General Self-Efficacy and Psychological Distress of Grade 10 Students in Tamu Township

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Abstract

The main purpose of the present study was to investigate general self-efficacy and psychological distress of Grade 10 students in Tamu Township. This study was conducted by using descriptive research design and survey method. The sample was 643 Grade 10 students (290 males and 353 females) from Tamu Township. In this study, Self-efficacy Questionnaire for Children and Depression Anxiety and Stress Scale were used. In this study, the data was analyzed by using descriptive statistics, t test, and one-way ANOVA. According to the result of independent samples t test, female students had higher general self-efficacy than male students. However, there was no significant difference in psychological distress of the Grade 10 students according to gender. Again, the result of independent samples t test revealed that students in combination 7 were higher in general self-efficacy than that of the students in combination 1. On the other hand, the result of independent samples t test showed that combination 1 students had more psychological distress than combination 7 students. Next, the result showed that urban students had higher general self-efficacy than rural students. However, there was no significant difference in psychological distress of Grade 10 students according to their school locality. According to the result of one-way ANOVA, there was a significant difference in general self-efficacy and psychological distress of Grade 10 students by schools. Thus, teachers and parents should try to improve general self-efficacy of adolescents in order to make them to be able to face challenges of their life.

Key Words: Self-efficacy, General Self-efficacy, Psychological Distress.

Introduction

Psychological distress is a common mental health problem among adolescents population in modern era. Psychological distress is shown to negatively impact students' physical, mental and academic well-being (Foster, Allen, Oprescu, & McAllister, 2014).

Adolescence is considered a stressful period due to physical, psychological, sexual changes and is also influenced by maturity. It is a crucial phase in life course of a human, and the presence of psychiatric disorders such as depression, anxiety, and stress at this stage of life is a matter of concern. The symptoms of these three disorders can lead to poor academic performance, lack of communication with friends and family members, substance abuse, feeling of abandonment, homicidal ideation and suicidal tendency (Polloc, Rosenbaum, Marrs, &Biederman, 1995).

In order to cope with psychological distress (stress, anxiety and depression), adolescents need to improve their perceived self-efficacy. The concept of self-efficacy was created by Albert Bandura, founder of the social cognitive theory. Defining this concept, Bandura (1997) says that "perceived self-efficacy refers to beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments". Self-efficacy is defined as confidence in one's capability for organizing and implementing the cognitive, behavioral, or social skills necessary for successful performance of a task (Brunning, Colvin, & Shell, 1995). Self-efficacy plays a vital role in students' lives and future. The improvement of self-efficacy will contribute towards their achievement in life.

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Aim and Objectives

The main aim of this study is to investigate the general self-efficacy and psychological distress of Grade 10 students in Tamu Township (2018-2019) Academic year. The specific objectives are:

1. To explore the difference in general self-efficacy and psychological distress of Grade 10 students by gender.
2. To investigate the difference in general self-efficacy and psychological distress of Grade 10 students by subject combination.
3. To investigate the difference in general self-efficacy and psychological distress of Grade 10 students by school locality.
4. To study the difference in general self-efficacy and psychological distress of Grade 10 students by school.
5. To investigate the relationship between general self-efficacy and psychological distress of Grade 10 students.

Research Questions

1. Is there any significant difference in the general self-efficacy and psychological distress of Grade 10 students by gender?
2. Is there any significant difference in the general self-efficacy and psychological distress of Grade 10 students by subject combination?
3. Is there any significant difference in the general self-efficacy and psychological distress of Grade 10 students by school locality?
4. Is there any significant difference in the general self-efficacy and psychological distress of Grade 10 students by school?
5. Is there any significant relationship between the general self-efficacy and psychological distress of Grade 10 students?

Definition of the Key Terms

Self-efficacy refers to an individual's belief in his or her innate ability to achieve goals (Bandura, 1982).

General self-efficacy is a measure of an individual's beliefs in whether problems or barriers can be confronted and addressed with a successful outcome (Muris, 2001).

Psychological distress is defined as an unpleasant mood or an affective state that can be measured as positive or negative affect usually assessed as subjective symptoms of depression and/or anxiety (Portenoy&Bruera, 2003).

