Development of Stress Management Guidebook to Prevent Academic Burnout on Vocational High School Students

(Pengembangan Panduan Manajemen Stress Untuk Mencegah Academic Burnout Pada Siswa Sekolah Menengah Kejuruan)

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Abstract

Students must be aware of academic burnout, as it can reduce their learning achievement. This study aims to develop a stress management guidebook to prevent academic burnout in vocational high school students. This guidebook can be used by counselors as a reference in providing guidance services to vocational students who have problems related to academic burnout. This manual is equipped with an academic burnout scale to measure the level of student academic burnout. The development model in this study used the Borg and Gall development research design. In this study, we used five stages, consisting of pre-survey, product design, design validation, product testing, and final product preparation. The research instruments were material expert assessment instruments, media expert assessment instruments, and assessment instruments for prospective product users. The obtained data were analyzed using descriptive percentages and inter-rater agreement. The results of the study indicated that the stress management guide meets the acceptability criteria, so it is appropriate to be used as a medium for counselors to facilitate the development of students’ stress management to prevent academic burnout.

Keywords: stress management guide; academic burnout; vocational high school students

1. Introduction

Learning is a primary academic activity involved in almost every school’s educational process. The achievement of learning goals highly relies on the students learning, as the main

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subject in the learning process. Frequently, students feel anxious and apprehensive during their learning process due to the burdens of their assignments (Abdous, 2019; Jawas, 2019). Besides, students with unfinished assignments will experience fatigue and desperation, resulting in prolonged stress that affects their learning (Santrock, 2008). This issue is commonly known as academic burnout, where students experience physical and mental exhaustion caused by academic assignments.

Burnout is weariness and saturation due to increasing assignments (Al-Marwaziyyah & Chori, 2021). Besides, academic burnout is also interpreted as emotional fatigue due to the assignment insistence that may cause students' feeling of incompetence, so that they are lethargic to learn as they doubt their capabilities (Maslach, Schaufeli, & Leiter, 2001). Burnout perfectly portrays students' feelings when they complete their academic tasks. The symptoms of academic burnout in students include emotional exhaustion (Lee, Lee, Lee, & Cho, 2020), a tendency to depersonalize (Fardous & Afzal, 2022), and a feeling of low achievement (Liu, Yao, & Li, 2020). Meanwhile, Maslach et al. (2001) divides academic burnout into three aspects, namely exhaustion, depersonalization (cynicism), and reduced personal accomplishment.

Our preliminary studies involving the school counselors from one of State Vocational High School in Malang suggested that students rarely complete their tasks and collect assignments in time, lowering their learning reports. Besides, some students are reported to face difficulties in concentrating and in attending online learning through Zoom or Google Meet since their load of assignments remains the same as offline learning. The students have a high possibility of experiencing academic burnout, especially during the pandemic, in which student workloads did not differ much from what it was before the pandemic (Setiyowati, Rachmawati, & Prihatiningsih, 2022).

Our preliminary study involving the students also revealed that one of the causes for students avoiding teachers is the massive load of assignments given by the teachers in a short period. Therefore, this situation leads to students being susceptible to stress and experiencing lower learning motivation. In addition, the decrease in learning motivation is also an indication of academic burnout. The school counselors of State Vocational High School 3 attempted to anticipate students' academic burnout by providing motivation and academic burnout-related materials in the form of a classical guide. To optimize classical guidance, school counselors can use media that facilitates guidance and counseling services to prevent academic burnout.

The aforementioned preliminary study is also linear with a previous study reporting that 52% of high school students in Yogyakarta, Indonesia, experienced learning boredom (Suwarjo & Purnama, 2016). Meanwhile, a study from Maharani (2019) showed that 44.1% of students experience academic burnout as they experience fatigue. Therefore, academic burnout should be regarded as a serious issue requiring immediate solvency as it affects students' academic performance and achievement.

Academic burnout among students can be prevented through stress management. Stress management is the students' ability to control themselves excellently and positively. Stress management is defined as a procedure to transform someone's negative perception that also improves someone's internal and external behaviors regarded as burdensome (Lazarus & Folkman, 1984). Schafer (1996) defines stress management as a strategy to control and manage stress to acknowledge the cause of the stress and techniques to manage the stress to perform a daily task better and prevent stress. Conversely, a previous study suggested that
stress management greatly affects students’ learning results (Guyana, Witarsa, & Achmadi, 2016). Additionally, Wati (2017) explained that burnout among nurses could be resolved using a coping strategy. A coping strategy is a behavior used to adapt to a particular pressure. This strategy can be enhanced by optimizing the ability of stress management.

