



Contents lists available at Jurnal IICET

Jurnal Konseling dan Pendidikan

ISSN: 2337-6740 (Print) ISSN: 2337-6880 (Electronic)

Journal homepage: <http://jurnal.konselingindonesia.com>



Investigation of online counseling with solution focused brief counseling-based implementation for students with severe academic stress conditions

Zadrian Ardi^{1*)}, Ifdil Ifdil¹, Chibueze Tobias Orji², Nilma Zola¹

¹Universitas Negeri Padang, Indonesia

²University of Nigeria Nsukka, Nigeria

Article Info

Article history:

Received Jul 12th, 2022

Revised Aug 02nd, 2022

Accepted Sep 19th, 2022

Keyword:

Online counseling

SFBC

Academic stress

College Students

ABSTRACT

Students are susceptible to feeling pressure as a manifestation of the changes experienced during their educational process. These changes present themselves in a variety of different ways. This state is reasonably frequent among students, mainly when supporting causes of pressure are present. Some examples of these circumstances include living away from parents, shifting patterns of academic interactions from high school, differing academic expectations, and socio-cultural shifts. Moving beyond the theoretical foundation, empirical investigations, and phenomena in the area, there is a need for in-depth research and studies about attempts to identify models that alleviate the academic stress experienced by students. The Solution Focused Brief Counseling (SFBC) technique combined with the internet, and online media is one of these approaches. The goal of this research was to determine whether or not the SFBC method combined with the model of distant counseling might successfully alleviate the academic stress experienced by first-year students. The number of participants in this research was cut down to five college students to meet the research requirements. The design and analysis of the research adhere to the premise of using a single-subject experimental design combined with visual analysis. The findings demonstrated an overall reduction in the amount of academic stress experienced by students after two sessions, as well as an improvement in their condition by the time the session was through.



© 2022 The Authors. Published by Indonesian Institute for Counseling, Education and Therapy (IICET). This is an open access article under the CC BY license (<https://creativecommons.org/licenses/by/4.0/>)

Corresponding Author:

Zadrian Ardi,

Universitas Negeri Padang

Email: zadrian@fip.unp.ac.id

Introduction

College students are prone to experiencing pressure as a manifestation of the changes experienced throughout their educational process (Cheung, Tam, Tsang, Zhang, & Lit, 2020; Freire et al., 2020; Matyushkina, 2016). This condition is very commonly experienced by students, especially with pressure supporting factors such as living apart from parents, changes in academic relationship patterns from high school, different academic demands, socio-cultural changes (Arnekrans et al., 2018; Bai, Elavsky, Kishida, Dvořáková, & Greenberg, 2020; Boyraz, Zhu, & Waits, 2019; White & Perrone-McGovern, 2017) to changing career decisions (Ramachandiran & Dhanapal, 2018). Weak coping with pressure is one of the most contributing factors to student stress conditions (Al-Daghri et al., 2014; Arnekrans et al., 2018; Saxena, Shrivastava, & Singh, 2014).

The stressful conditions experienced by students while studying, often termed academic stress, are one of the variables that most contribute to disturbances in mental health, emotional conditions, general psychological functioning, and student learning abilities (Sang, Pan, Deng, & Zhao, 2018). Academic stress is the primary variable that contributes negatively to mental health, emotional state, general psychological functioning, and student learning abilities (Sang et al., 2018). This pressure arises from various stressors related

to academic demands. This pressure is evidenced by various reports from world health associations such as the American College Health Association National College Health Assessment, which states that more than 58.1% of students in the United States find it difficult and stressful with academic demands (de la Fuente et al., 2020; Navarro-Mateu, Alonso-Larza, Gómez-Domínguez, Prado-Gascó, & Valero-Moreno, 2020).

Findings from various studies regarding academic stress and its impact on psychological conditions reinforce the importance of studying this variable. One of the research findings that focus on the conditions of Y and Z generations reveals that more than 88% of Y and Z generations experience stressful conditions due to learning conditions and academic demands, and 54% of them affect the quality of students' sleep and rest (Ramachandiran & Dhanapal, 2018). Furthermore, the effect of academic stress on sleep quality is also a manifestation of student burnout from lecture assignments that take up rest time (Yan, Lin, Su, & Liu, 2018).