Review of Related Literature

Psychological distress is a major problem of present era especially for adolescence.It is true to emphasize that with advancement of science and technology everyone wants to move forward and reach on the peak of his or her success, compete others and live more luxurious life for which they struggle round o' clock. As a result they experienced high level of stress which may have adverse impact on their emotional, physiological, cognitive, and behavioral state (as cited in Shaheen, 2012). A large number of research studies indicated that low levels of self-efficacy increases different symptoms of psychological problems such as distress, anxiety, depression, eating disorders, and alcohol abuse (Bandura, 1997). Psychological distress is a term used to describe the general psychopathology of an individual with a combination of depressive symptoms, anxiety and perceived stress. In the environmental model, stress is defined as external to an organism, including threats of immediate harm or aversive environmental conditions.

External stress has been linked to as academic underachievement, substance abuse and compromised life satisfaction (as cited in Suldo, Shaunessy, & Hardesty, 2008).

One of the important factors that affect mental health status and appropriate responses to stressors is high self-efficacy. Some studies have reported the importance of self-efficacy on adolescent's mental health (Muris, 2002). Self-efficacy is a focal determinant because it affects health behavior, both directly and by its influence on the other determinants. Self-efficacy beliefs influence goals and aspiration. Self-efficacy beliefs shape the outcomes people expect their efforts to produce. Those of high self-efficacy expect to realize favorable outcomes. Conversely, those with low self-efficacy expect their efforts to result in poor outcomes (Bandura, 2004).

Method

Research Design and Method

In this study, descriptive research design and survey method were conducted. A total of 643 Grade10 students from Basic Education High Schools in Tamu Township were randomly selected as participants. The Self-efficacy Questionnaire for Children (SEQ-C), developed by Muris (2001) was adapted to assess the general self-efficacy of Grade 10 students. The Depression, Anxiety and Stress Scales (DASS), developed by LovibondandLovibond (1995) was adapted to assess psychological distress of Grade 10 students.

Instrumentation

Self-efficacy Questionnaire for Children (SEQ-C) was developed by Muris (2001) to measure general self-efficacy. The (SEQ-C) is composed of 24 items to measure individual's perception of their academic self-efficacy (ability to succeed in school and display appropriate learning behaviors), social self-efficacy (ability to relate and get along with other peers) and emotional self-efficacy (ability to regulate unpleasant emotions). Self-efficacy Questionnaire for Children included 24 items; 8 items for academic self-efficacy (1,4,7,10,13,16,19,22), 8 items for social self-efficacy (2,6,8,11,14,17,20,23) and 8 items for emotional self-efficacy (3,5,9,12,15,18,21,24). The three subscales each contain eight items in which participants rate their competence level on a 4-point Likert scale (Not at all, Hardly true, Moderately true and Exactly true).

Based on the tripartite model of anxiety and depression, LovibondandLovibond (1995) developed the Depression, Anxiety and Stress Scales (DASS) and an abbreviated version, the DASS-21. In this research, the abbreviated version, the Depression, Anxiety and Stress Scales (DASS-21) was used. It is composed of 21 items; 7 items for stress (1, 6, 8, 11, 12, 14, 18), 7 items for anxiety (2, 4, 7, 9, 15, 19, 20) and 7 items for depression (3, 5, 10, 13, 16, 17, 21). Items on the DASS are rated on 4 point Likert scale (Did not apply to me at all, Applied to me to some degree, or some of the time, Applied to me to a considerable degree or a good part of time and Applied to me very much or most of the time).

After preparing the questionnaire, face validity and content validity were confirmed by the experts from Department of Educational Psychology in Sagaing University of Education. According to their suggestions and recommendations, the questionnaires were modified. Then, pilot study was done with the sample of 100 Grade10 students (50 males, 50 females) from No (2) Basic Education High School, Amarapura Township in order to determine the relevancy, appropriateness and clarity of the items included in the survey questionnaire. After the pilot study, the reliability analysis of the instrument was calculated by using Cronbach's Alpha values with the help of Statistical Packages for the Social Science (SPSS, 23) software. The internal

consistency (Cronbach's Alpha) for the self-efficacy questionnaire and psychological distress are 0.710 and 0.737.

Procedure

The permission from the headmasters or headmistresses of the respective high schools in Tamu Township was requested to carry out data collection. To receive reliable data,

the researcher explained the purpose of the study to the participants, and assured them that their information would be confidential.

Data Analysis and Findings

Descriptive analysis was conducted to reveal the minimum score, maximum score, mean and standard deviations of Grade 10 students. The results were shown in Table1.