Stress management skills are essential skills for students. This skill is included as one of the students’ development aspects mentioned in competency standards for student independence as a part of emotional maturity (Santoso, 2022). Therefore, stress management should be properly developed and internalized by vocational high school students, particularly in the level of identification, accommodation, and action. Stress management is also one of the components of fundamental service. Meanwhile, the most common strategy used in the stress management service is classical guidance.

Students with excellent stress management skills have greater confidence and self-commitment to avoid or minimize the potential of academic burnout (Wati, 2017). This study aimed to construct a stress management guidebook as a proper guidance and counseling media for the school counselor to prevent students’ academic burnout. The constructed guidebook was expected to be used by school counselors in all study programs and levels in vocational high school. The stress management guidebook consisted of cognitive, emotional, physical, and social strategies (Ismiati, Hasanah, & Prabawati, 2016). Besides, this guidebook was also completed with an academic burnout scale to measure vocational high school students’ academic burnout.

2. Method

This study use a research and development design adapted from Borg and Gall’s (1983) development model, which consisted of 10 stages. However, we only developed our product up to the fifth stage, so we carried out a preliminary study (pre-survey), developed a product design or prototype, validated the design, tried out the product to the experts of material, media, and the designated user (school counselors), as well as revising the final product.

Our tryout subject consisted of the experts in guidance and counseling materials, experts in learning media, and the designated users (school counselors). We collected data in the form of verbal and numerical data, in which the numerical data were obtained from the scoring from the material expert, learning media experts, and the designated users. Meanwhile, the verbal data were attained from the suggestion from the material, learning media, and the users. The verbal data were used to revise the product.

In addition, our research instrument consisted of the scoring format for the guidance and counseling material experts, learning media experts, and the users (school counselors). The measured aspects consisted of accuracy, usability, and convenience. The obtained assessment results from the material and learning media experts were analyzed using the descriptive percentage method. Meanwhile, the data obtained from the designated users (counselors) were analyzed using the inter-rater-agreement model. The criteria for product feasibility, based on the experts’ evaluation, are presented in Table 1. In addition, the criteria for product feasibility based on the assessment of the users are shown in Table 2.
Table 1. Criteria of Product Feasibility Based on Materials and Learning Media Experts Evaluation

| Score Range | Score Scale | Classification              |
|-------------|-------------|------------------------------|
| 76-100%     | 4           | Very accurate/ useful/ feasible |
| 56-75%      | 3           | Accurate/ useful/ feasible   |
| 40-55%      | 2           | Less accurate/ useful/ feasible |
| 0-39%       | 1           | Not accurate/ useful/ feasible |

Table 2. Criteria of Product Feasibility Based on Evaluation from Users

| Score Range | Criteria |
|-------------|----------|
| 0.00-0.25   | Low      |
| 0.26-0.50   | Moderate |
| 0.51-0.75   | High     |
| 0.76-1.00   | Very High|

3. Results and Discussion

3.1. Results

In this research and development, we developed a management stress guidebook to prevent vocational high school students’ academic burnout. This management stress guidebook was designed for the school counselors in vocational high schools. This stress management guidebook consists of four parts. First, the introduction consists of the background, purposes, targets, and materials of stress management. The second part covers the instruction for use, including the general instruction for use, special instruction, the definition of academic burnout, the symptoms of academic burnout, and the stages of strategy for stress management. The third part consists of the implementation of the service, subsisting of the pretest, service implementation, posttest, and the period of implementation. The fourth part subsists of the special instruction for each meeting, from the first to the sixth meeting, along with the evaluation. Besides, this stress management guidebook is also contained an academic burnout scale.

The guidebook is in A4 size with the front cover using a combination of light blue and light brown color with a picture of the school building and a student who experiences academic burnout. On the guidebook cover, it is explained that this guidebook is for school counselors. Besides, the cover also contains the identity of the developed university's identity and logo, as well as all the author names. Besides, the use of this guidebook is explained in the middle part of the back cover.

After the stress management guidebook was developed, a product tried out was carried out. The product tryout was completed by involving the experts of guidance and counseling material, the learning media experts, and designated users (school counselors). The experts of guidance and counseling material assessed the guidebook based on three aspects of accuracy, usability, and convenience. The obtained score for the aspects of accuracy, usability, and convenience was 90.38, 100, and 100%, respectively. The illustration in the guidebook content and the improvement in the process and results of the evaluation. The process evaluation is adjusted to the method, while the result evaluation is adjusted to the service's purposes. The
services stages should be written in stages. Based on the suggestion from the material experts, some improvements are required, such as adding a picture on every border per page, from the first to the fourth parts. Besides, the process and result evaluation should be adjusted, while the step of the service should be written in stages. A general explanation of the strategy being used in the guidebook should also be provided.

