondary school students.

2.2. Measurement

2.2.1. The VAS

This study used the VAS conducted by D.A. Infante, et al. (1986) [1] to collect data on the verbal aggression behaviour of secondary school students. This scale has been adapted to adolescents in Vietnam [9].

The scale comprises 20 items. During the adaptation process, two items were removed to improve the Comparative Fit Index (CFI) of the scale. The remaining 18 items are divided into two factors and each factor has 9 items.

Factor 1 is named "Aggressive" and it correlates with verbally aggressive message selection and generation, which includes aggressively worded items such as *"When individuals are very stubborn, I use insults to soften the stubbornness"*; *"When people simply will not budge on a matter of importance, I lose my temper and say rather strong things to them..."*.

Factor 2 is named "Benevolent" and it includes benevolently worded items that appear to predict non-aggressive and prosocial communication of children, for example: *"I am extremely careful to avoid attacking individuals' intelligence when I attack their ideas"*; *"I try to make people feel good about themselves, even when their ideas are foolish..."*.

The VAS is a Likert-type scale that uses five-point response formats corresponding to the following scores: 1) *almost never true*; 2) *rarely true*; 3) *occasionally true*; 4) *often true*; 5) *almost always true*. The level of verbal aggression in children is assessed by summing across the scores.

In this study, Cronbach's alpha coefficient (.71) shows that all observed variables meet the requirements of the item-total correlation coefficient [10], with the average value of correlation being above .30. The average value of the correlation coefficient between the items ranges from .15 to .50.

This research used descriptive statistical analysis with the parameters of mean score and standard deviation to describe the verbally aggressive behaviour of secondary school students.

2.2.2. The SDQ

In order to assess the mental health status of students, the SDQ [2] was used.

The questionnaire has 25 items divided into the sub-scales of Hyperactivity, Emotional Problems, Conduct Problems, Peer Problems, and Prosocial Behaviour. Each sub-scale includes five items and

is scored on a 0-2 scale: 0) not true, 1) somewhat true, 2) certainly true; excluding the prosocial items which are reversely rated (2: not true, 1: somewhat true, 0: certainly true).

The Total Difficulties scale is figured out by summing the scores of four problem scales (emotional symptoms, conduct problems, hyperactivity, and peer relationship problems) with positively balanced objects rated reversely. The Total Difficulties score can range from 0 to 40. Children with higher overall difficulty scores are more likely to develop psychopathology [11]. The prosocial scale, which has a score that ranges from 0 to 10, is nevertheless positively framed with higher scores reflecting fewer obstacles in prosocial conduct.

SDQ scores are divided into normal, borderline, and abnormal [2, 11]. An abnormal score on the total difficulties score can be used to determine cases with mental health disorders as described in the bandings below.

SDQ items	Normal	Borderline	Abnormal
Total difficulties score	0-15	16-19	20-40
Emotional symptoms score	0-5	6	7-10
Conduct problems score	0-3	4	5-10
Hyperactivity score	0-5	6	7-10
Peer problems score	0-3	4-5	6-10
Prosocial behaviour score	6-10	5	0-4

The SDQ was validated for use in Vietnamese children [12, 13]. Cronbach’s alpha of measure for mental difficulties in our data was .66.

2.3. Data analysis

The SPSS program version 22.0 was used to analyse the data. The statistical quantities analysed in this study were percentage, mean score, and standard deviation. In order to evaluate the reliability of the VAS scale and the SDQ tool, Cronbach’s alpha index and Pearson correlation coefficient were used.

3. Results

3.1. Verbal aggressiveness of secondary school students

These items performed in Table 1 were based on the VAS reported by D.A. Infante, et al. (1986) [1]. In general, the frequency of using verbal aggressiveness of students was quite low, with the mean score of aggressively worded items being less than 3.0.

Table 1. Mean scores and standard deviations of verbal aggressiveness in secondary school students.