Table 1 Descriptive Statistics for General Self-efficacy

Variable	N	Minimum	Maximum	Mean	SD
General Self-efficacy	643	38	92	71.05	9.318

Table 1 showed the mean and standard deviation of general self-efficacy for the whole sample were 71.05 and 9.318. The minimum score and maximum score of the whole sample were 38 and 92. Then, the frequency distribution of general self-efficacy of Grade 10 students could be seen in Figure 1.
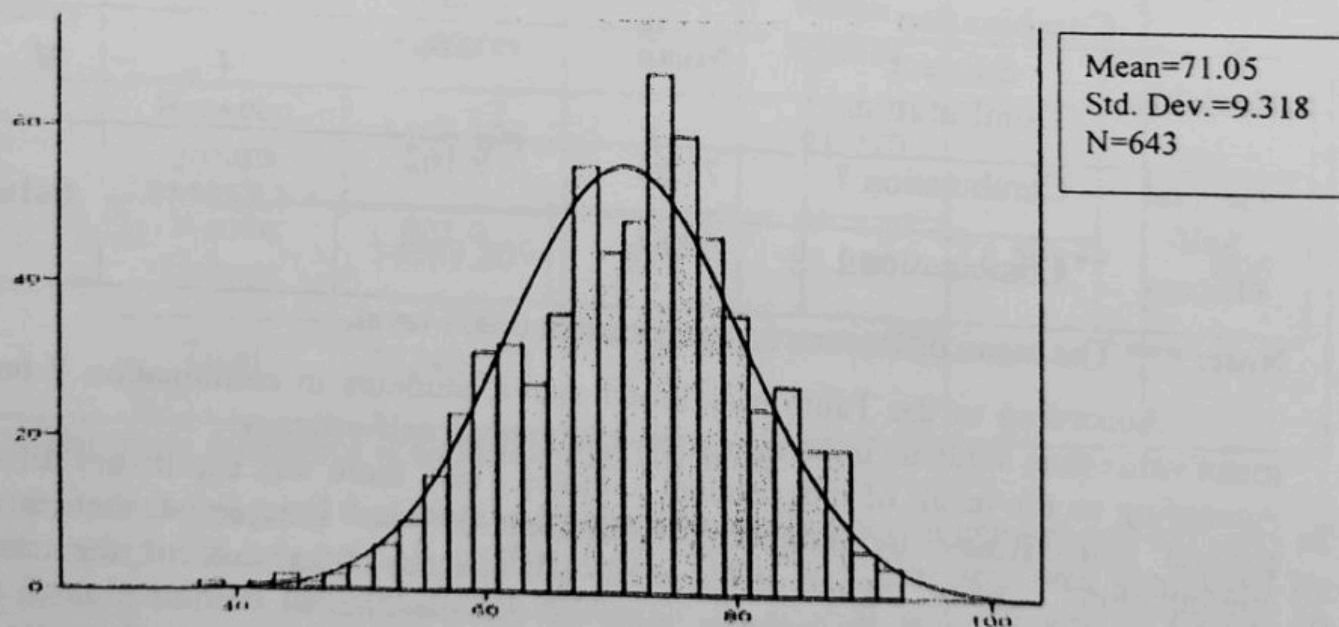

Figure 1 Frequency Distribution of General Self-efficacy Scores

Figure 1 showed the frequency distribution for general self-efficacy of Grade 10 students. It is noticeable that the largest number of students had scores in the range between 60 and 80. Moreover, a small number of students had very low and very high scores respectively. Therefore, the illustrated histogram was quite similar to normal, bell shaped curve shown by the line.

To find out the difference in general self-efficacy of Grade 10 students according to gender, descriptive statistics was conducted.

Table 2 Result of Independent Samples *t* test for General Self-efficacy by Gender

Variable	Gender	Mean	SD	*t*	*df*	*p*
General Self-efficacy	Male	68.46	9.231	-6.599***	641	.000
	Female	73.18	8.849			

Note: ***The mean difference is significant at 0.001 level.

According to Table 2, the mean score of female students was higher than that of male students in general self-efficacy. In order to determine whether gender difference were significant or not, the independent samples*t* test was used. The result of independent samples*t*test showed that there was significant difference in general self-efficacy at 0.001 level. Thus it could be interpreted that female students had higher general self-efficacy than that of male students. This finding was contracted to the result of research done by Muris (2001) which indicated that female adolescents had lower level of total self-efficacy compared to their male counterparts. However, this finding is consistent with the result of WintZawHtet (2016) which indicated that female students had more self-efficacy than male students.