The experts of learning media evaluated the guidebook based on the scoring format following the aspects of accuracy, usability, and convenience. The obtained score for the accuracy, usability, and convenience aspects were 92.85, 100, and 100%, respectively. Further, the verbal data from experts in learning media suggested that the stress management guidebook is feasible to be used, but it requires optimization on the graphic aspects, such as layout improvement by mentioning the product name on the header or footer, adding the inner cover, readjusting the texts in the cover, and adding information in the form of video, if necessary. Consequently, some revision was carried out by improving the cover layout, adding the product name on the footed, adding the logo of Universitas Negeri Malang in the top left part, and increasing the font size of the "guidebook for counselor" text.

The users (school counselors) also evaluated the guidebook following the scoring format that consisted of three aspects, namely accuracy, usability, and convenience. The evaluation results from user 1 and user 2 were calculated using text index calculation through the determined formula and model, resulting in a 1.00 index. The obtained 1.00 index represented very high product feasibility. Additionally, the verbal data from the product users showed the need to add some illustrations to prevent the emergence of new stress, such as by adding illustrations in the emotional material in the third meeting, improving non-consistent and standard text, and regard the suitability between the provided materials and evaluation sheet. Another revision process was carried out following the suggestions from user 1 and user 2, by adding the illustration of the emotional material and improving the non-consistent and non-standardized text.

3.2. Discussion

This study produced a stress management guidebook to prevent academic burnout in vocational high school students. According to the results of the assessment involving the material expert, learning media expert, and the users, this stress management guidebook is feasible to be used by school counselors in providing guidance and counseling service for preventing academic burnout among students. One of the types of guidance and counseling services that can be provided by school counselors is the service of providing information (Cai, 2020). The service of providing information related to academic burnout corresponds with the development stage of the vocational high school students written in the competency standards for student self-reliance to ensure the attainment of emotional maturity (Santoso, 2022).
The results of learning media expert evaluation were analyzed using the percentage formula. The results indicated that the guidebook is very suitable, useful, and convenient. Accordingly, the produced stress management guidebook has fulfilled the expected acceptability criteria. This finding signifies that the developed guidebook has also fulfilled the indicator of service media that can be used by school counselors in providing guidance and counseling service for students. Media can optimize students’ motivation (Hess, 2014; Puspitarini & Hanif, 2019). The results of the assessment involving the learning media experts also suggested that the stress management guidebook can be an attractive service media. The non-attractive media can lower someone’s focus on reading, resulting in boredom, so a better and more attractive service media is required (Sari, Triyono, & Mappiare-AT, 2018).

The assessment from users involved two school counselors. The results of their assessment were analyzed using the inter-rater agreement model (Gregory, 2000), resulting in the 1.00 index. The 1.00 index represents very high feasibility. Thus, this stress management guidebook is highly accurate, useful, and convenient. Besides, these results also suggested that the produced guidebook can be understood easily by the school counselors as the guidebook also provides evaluation sheets for the students. This evaluation sheet aids the school counselor in evaluating the students’ development after attending the service (Sari et al., 2018).

Following the results of the evaluation involving the material expert, media expert, and users, this stress management guidebook for preventing academic burnout among vocational high school students is acceptable. Our research and development results can be used by the school counselor as a media in proving the service for vocational high school students, especially related to academic burnout. This finding is linear with a previous study that reported an increase in stress management skills induced by stress coping strategy (Febrina, 2012). Therefore, our stress management guidebook can be used by school counselors at vocational high schools as an attempt to prevent academic burnout among students.

Our developed guidebook uses a stress management strategy. The stress management strategy trains and teaches students to develop their stress management skills. Through stress management, students can transform their negative thoughts into more positive perceptions. The study from Wati (2017) identified that stress management can resolve academic burnout through attending training that is divided into stages of: (1) understanding stress, (2) acknowledging the occurrence of stress, (3) understanding and acknowledging the need to grow self-confidence, (4) conducting self-evaluation and training. Therefore, this guidebook development is linear with previous study that shows individuals’ problems are correlated with the effects of physical and mental conditions on their self-adjustment in school and home (Khofifah, Sano, & Syukur, 2017).

