



Effect of Stress Inoculation Training on Academic Distress Tolerance in High School Students

Indah Lestari^{1*}, Ashari Mahfud², Santoso Santoso³

^{1,3}Bimbingan Konseling, Universitas Muria Kudus, Kudus, Indonesia

²Bimbingan Konseling, Universitas Lampung, Lampung, Indonesia

*indah.lestari@umk.ac.id

Abstract .This study aims to examine the impact of stress inoculation training techniques on the ability to tolerate academic distress of high school students. This is done because the need for the ability to tolerate academic distress in the era of the COVID-19 pandemic has increased, in line with the increase in stressors for high school students. The research subjects were 24 high school students in Kudus Regency, which were taken using a purposive sampling technique. The screening was carried out using the academic distress tolerance scale instrument that was developed previously and got the test results at a good level. Multiple linear regression analysis showed that, together, three types of activities in SIT were able to increase academic distress tolerance in high school students ($F = 55.194 / \text{Sig} < 0.05$). However, conceptualization activities did not have a significant effect ($t : 1.664 / \text{Sig} > 0.05$) when compared to training activities ($t : 3.161 / \text{Sig} < 0.05$) and application ($t : 8.380 / \text{Sig} < 0.05$) in SIT interventions. Through the coping strategies carried out, individuals will be able to reconstruct their minds back to positive thinking (positive cognitive restructuring), broaden perspectives (enriched restructuring), try to understand as well as possible (dependent understandings), determine the actions to be taken (device action), and achieve emotional support (emotional support) so that distress tolerance is achieved. These results provide a recommendation that the SIT intervention given for the development of academic distress tolerance ability needs to get more focus, such as adding activity sessions to the conceptualization phase

Keywords: stress inoculation training, distress tolerance

1 INTRODUCTION

The era of the covid 19 pandemic, makes students and teachers have a tendency to get worse stress (Marusak, et al. 2021). This condition is triggered by a rapidly changing environmental situation while the individual's adaptability has limitations. Thus, this condition triggers stressors that arise within themselves. Suartika, Nurdin and Ruhmadi (2014) suggest that stress is a form of a person's response, both physically, to changes in the environment that disturb and result in him being threatened (Hadi, A., Yusrizal., & Bahrun. 2021). Automatically the body will get a reaction

based on the stimulus in the form of conditions that are not in accordance with expectations. Prabu(2015), defines stress as a form of situation where the burden felt by a person is notproportional to his ability to cope with the burden. the body's reaction to a burden that isfelt too heavy to handle, is a form of stress. Based on this understanding, it can be defined that the stress condition is a form of individual reaction both physically andmentally. Environmental conditions that are too pressing or felt too heavy for the above.

According to Jabari and Sheykhjan (2015), kids' stress levels during the school year have a significant impact on the learning process they are going through. Stress is divided into two categories by Hawari (2011): eustress and distress. Distress is defined as stress that leads to an unfavorable, detrimental, and destructive reaction to stress. While Eustress is stress that has the result of a response to pressure that is healthy, positive and constructive. Those with a good pattern of distress tolerance will be able to determine the nature of eustress. Distress tolerance, according to Bardeen, Fergus, and Orcut (2013), is the capacity to withstand emotional and physical situations, including adverse psychological states, physical ailments, and others. Stated differently, distress tolerance permits people to develop even under harsh circumstances. (Macatee, Allan, and Norr., 2014). Through the development of a pattern of tolerance for stress within the individual, stressful situations will be transformed into a form of encouragement to become material for future learning. Stress does not automatically benefit. Through this torenation of pressure, individuals will have a moderate degree of stress so that it has a good impact on improving performance, including in the academic field. Therefore, during the education period, students are expected to be able to develop eustress well through tolerance of adversity, so that they will be motivated to achieve learning goals during their education.