Descriptive Statistics was conducted to examine differences in general self-efficacy between two subject combinations; combination-7 (Biology) and combination-1 (Economics).

Table 3 Result of Independent Samples*t* test for General Self-efficacy by Subject Combination

Variable	Subject Combination	Mean	SD	*t*	*df*	*p*
General Self-efficacy	Combination 7	73.56	9.162	4.825***	641	.000
	Combination 1	69.84	9.159			

Note: *** The mean difference is significant at 0.001 level.

According to the Table mentioned above, students in combination 7 had higher mean value than students in combination 1 in general self-efficacy.
According to the result of independent samples *t* test, there was significant difference in general self-efficacy by subject combination. It was interpreted that students in combination 7 were higher in general self-efficacy than that of the students in combination 1. It may be because most of the students in combination 7 are more ambitious, had keen interest and willing in studying their lessons than most of the students in combination 1. They may be more efficacious in solving their social, emotional and personal problems. This study is inconsistent with the findings of Hay Mar Oo (2017) which found that there was no significant difference in general self-efficacy according to their subject combination.

Table 4 Result of Independent Samples*t* test for General Self-efficacy by School Locality

Variable	Locality	N	Mean	SD	*t*	*df*	*p*
General Self-efficacy	Urban	354	71.98	9.196	2.808**	641	.005
	Rural	289	69.92	9.356			

Note: **The mean difference is significant at 0.01 level.

Based on the Table 4, the mean scores of urban students were higher than that of the students from rural in general self-efficacy. Based on the result of independent samples t test. there was significant difference between urban and rural students in their general self-efficacy. It can be interpreted that urban students had higher general self-efficacy than rural students. It may be because there are more accessibilities in urban than in rural areas.

In order to explore the difference in general self-efficacy of Grade 10 students among four Basic Education High Schools and two Basic Education Branch High Schools. descriptive statistics was computed.

Table 5 Mean Comparison of General Self-efficacy of Grade 10 Students by School

Variable		School 1	School 2	School 3	School 4	School 5	School 6
General Self-efficacy	Mean	72.47	71.55	68.45	69.12	72.19	69.32
	SD	8.616	9.755	10.017	9.766	8.428	9.033

According to the Table 5, students from school (1) had the highest mean scores and students from school (3) had the lowest mean scores. In order to investigate whether general self-efficacy of Grade 10 students significantly differ according to school, one way ANOVA was conducted. The results were shown in Table 6.

Table 6 ANOVA Result of General Self-efficacy for Grade 10 students by school

Variables		Sum of Squares	df	Mean Square	F	p
General Self-efficacy	Between groups	1406.394	5	281.279	3.298**	.006
	Within Groups	54333.809	637	85.296		
	Total	55740.202	642			

Note: **The mean difference is significant at 0.01 level.

The result indicated that there was significant difference in general self-efficacy of students among different schools at 0.01 level. Then, Post Hoc test was computed by Tukey method to find the significant difference in general self-efficacy of Grade 10 students by schools. Table 7 showed that the results of the Post Hoc Analysis in detail.

Table 7 Result of Post Hoc Test for General Self-efficacy by School

Variables	(I) School Name	(J) School Name	Mean Difference (I-J)	p
General Self-efficacy	School (1)	School (3)	4.019*	.040

Note:*The mean difference is significant at 0.05 level.

Post Hoc test revealed that there was significant difference in general self-efficacy among schools. General self-efficacy of students from school (1) was significantly higher than that of the students from school (3) at 0.05 level.

To investigate psychological distress of Grade 10 students, descriptive statistics was conducted and the results were shown in Table 8.