The stress management strategy in this guidebook consists of physical, emotional, cognitive, and social strategies (Ismiati et al., 2016). Stress management consists of four strategies using numerous methods. The cognitive strategy is developed using the problem-solving method or technique. The problem-solving technique uses a particular technique to enhance students’ creativity and ability to decide life choices related to their life purposes. Problem-solving is presumed to be a proper strategy for students as it facilitates students to develop their cognitive skills using the provided cases and improve their problem-solving skills.

The emotional strategy is constructed using a relaxation technique. The relaxation technique asks individuals to concentrate and create a comfortable and calm feeling (Suyono,
In relation to academic burnout experienced by vocational high school students, students need to have relaxation skills in facing the pressure from their academic tasks to experience calmness and lower stress. It is linear with the explanation from Suyono et al. (2016) that factors inducing stress subsist, of course, demands (Balducci, Avanzi, & Fraccaroli, 2014), fight with parents (Vahedi, Krug, & Westrupp, 2019), financial or economic problems, and different environment (Friedline, Chen, & Morrow, 2021).

The physical strategy is developed using a time management technique. Time management is a process of planning an action with an efficient time. This physical strategy is correlated with time management techniques since if students can manage their time, they will have more structured learning and daily activities. Time management have an impact to academic burnout (Kordzanganeh, Bakhtiarpour, Hafezi, & Dashtbozorgi, 2021). Time management skills are required, as physical fatigue is one of the symptoms of academic burnout (Yong & Yue, 2007).

Social strategy is constructed using the role-playing technique (psychodrama). This technique uses role play to help individuals find their self-concept and determine self-reaction (Nahar, Nasution, & Sari, 2020; Shirazi, Zarnaghash, & Dashti, 2017). Role play brings positive effects on each individual because this technique facilitates students to socialize with their friends. Students’ increasing skills to socialize with their environment can be the catharsis to reducing their academic burnout. Besides, their enhanced care for other people can also be realized in the form of sympathy and empathy in the proper context to help others resolve their problems (Utami & Setiyowati, 2016).

Finally, the produced stress management guidebook can be used to enhance the potential of the vocational high school counselor in providing guidance and counseling service for students experiencing academic burnout. This guidebook can be used as an alternative media in helping students resolve their academic burnout. Through stress management training, the students are trained to develop their stress management skills using the strategies of cognitive, emotional, physical, and social. However, this study has a limitation since it is only designed to prevent academic burnout in vocational high school students so further adjustment is required.

### 4. Conclusion

According to the results of the assessment involving material experts, media experts, and product users, our stress management guidebook to prevent academic burnout among vocational high school students has fulfilled the acceptability criteria, consisting of the accuracy, usability, and convenience aspects. Therefore, this guidebook is feasible to be used by the school counselor in providing guidance and counseling service related to students’ academic burnout.

### References

Abdous, M. (2019). Influence of satisfaction and preparedness on online students’ feelings of anxiety. *The Internet and Higher Education, 41*, 34–44. doi: 10.1016/j.iheduc.2019.01.001

Al-Marwaziyyah, K., & Chori, D. I. M. (2021). Burnout akademik selama pandemi Covid-19. *Psychological Journal: Science and Practice, 1*(2), 37–42. doi: 10.22219/pjsp.v1i2.19021

Balducci, C., Avanzi, L., & Fraccaroli, F. (2014). Emotional demands as a risk factor for mental distress among nurses. *La Medicina Del Lavoro, 105*(2), 100–108.

Borg, W. R., & Gall, M. D. (1983). *Educational research an introduction*. New York: Longman Inc.
Cai, B. (2020). A Study on the effectiveness of career information collection as a way to promote graduate students’ employment. *International Conference on Modern Educational Technology and Innovation and Entrepreneurship (ICMETIE 2020)*, 303–308. Atlantis Press.

Fardous, N., & Afzal, M. T. (2022). Contribution of emotional exhaustion towards depersonalization among teachers. *Journal of Positive School Psychology*, 6(8), 5265–5274.

Febrina, E. S. N. (2012). *Pengembangan modul peningkatan keterampilan manajemen stres dengan strategi coping stress untuk siswa akselerasi di SMA Negeri 1 Purwosari Kabupaten Pasuruan*. Universitas Negeri Malang.

Friedline, T., Chen, Z., & Morrow, S. (2021). Families’ financial stress & well-being: The importance of the economy and economic environments. *Journal of Family and Economic Issues*, 42(1), 34–51.

Gregory, R. J. (2000). *Psychology testing: History, principle and applications* (3rd ed.). Boston: Allyn and Bacon.