Currently in the midst of the Covid-19 pandemic where students appear in the midst of limitations, students must immediately prepare themselves with new learning situations. Finally, this triggers stressful conditions among students (Masitoh. 2020). Andiarna and Kusumawati. (2020). explained that the results of observations made by researchers on several children who were studying at home showed that daring learning can cause children to become angry and lazy. Children's emotions become unstable, because the needs of home and school must be run at the same time, this affects the child's emotional condition, causing stress such as not paying attention to tasks, being scolded, and finally the child cries and even becomes depressed like that.

A study conducted by Suartika, Nurdin and Ruhmadi (2014) showed that, high levels of anxiety and stress were experienced by students during the Covid-19 pandemic caused by excessive academic burdens. Furthermore, the results of research from Rahmi(2013) on second-level students revealed that the higher the

level of stress experienced by students, the lower their academic achievement, and vice versa (Martaputri, N., A., Muhtadi, A., Hukom , J., & Samal, D. 2021).

But on the other hand, Counseling Guidance Teachers have an important role in situations like this, it turns out that there are still many who have not been able to apply stress management. Thus, this is a current need for BK teachers in schools and will have an impact on students in tolerant of their academic distress. A study shows that teachers are deemed necessary to be equipped with management skills (Rah-

mawati, T. (2021). If teachers experience not having a good stress management, then there is the potential to bring new problems when in class. The teacher as an example for students requires able to show many positive skills, one of which is stress control (Suparman, 2021).

Donald Meichenbaum created the Stress Inoculation Training (SIT) method, which is predicated on the notion that assisting customers in managing little stressors will allow them to grow tolerant of other types of discomfort (Erford: 2016). The foundation of stress inoculation training (SIT) is the idea that the abilities acquired there can be applied to other potential future scenarios (Corey, 2013). Numerous studies have looked into the benefits and utility of SIT since its inception. SIT has been the most widely used model for stress management training in the workplace for more than 20 years (Flaxman & Bond, 2010).

According to Suzsana and Marian's (2012) research, SIT is particularly successful at teaching teenagers coping mechanisms to lessen stress and anxiety. These effects are measured both immediately and three months later. According to Shalkouhi, Vatankhah, and Bahri (2015), administering SIT can also lengthen life expectancy and strengthen the body's ability to withstand stressful events. However, studies by Flaxman and Bond (2010) demonstrate that SIT had no appreciable effect on cognitive impairment or psychological flexibility while coping with work-related stress. This shows that the impact given by SIT for individuals who experience stress is inconsistent. Thus, there is a need for a study that is able to reveal the weaknesses of the SIT.

Therefore, this study will complement the results of previous studies, to see the influence given to every aspect of SIT in developing academic distress tolerance. From the results of this study, the information that will be obtained is in the form of the value of the influence that will be given to each form of SIT activity on the development of tolerance for academic distress. The type of SIT activity that has a low impact will be input for further research in modifying the technique.

2 Method

Regression research method was conducted to determine the magnitude of the effect of each SIT activity on the development of academic distress tolerance abilities in high school students. SIT activities carried out in this study include "conceptualization", "practice" and "application/completion". The subjects of this study involved 24 high school students taken from a high school in Kudus. The purposive sampling technique was carried out to take students who had a low level of academic distress tolerance ability to be given the SIT intervention. Subject selection was carried out by involving the academic distress tolerance scale instrument which was developed by Tonarely and Ehrenreich. (2020). This measuring instrument has previously been tested for validity and reliability with an alpha coefficient level on the aspect of tolerance: 0.89, Rating: 0.90, absorption: 0.95, and regulation: 0.63. The data obtained will then be tested together with multiple linear regression analysis techniques.