Table 8 Descriptive Statistics of Psychological Distress for Grade 10 Students

Variable	N	Minimum	Maximum	Mean	SD
Psychological Distress	643	26	84	45.34	8.509

Table 8 showed that the mean score of the whole sample is 45.37 and its standard deviation is 8.509. Moreover, the minimum score and the maximum score of the whole sample are 26 and 84 respectively. Then, the frequency distribution for psychological distress of students could be seen in Figure 2.
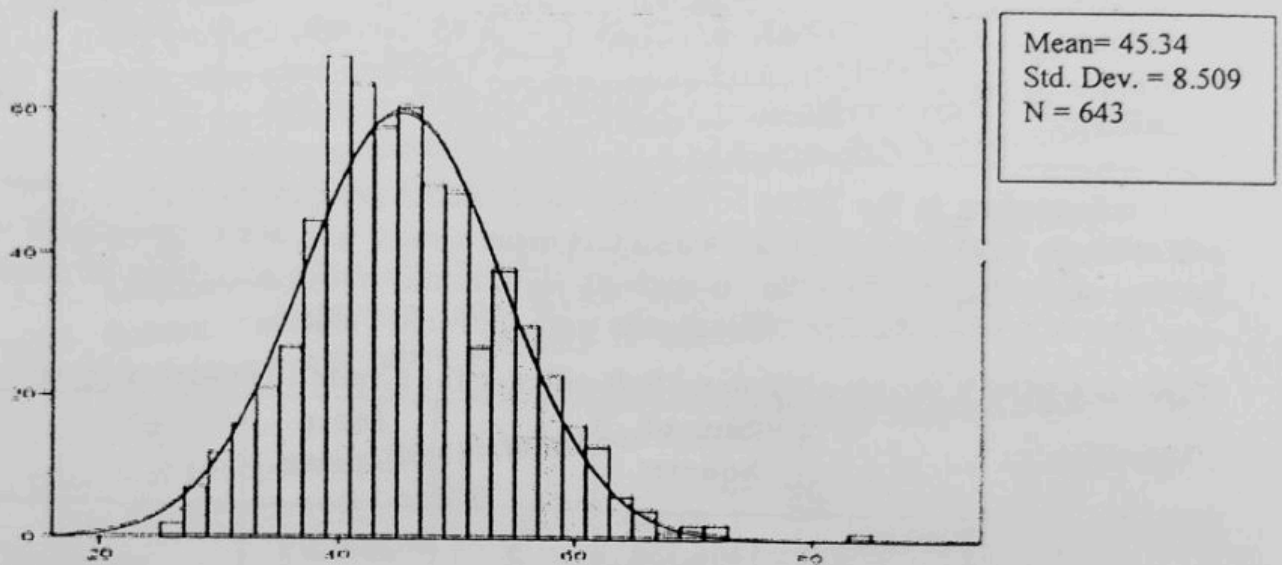

Mean= 45.34
Std. Dev. = 8.509
N = 643

Figure 2 Frequency Distribution of Psychological Distress

The illustrated histogram was quite similar to normal, bell shaped curve shown by the line. According to figure 2, it was noticeable that the largest number of students had scores in the middle of two bars of the range between 35 and 60.

To find out the difference in psychological distress of Grade 10 students according to gender, descriptive statistics was conducted. The mean and standard deviation of psychological distress for male and female students were presented in Table 9.

Table 9 Result of Independent Samples$t$ test for Psychological Distress of Grade 10 Students by Gender

Variable	Gender	Mean	SD	t	df	p
Psychological Distress	Male	45.44	8.106	.263	641	.793
	Female	45.26	8.836			

According to the Table 9. male students had higher mean score in psychological distress than female students. The result of independent samples$t$ test showed that there was no significant difference in psychological distress of Grade 10 students by gender. This finding was consistent with the research finding of Shaheen, 2012 which found there was no significant difference in psychological distress between male and female students.

In order to find out the difference in psychological distress of Grade 10 students by subject combination, descriptive analysis was conducted.

Table 10 Result of Independent Samples*t* test for Psychological Distress of Grade 10 Students by Subject Combination

Variable	Subject Combination	N	Mean	SD	t	df	p
Psychological Distress	Combination-7	209	43.92	8.638	-2.948**	641	.003
	Combination-1	434	46.02	8.370			

Note: **The mean difference is significant at 0.01 level.

According to Table 10, the mean score of students in combination 1 had higher than that of the students in combination 7 for psychological distress. According to the result of independent samples*t* test, there was significant difference in psychological distress of Grade 10 students according to subject combination. It can be interpreted that combination 1 students had more psychological distress than combination 7. According to the result which was discussed earlier showed that students in combination 7 had higher level of general self-efficacy: an individual's belief in his or her inrate ability to achieve goals than students in combination 1. This may be the reasons that they had lower level of psychological distress.