Guyana, C., Witarsa, & Achmadi. (2016). Pengaruh manajemen stres terhadap hasil belajar siswa dalam pembelajaran akuntansi SMKN 1 Pontianak. *Jurnal Pendidikan dan Pembelajaran Khatalistiwa*, 5(5), 1–13. doi: 10.26418/jppkv5i.5.15221

Hess, S. A. (2014). Digital media and student learning: Impact of electronic books on motivation and achievement. *New England Reading Association Journal*, 49(2), 35.

Ismiati, D., Hasanah, U., & Prabawati, M. (2016). Pengaruh manajemen stres terhadap ketahanan karhura. *JKKP (Jurnal Kesejahteraan Keluarga dan Pendidikan)*, 3(2), 62–67. doi: 10.21009/jkkp.032.03

Jawas, U. (2019). Writing anxiety among Indonesian EFL students: Factors and strategies. *International Journal of Instruction*, 12(4), 733–746. doi: 10.29333/iji.2019.12447a

Khofifah, A., Sano, A., & Syukur, Y. (2017). Permasalahan yang disampaikan siswa kepada guru BK/konselor. *Jurnal Pendidikan Indonesia*, 3(1), 45–52. doi: 10.29210/12017271

Kordzanganeh, Z., Bakhtiarpour, S., Hafezi, F., & Dashtbozorgi, Z. (2021). The relationship between time management and academic burnout, learning engagement, and test anxiety. *Learning and Individual Differences*, 83–84, 101945. doi: 10.1016/j.lindif.2020.101945

Maharani, D. M. (2019). *Hubungan antara self esteem dengan academic burnout pada siswa kelas XI SMA N 1 Semarang.*

Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job Burnout. *Annual Review of Psychology*, 52(1), 397–422. doi: 10.1146/annurev.psych.52.1.397

Nahar, S., Nasution, W. N., & Sari, S. (2020). The effect of role-play learning strategy and self-concept on social skills of children age 5-6 years old in Aisyah Az-Zahra Medan. *Britain International of Linguistics Arts and Education (BiLoAE) Journal*, 2(3), 810–816.

Puspitarini, Y. D., & Hanif, M. (2019). Using learning media to increase learning motivation in elementary school. *Anatolian Journal of Education*, 4(2), 53–60.

Santo, D. B. (2022). *Dasar-dasar bimbingan dan konseling*. Malang: Elang Mas.

Santrock, J. W. (2008). *Life-span development*. New York: McGraw-Hill.

Sari, P., Triyono, T., & Mappiare-AT, A. (2018). Panduan pertimbangan nilai ajaran mengah nyappur etnis lampung untuk meredulasi perilaku bullying siswa SMK. *Jurnal Pendidikan: Teori, Penelitian, dan Pengembangan*, 3(8), 1095–1099.

Schafer, W. (1996). *Stress management for wellness*. Harcourt Brace College Publishers.

Setiyowati, A. J., Rachmawati, I., & Prihatiningsh, R. (2022). Validation of the academic burnout scale with the Rasch model. *Cyprriot Journal of Educational Sciences*, 17(8), 2888–2898. doi: 10.18844/cjes.v17i8.7844
Shirazi, M., Zarnaghash, M., & Dashti, A. (2017). The effect of social skills through role-play on the self-concept of students with and without ADHD. *New Trends and Issues Proceedings on Humanities and Social Sciences, 4*(7), 1–7.

Suwarjo, D., & Purnama, D. S. (2016). *Model bimbingan pengembangan kompetensi pribadi sosial bagi siswa sma yang mengalami kejenuhan belajar (Burnout).* *Artikel Penelitian Hibah Bersaing.*

Suyono, S., Triyono, T., & Handarini, D. M. (2016). Keefektifan teknik relaksasi untuk menurunkan stres akademik siswa SMA. *Jurnal Pendidikan Humaniora, 4*(2), 115–120.

Utami, N. W., & Setiyowati, A. J. (2016). Model permainan edukasi peduli sosial bagi siswa sekolah dasar. *PSIKOPEDAGOGIA Jurnal Bimbingan dan Konseling, 5*(2), 99–103. doi: 10.12928/psikopedagogia.v5i2.7110

Vahedi, A., Krug, I., & Westrupp, E. M. (2019). Crossover of parents’ work-family conflict to family functioning and child mental health. *Journal of Applied Developmental Psychology, 62*, 38–49.

Wati, N. M. N. (2017). “ABC’s stress management”: Upaya menurunkan burnout berfokus pada individu. *Adi Husada Nursing Journal, 3*(1), 33–38.

Yong, Z., & Yue, Y. (2007). Causes for burnout among secondary and elementary school teachers and preventive strategies. *Chinese Education & Society, 40*(5), 78–85.