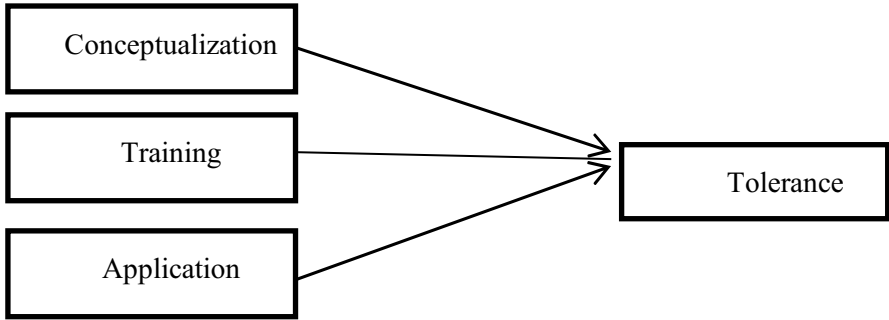


Fig. 1. Study Diagram

3 Results And Discussion

The results of the multiple linear regression test will be grouped into two results. The first is the result of the t-value, to see each effect of the three types of activities contained in the SIT. The two results of the F value will be used to see the value of the simultaneous influence of three types of activities from SIT in developing the ability to tolerate academic distress in high school students.

The three types of activities in SIT include conceptualization, training and implementation activities. Thus, the hypothesis that will be expressed in the multiple linear regression test includes 4 things. That is:

- a. The effect of conceptualization on high school students' academic distress tolerance
- b. The effect of training on high school students' academic distress tolerance
- c. The effect of application on high school students' academic distress tolerance
- d. The effect of conceptualization, training, and application together on high school students' academic distress tolerance

Data were taken from 4 types of groups that had previously been given different SIT interventions. Group 1) Conceptualization, 2) Training 3) Implementation 4) Different SIT. data was taken using the academic distress tolerance scale, and then tested (analysis). The following are the results of the analysis obtained.

Table 1. Coefficients

Model	Standardized		Coefficients		
	Unstandardized		Beta	t	Sig.
1	(Constant)	28.452		1.664	.112
	Conceptualization	.247	.149	1.594	.127

Training	.375	.119	.377	3.161	.004
Application	1.299	.155	1.112	8.380	.000

a. Dependent Variable: TOLERANCE

The data in the table above can be used in answering the three types of hypotheses contained in this study.

Hypothesis 1

In table 1, it can be seen that the significance value for the effect of conceptualization activities on the development of high school students' academic distress tolerance ability is $0.127 > 0.05$ with a t value of $1.594 < t_{table} 2.085$, so it can be concluded that there is no influence of conceptualization activities on the development of students' academic distress tolerance.

Hypothesis 2

The results in table 1, it can be seen that the significance value for the influence of training activities on the development of academic distress tolerance abilities of high school students is $0.04 < 0.05$ with a t value of $3.161 < t_{table} 2.085$, so it can be concluded that there is an influence of training activities on the development of students' academic distress tolerance.

Hypothesis 3

The results in table 1, it can be seen that the significance value for the effect of application activities on the development of high school students' academic distress tolerance ability is $0.00 < 0.05$ with a t count of $0.30 < t_{table} 2.085$, so it can be concluded that there is an effect of application activities on the development of students' academic distress tolerance.

Hypothesis 4

The results are seen from the magnitude of the F value and the significance level of the three types of SIT activities in the development of high school students' academic distress tolerance ability.

Table 2. : Anova

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1189.642	3	396.547	55.194	.000 ^b
	Residual	143.691	20	7.185		
	Total	1333.333	23			

a. Dependent Variable: Tolerance

b. Predictors: (Constant), Application, Conceptualization, Training

Based on the output above, it is known that the significance value for the effect of conceptualization, training and application activities in SIT simultaneously on the development of academic distress tolerance of high school students is $0.00 < 0.05$ and the calculated F value is $55,195 > F$ table $3,470$. So it can be concluded that the three types of activities in SIT are simultaneously able to have a positive influence on the development of high school students' academic distress tolerance ability.