School locations based analysis was conducted to find out the difference in psychological distress among rural and urban students. To study the significant differences between rural and urban students in psychological distress, descriptive statistics was conducted.

Table 11 Result of Independent Samples*t* test for Psychological Distress of Grade 10 Students by School Locality

Variable	Locality	N	Mean	SD	t	df	p
Psychological Distress	Urban	354	45.20	8.910	-.462	641	.645
	Rural	289	45.51	8.001			

According to Table 11, the mean score of rural students was slightly higher than urban students in stress. It means that rural students had slightly higher psychological distress than urban students. In order to determine whether this difference was significant or not, the independent samples*t* test was used. According to the result of independent samples*t* test, there was no significant difference in psychological distress of Grade 10 students according to their school locality. It can be interpreted that rural and urban students had the same level of psychological distress. This may be because anxiety mostly depends on an individual's reaction to the perception of stressors. Each and every individual may have different perception about the stressors they experience in their life. If they have negatively based cognitions about themselves, their environment and their future, they are very prone to develop psychological distress: stress, anxiety and depression. The psychological distress in adolescents might be growth because of the conflict and problems they experienced as a child. All of the perceptions about stressors, cognitions and childhood experience may differ for everyone. That is why each student may have at least small amount of psychological distress. This research finding is consistent with the research of Mishra, Srivastava, Tiwary& Kumar, 2018. They found that there was no significant difference in the prevalence of anxiety and depression in rural and urban areas.

Table 12 Descriptive Statistics of Psychological Distress of Grade 10 Students by School

Variable		School 1	School 2	School 3	School 4	School 5	School 6
Psychological Distress	Mean	45.14	45.19	47.74	44.75	42.95	47.24
	SD	8.782	9.009	8.238	7.844	7.646	7.695

Based on the results of Table 12, the mean score of the students who are in school (3) was higher than that of the students in other schools in psychological distress. Moreover, the students in school (5) had the lowest mean score.

To be sure these differences were significant or not, one way ANOVA was conducted and the result was shown in Table 13.

Table 13 ANOVA Result of Psychological Distress of Grade 10 Students by School

Variable		Sum of Squares	df	Mean Square	F	p
Psychological Distress	Between groups	1150.770	5	230.154	3.234**	.007
	Within Groups	45327.641	637	71.158		
	Total	46478.411	642			

Note: **The mean difference is significant at 0.01 level.

The result revealed that there was significant difference in students' psychological distress by their schools at 0.05 level. Then, in order to attain detailed information about the difference in psychological distress of Grade 10 students according to schools. Post-Hoc test was computed by Tukey method. The result was presented in Table 14.

Table 14 Result of Post Hoc Test for Psychological Distress of Grade 10 Students by School

Variable	(I) School Name	(J) School Name	Mean Difference (I-J)	p
Psychological Distress	School (5)	School (3)	-4.790**	.010
		School (6)	-4.289*	.016

Note: *The mean difference is significant at the 0.05 level.
Note: **The mean difference is significant at the 0.01 level.

Based on the Table 14, there was significant difference in psychological distress of Grade 10 students between school (5) and school (3), and between school (5) and school (6) at 0.05 and 0.01 level. It can be interpreted that students in school (3) and school (6) had more psychological distress than the students in school (5). As rural school had low level of self-efficacy, they are more likely to have psychological distress (stress, anxiety and depression) than urban school which had high level of self-efficacy.

Conclusion

Besides self-efficacy, there are many factors which can influence psychological distress (stress, anxiety and depression) of adolescents and children. Therefore, future study should consider the following factors as much as possible. Future research ideas could include the study of whether low social self-efficacy is connected to worry, social

withdrawal or loneliness both in children, adolescents and in emerging adulthood. Future research should look further into the gender difference in the correlations for self-perceived appearance and social self-efficacy to investigate whether there may be a third variable responsible for this association. Future study should also conduct social self-efficacy and self-esteem of adolescents. Furthermore, future study should also conduct emotional self-efficacy and emotion regulation and coping skills. Future research should also perform social support and stress of adolescents. Further research may be conducted to explore mediating role of self-efficacy in the relationship between perfectionism and psychological distress. Future studies could look into having a larger sample size to gain a more variety of results.Longitudinal research and qualitative research should be conducted to investigate students' general self-efficacy and psychological distress.

Acknowledgements

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