Statements	Mean	Std.
Aggressive		
1. When individuals are very stubborn, I use insults to soften the stubbornness.	1.81	.93
2. When people refuse to do a task I know is important without good reason, I tell them they are unreasonable.	2.70	1.29
3. If individuals I am trying to influence really deserve it, I attack their character.	2.36	1.13
4. When people behave in ways that are in very poor taste, I insult them in order to shock them into proper behaviour.	2.97	1.17
5. When people simply will not budge on a matter of importance, I lose my temper and say rather strong things to them.	2.32	1.12
6. When individuals insult me, I get a lot of pleasure out of really telling them off.	1.94	1.14
7. I like poking fun at people who do things which are very foolish in order to stimulate their intelligence.	1.81	1.06
8. When nothing seems to work in trying to influence others, I yell and scream in order to get some movement from them.	1.91	1.09
9. When I am not able to refute others’ positions, I try to make them feel defensive in order to weaken their positions.	1.73	1.02
Total	19.55	5.40
Benevolent		
1. I am extremely careful to avoid attacking individuals’ intelligence when I attack their ideas.	3.41	1.09

2. I try very hard to avoid having other people feel bad about themselves when I try to influence them.	2.83	1.28
3. When others do things I regard as foolish, I try to be extremely gentle with them.	3.39	1.12
4. I try to make people feel good about themselves, even when their ideas are foolish.	3.23	1.22
5. When people criticise my shortcomings, I take it in good humour and do not try to get back at them.	3.21	1.28
6. When I dislike individuals greatly, I try not to show it in what I say or how I say it.	3.25	1.31
7. When I attack a person's ideas, I try not to damage their self-concept.	3.57	1.21
8. When I try to influence people, I make a great effort not to offend them.	3.51	1.21
9. When an argument shifts to personal attacks, I try very hard to change the subject.	3.17	1.21
Total	35.71	7.02

In the factor "Aggressive", the behaviours that students tended to perform the most were "When people behave in ways that are in very poor taste, I insult them in order to shock them into proper behaviour", "When people refuse to do a task I know is important, without good reason, I tell them they are unreasonable", and "If individuals I am trying to influence really deserve it, I attack their character".

Overall, the percent of the students using benevolent words was higher than aggressive words and most of the items in the "Benevolent" subscale reached a mean score above 3.0. The most compatible behaviours with students were "When I attack persons' ideas, I try not to damage their self-concepts", "When I try to influence people, I make a great effort not to offend them", and "I am extremely careful to avoid attacking individuals' intelligence when I attack their ideas".

3.2. The mental health of secondary school students

Table 2 presented that 24.4% of adolescents reported being at high risk of experiencing mental problems. The number of students with emotional problems achieved the highest rate of 23%, with the borderline percentage being 17.8%.

Table 2. Distribution of prevalence of mental difficulty among secondary school students.

SDQ items	Normal		Borderline		Abnormal	
	Total	Percentage	Total	Percentage	Total	Percentage
Prosocial behaviour	511	72.2	105	14.8	92	13.0
Emotional symptoms score	419	59.2	126	17.8	163	23.0
Conduct problems score	493	69.6	77	10.9	138	19.5
Hyperactivity score	564	79.7	87	12.3	57	8.1
Peer problems score	272	38.4	311	43.9	125	17.7
Total difficulties score	320	45.2	215	30.4	173	24.4

3.3. The relationship between verbal aggressiveness and mental health of secondary school students

In order to investigate the association between verbal aggressiveness and the mental health of secondary school students, the Pearson correlation coefficient between these two variables was quantified (Table 3).

Table 3. Correlations between verbal aggressiveness and mental health of secondary school students.

SDQ items	Verbal aggressiveness	
	Benevolent	Aggressive
Prosocial behaviour	.32**	-.15**
Hyperactivity score	-.03	.20**
Emotional symptoms score	.05	.13**
Conduct problems score	-.21**	.28**
Peer problems score	-.17**	.15**
Total difficulties score	-.12**	.28**

*p<.05, **p<.01, ***p<.001.

Table 3 reported a meaningful correlation between verbal abuse and some mental health problems. Students who are at risk of peer problems

had low scores in verbal aggressiveness ($r=.15$, $p<.01$) and were negatively related to benevolent words ($r=-.17$, $p<.01$). Conduct problems were significantly and positively related to aggressive communication ($r=.28$, $p<.01$), while negatively correlated to benevolent words ($r=-.21$, $p<.01$). Students who had more serious mental difficulties tended to communicate aggressively; on the other hand, students with healthy minds were likely to use more benevolent words. The data in Table 3 showed that prosocial behaviour is positively correlated with benevolent communication ($r=.31$, $p<.01$) and negatively correlated with verbal aggressiveness ($r=-.15$, $p<.01$).

4. Discussion

4.1. Verbal aggressiveness of secondary school students

Results indicate that teenagers are more likely to behave benevolently than aggressively. Aggressiveness in communication performed below the “occasionally” level. This demonstrates that adolescents prefer to use nonviolent communication to address problems especially when they are in a conflict of ideas so as not to hurt others’ feelings.

The findings in our study are similar with the previous study of V.C. Tran, et al. (2018) [14] suggesting that the proportion of verbal aggressiveness in secondary school students is still low.