The above findings complement the previous research conducted by Flaxman and Bond (2010) which showed that SIT did not have a significant impact on psychological flexibility and cognitive dysfunction in dealing with stress in the workplace. This is specific to the type of "conceptualization" activity. This shows that the impact given by SIT for students who experience stress is inconsistent in the conceptual phase, therefore, it is necessary to focus on more activities in this phase. This is because, SIT only provides a short time to intervene in the realm of This affects the individual's resilience in dealing with stressful situations in the future. Psychological and cognitive flexibility are very influential in bringing up coping strategies. Coping itself consists of cognitive and behavioral efforts aimed at overcoming requests, both internal, external, and conflicts between which are considered very burdensome for individuals (Tavousi 2015).

When coping mechanisms do not materialize, distress tolerance is compromised (Fetzner, Peluso, & Asmundson, 2014). Restructuring their minds to positive thinking (positive cognitive restructuring), expanding their horizons (enhanced restructuring), attempting to comprehend as much as possible (dependent understandings), deciding on the course of action to take (device action), and obtaining emotional support are all goals of coping in distress tolerance itself. When people possess high resilience, they can implement transformational coping strategies to accomplish all of these tasks (Kobosa in Tavousi 2015).

It is believed that by lengthening the SIT training, which covers the conceptualization phase of harshness personality development, students' academic distress tolerance patterns will rise. Thus, based on the justification provided, it is anticipated that this study will highlight the influence of SIT on high school students' ability to tolerate academic distress.

However, in the end this study tries to prove that, through the inoculation training provided, high school students are able to have coping strategies that can be raised when academic stressors come with very strong. Through the coping strategies carried out, individuals will be able to reconstruct their minds back to positive thinking (positive cognitive restructuring), broaden perspectives (enhanced restructuring), try to understand as well as possible (dependent understandings), determine the actions to be taken (device action), and achieve emotional support (emotional support) so that distress tolerance is achieved. All of these actions can be recommendations for implementing SIT interventions for high school students to further increase the duration of activities in the conceptualization phase.

4 Conclusion

SIT has 3 types of activities to help high school students develop academic distress tolerance skills. These activities include drafting, training and implementation / completion. These three types of activities together have a significant influence on the development of high school students' academic distress tolerance ability. However, it is necessary to focus more on the type of conceptualization activity, so that this activity has a more significant influence on the development of high school students' academic distress tolerance abilities. This is because psychological and cognitive flexibility are very influential in bringing up students' coping strategies in tolerating stressful situations.

References

1. Allan, N.P., Macatee, R. J., Norr, A. M., & Schmidt. 2014. Direct and Interactive Effects of Distress Tolerance and Anxiety Sensitivity on Generalized Anxiety and Depression. *Journal of Cognitive Therapy*. 38: 530-540.
2. Andiarna, F., & Kusumawati, E. (2020). Pengaruh pembelajaran daring terhadap stres akademik mahasiswa selama pandemi Covid-19. *Jurnal Psikologi*, 16(2), 139- 149.
3. Bardeen, J. R., Fergus, T. A., & Orcut, H. K. 2013. Testing a Hierarchical Model of Distress Tolerance. *Journal of Psychopathology Behavior Assesment* 35: 495- 505.
4. Between Emotional Intelligence and Acedemic Achievement. *Jurnal Pendidikan Progresif*, 11(3),511-523. doi: 10.23960/jpp.v11.i3.202102.
5. Corey, Gerald. 2013. *Theory and Practice of Counseling and Psychoteraphy*, ninth edition. California : Brooks/cole.
6. Erford, Bradley T.2016.40 Teknik yang Harus Dietahui Setiap Konselor Edisi Kedua. Yogyakarta.Pustaka Pelajar.
7. Fetzner, M. G., Peluso, D. L., & Asmundson, G. J. G. 2014. Toleranting Distress After Trauma: Differential Associations Between Distress Tolerane and Posttraumatic Stress Symtoms. *Journal of Psychopathol Behavior Assessment* 36:475–484.
8. Flaxman, P. E., & Bond, F. W. 2010. A Randomised Worksite Comparison of Acceptance and Commitment Therapy and Stress Inoculation Training. *Journal of Behavior Reseach and Therapy* 48: 816 – 820.
9. Hadi, A., Yusrizal., & Bahrn. (2021). Principal Leadership in Education Quality at Elementary School in Cluster VI of Geumpang Pidie Regency. *Jurnal Pendidikan Progresif*, 11(3), 573-579. doi: 10.23960/jpp.v11.i3.202108.
10. Hawari, dadang. 2011. *Manajemen Stress, Cemas dan Depresi* (2 ed). Jakarta : FKUI.
11. Jabari, Kamran& sheykhjan, T.M. 2015. Stess among academic stress and students satisfaction of their performances in payame noor university of mianoloab *journal of Indian psychology* 2 (4): 67-72
12. Martaputri, N., A., Muhtadi, A., Hukom, J., & Samal, D. (2021). Meta-Analysis : The Corellation
13. Marusak, H. A., Borg, B., Morales, A., Carrington Smith, J., Blankenship, K., Allen, J. L., ... & Bluth, M. H. (2021). Martial Arts-Based Curriculum Reduces Stress, Emotional, and Behavioral Problems in Elementary Schoolchildren During the COVID-19 Pandemic: A Pilot Study. *Mind, Brain, and Education*.