Moving on from the conditions of academic stress students are prone to experience, it is necessary to minimize its impact. Academic stress is an experience that is inseparable from the educational process in tertiary institutions; there should be appropriate and efficient steps in providing treatment for these conditions (Watson & Watson, 2016). One approach that is suitable for dealing with academic stress conditions is Solution Focused Brief Counseling (SFBC). In the face-to-face format, this approach focuses on alleviating the main factors that form stress (stressors). It is then oriented towards increasing the positive power of the client by strengthening self-autonomy, strengthening solution-focused thinking, formulating responsibility, developing independence, and increasing self-control (Corey, 2015; Guterman, 2014; Yussuf, Issa, Ajiboye, & Buhari, 2013; Zhang et al., 2020).

More specifically, there needs to be a specific platform or program that will deliver the counseling process with internet technology quickly, effectively, and efficiently (Doriza, Irzal, Muhidin, & Sari, 2019; Mirawati, Sugiana, & Wirakusumah, 2019; Sukmawati, Ardi, Ifdil, & Zikra, 2019). Online counseling services in conditions of academic stress problems experienced by students require appropriate coping strategies and reach out to situations that cause these stressful conditions (Lazarus, 2006; Lazarus & Folkman, 1984). Appropriate coping strategies should be able to reduce or even eliminate stressors experienced by students (Yu, Hsieh, & Chang, 2017; Zamroni, 2019). Counseling services with this long-distance format require a unique approach. Due to the processes and dynamics that occur in the online counseling process, this approach will be very different from the face-to-face format. Therefore, it is necessary to implement a counseling approach compatible with online counseling (Benton, Heesacker, Snowden, & Lee, 2016; Lam & Lam, 2016). The focus of this research is on tracking and investigating the effectiveness of online counseling using the SFBC approach in reducing the conditions of severe academic stress experienced by students.

Method

Research Design

This study uses a single-subject experimental design method that can provide various information about the client's condition and the interventions carried out by the counselor. This approach was chosen in order to be able to explain in more detail about changes in behavior that arise as a result of interventions by making repeated observations over a certain period. This study compared the same individuals (subjects) at different times, namely when the conditions before the treatment were given (baseline/A) and when the treatment or intervention was given (intervention/B) (Heppner, Wampold, & Kivlighan, 2008). The experimental design model of the single-subject experimental design method uses the A-B approach.

Participant

The number of samples was taken by considering the generalization factor as a decision from inferential statistical calculations. The truth of the generalization process can be statistically correct if it does not contain errors in calculating α or β . These considerations use the G Power Statistics method in determining the sample. For calculating the effectiveness test using the U-Mann Whitney technique, the number of samples was five people with actual power statistics of 0.9378. The characteristics of the sample that will be the target of research in the implication phase are respondents who have moderate to high levels of academic stress.

Measurement

The instrument used in this study was an adaptation of the Educational Stress Scale for College-Student (ESSC) developed by Sun, Dunne, Hou & Xu (Sun, Dunne, Hou, & Xu, 2011). This measurement tool is a further development of the Academic Expectation Stress Inventory (AESI) by Ang and Huan (Ang & Huan, 2006), the Student-Life Stress Inventory, which Bernadette Gadzella first developed (Gadzella, 1994;

Gadzella, Baloglu, Masten, & Wang, 2012) based on the concept put forward by Lazarus regarding Stress and Emotions (Lazarus, 2006; Lazarus & Folkman, 1984).

Data Analysis

Data obtained in implementing the model were analyzed using visual analysis. Previously, the data points after measuring academic stress conditions were tabulated according to the baseline (A) and intervention (B) data groups (Heppner et al., 2008; Thomas E Scruggs, Margo A Mastropieri, & Kelley S Regan, 2006) Then the data is transformed into a graphical form and analyzed using the attribute trend line and changes in levels. To further analyze the changes that occurred during the intervention period (B), a 2-Standard Deviation Band analysis was performed. Based on data on the 2-SD Band, it can also be seen that there is overlapping data in the intervention phase by knowing the percentage of the number of data points in the upper and lower band areas (Thomas E. Scruggs, Margo A. Mastropieri, & Kelley S. Regan, 2006).