Although verbal aggressiveness is not a common phenomenon, this kind of aggression might have tremendously negative impacts on others’ mentality and is considered the main cause of teenage fights or strained relationships. Therefore, schools should enhance the education of nonviolent communication for students.

4.2. The mental health of secondary school students

The proportion in this study is higher than that in other countries like Japan, India, Germany, Switzerland, Spain, Brazil..., which ranged from 12.7 to 22.5% [15]. Compared with previous studies conducted in Vietnam, this result is quite

similar to the research of H.M. Dang, et al. (2006) [16] with 25.8% having mental illnesses. However, this is higher than the percentage from studies by T. Tran (2007) [17] and C.M. Nguyen (2012) [18], which were 15.2 and 18%, respectively. This demonstrates the need for increased attention and care from families, schools, and educational institutions for children’s spiritual lives.

Among all the difficulties, students with emotional problems had the highest rate. This result is close to some earlier research in Vietnam [19] and overseas [20]. Teenagers go through a period of development where they change both physiologically and psychologically. During this period, neurological disorders frequently emerge, particularly when excitability processes increase sharply meanwhile conditioned inhibitory processes decrease resulting in sudden anger, the state of losing temper, or unreasonable reactions by them... [21]. This might explain why emotional disorder is the most common type of disturbance in this age group.

4.3. The relationship between verbal aggressiveness and mental health of secondary school students

Teenagers at risk of mental illnesses tend to behave aggressively, while students who suffer from verbal abuse might have serious mental health problems.

Findings from our study are entirely consistent with many studies abroad. N.K. Vizer, et al. (2016) [22], in a survey of the correlation between verbal abuse and mental health, suggested that verbal aggressiveness is a typical occurrence of potentially catastrophic consequences for mental health and well-being. D. Olweus (1991) [23] found that verbal aggression from students was a result of bad marks and failure in school, depression, and antisocial or conduct-disordered behaviour patterns. The spillover hypothesis can theoretically explain the positive relationship between mental illnesses and verbal aggression. According to this theory, long-term stress sensitizes humans to unpleasant stimuli thereby increasing tension and the propensity for violent conduct [24, 25].

On the contrary, the study of L.S. Aloia, et al. (2015) [26] showed that experiences of verbal aggression harm one's well-being and set an assumption that verbal aggressiveness is negatively and directly related to psychological states of well-being. Our findings indicated a contrasting relationship between verbal aggressiveness and mental health. Verbal abuse experiences might impair health, while poor mental health motivates individuals to use aggressive words.

Adolescents engaging in prosocial behaviour have an inclination to advocate for nonviolent communication rather than verbal aggressiveness. According to J.A. Piliavin (1981) [27], prosocial behaviour is a broad set of activities defined by some substantial part of society and/or an individual's social group as being generally helpful to others. Prosocial behaviours might promote social norms and encourage interpersonal relationships; thus, they must be pro-human first and foremost, contrary to the nature of verbal aggression.

5. Conclusions

Although the level of verbal aggressiveness committed by secondary school students is lower than that of benevolent communication, schools should consider the construct of interventions to reduce the prevalence of verbal abuse; hence building attachment connection among adolescents.

The number of abnormal students is quite high, of which emotional issues are the most prevalent cause. Results indicate that there is a remarkable link between verbal aggression and mental health where aggressive words are significantly and positively related to mental illnesses. In contrast, prosocial behaviour is negatively associated with verbal aggressiveness.

Evidence from this study can yield useful insights into developing nonviolent communication education programs for adolescents.

6. Limitations

We recognise several limitations in this study. First of all, the questionnaire used in this study is

self-reported. Self-reports of verbally aggressive tendencies in children might be conservative estimates due to social desirability biases. The random selection of participants eliminates this concern significantly but does not entirely remedy that shortcoming. Secondly, cross-sectional research cannot explain the causes and outcomes of all school-related factors, as well as psychological and social factors specific to each gender and class. Thirdly, participants were students in Thua Thien Hue province, which results in a study sample that is not genuinely varied or an impartial representation of adolescent samples in Vietnam. Fourthly, there have not been many previous studies in Vietnam that analyse the relationship between verbal aggressiveness and mental health; thus, it is difficult for us to define and remark on the strength of this correlation on the sample in Vietnam. Further research is needed to obtain a better grasp of this link among Vietnamese teenagers.

CRedit author statement

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COMPETING INTERESTS

The authors declare that there is no conflict of interest regarding the publication of this article.

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