14. Masitoh, A. (2020). Strategi koping siswa dalam menghadapi stres akademik di era pandemi Covid-19. *Academica: Journal of Multidisciplinary Studies*, 4(2), 185- 198.
15. Prabu, P. S. (2015). A study on academic stress among higher secondary students. *International Journal of Humanities and Social Science Invention*, 4(10), 63-68.
16. Rahmawati, T. (2021). Peningkatan Pengetahuan Dan Manajemen Stress Di Masa Pandemi Covid-19 Bagi Masyarakat. *JMM (Jurnal Masyarakat Mandiri)*, 5(1), 125-134.
17. Rahmi, N. 2013, Hubungan tingkat stress dengan prestasi belajar mahasiswa tingkat II Prodi D3 Kebidanan Banda Aceh Jurusan Kebidanan Poltekes Kemenkes NAD TA 2011/2012. *Jurnal Ilmiah Stikes U'Badiyah*, 2 (2) : 66-76
18. Reading Competence During Pandemic Covid-19 Outbreak. *Jurnal Pendidikan Progresif*, 11(3), 496511. doi: 10.23960/jpp.v11.i3.202101
19. Reddy, K. J., Menon, K. R., & Thattil, A. (2018). Academic stress and its sources among university students. *Biomedical and Pharmacology Journal*, 11(1), 531- 537.
20. Shalkouhi, F.H., Vatankhan, H., & Bahari, M.Z. 2015. The Effectiveness of Stress Inoculation Training (SIT) on Resiliency Live Expectancy in Infertile Woman From Rasht. *Journal of Natural and Social Sciences*, 4 (1): 117-124
21. Suartika, Ira., Nurdin, Agus & Rumadi, Edi. 2014. Analisis Faktor yang Berhubungan Dengan Tingkat Stress Akademik Mahasiswa Reguler Program Studi DIII Keperawatan Cirebon Polteker Kemenkes Tasikmalaya. *Journal Keperawatan Sudirman* 9(3): 173-189
22. Suparman, U. (2021). Question Prompts in Teaching Relevant and Authentic Texts to Improve Students'
23. Suzanna, SZABO & Marian, Mihai. 2012. Stress Inoculation Training in Adolescents: Classroom Intervention Benefits. *Journal of Cognitive an Behavioral Psychotherapies* 12(2). 175-188.
24. Tavousi, M. N., 2015, The Effectiveness of Progressive Relaxation Training on Daily Hassles: Moderating Role of Hardiness and Self Esteem. *Journal of Social Behaviour Sciences* 190 (2): 54-60
25. Tonarely, N. A., & Ehrenreich-May, J. (2020). Confirming the factor structure and validity of the distress tolerance scale (DTS) in youth. *Child Psychiatry & Human Development*, 51(4), 514-526.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