Results and Discussion

The student with the initials AP is the first subject in an online counseling trial with the SFBC approach to reduce academic stress. The subject is a student of the Faculty of Languages and Arts. The score obtained from the measurement results of the academic stress conditions experienced by AP subjects is visualized in Figure 1.

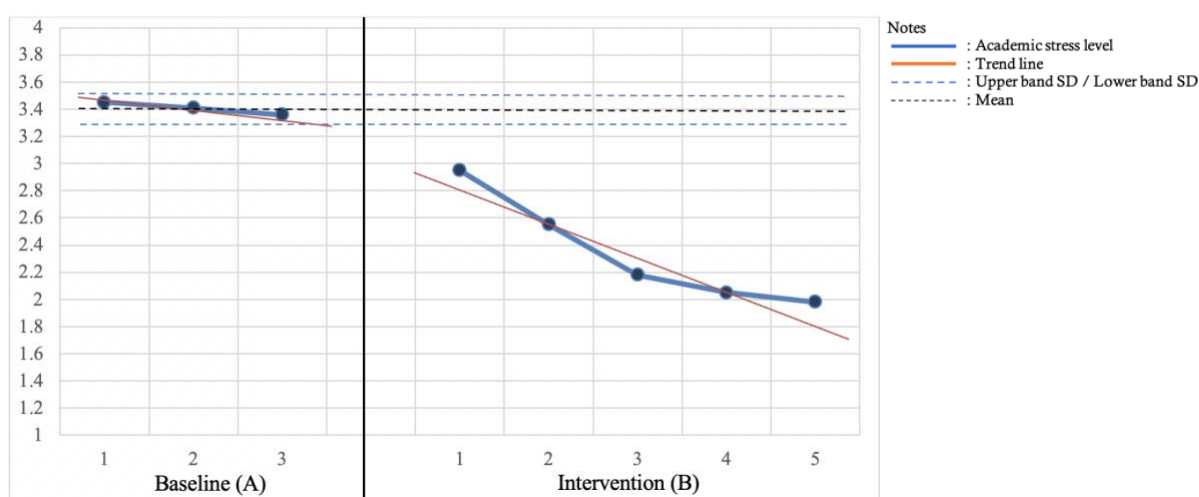


Figure 1. Client "AP" Academic Stress Condition Graph

After being treated in the form of online counseling through applications, there is a tendency to decline in the academic stress score of the subject. This can be seen in the acquisition of point 1 data scores in the intervention phase of 2.95, which means that academic stress scores have decreased by 0.41 points compared to the baseline phase. The decline in academic stress levels shows the impact of providing intervention on the subject. However, the academic stress conditions of the subject are still classified in the medium to high category. In the next session, there was a tendency to decrease the subject's academic stress level so that the final data point when session 3 was at a score of 1.98.

To ensure a decrease and significant impact of the model of the trial subject, a visual analysis is performed with the 2-Standard Deviation Band method. In Figure 1, it can be seen that all data points in the intervention phase are below the lower band of SD (at point 3.31). The analysis is strengthened by achieving the percentage of overlapping data in position 0%. This finding means that the subject's achievements are far from the 2 SD Baseline phase with 0% overlapping data, so it can be concluded that there is a significant change in the intervention phase.

In the baseline phase, NS subjects experienced an increasing trend in academic stress levels. The trend line shows a tendency to increase the academic stress conditions experienced by NS subjects, where in the initial measurement, it produced a score of 3.36. Still, at data point 3 in the baseline phase, the academic stress score showed an increase of 0.41 compared to data point 1. Academic stress conditions were measured after counseling interventions in session 1 and obtaining data points for the intervention phase. Based on the gains in this phase, there was a decrease in the score on academic stress with a score of 3.09. In the trend of the

intervention phase data, there is a tendency to decrease the academic stress score after an increase in the baseline phase. Reducing academic stress levels continues until data point 5 with a score of 2.64. Even though the final score of the NS subject was still at a moderate level of academic stress (towards high), there was a decrease in academic stress after being given online counseling treatment.

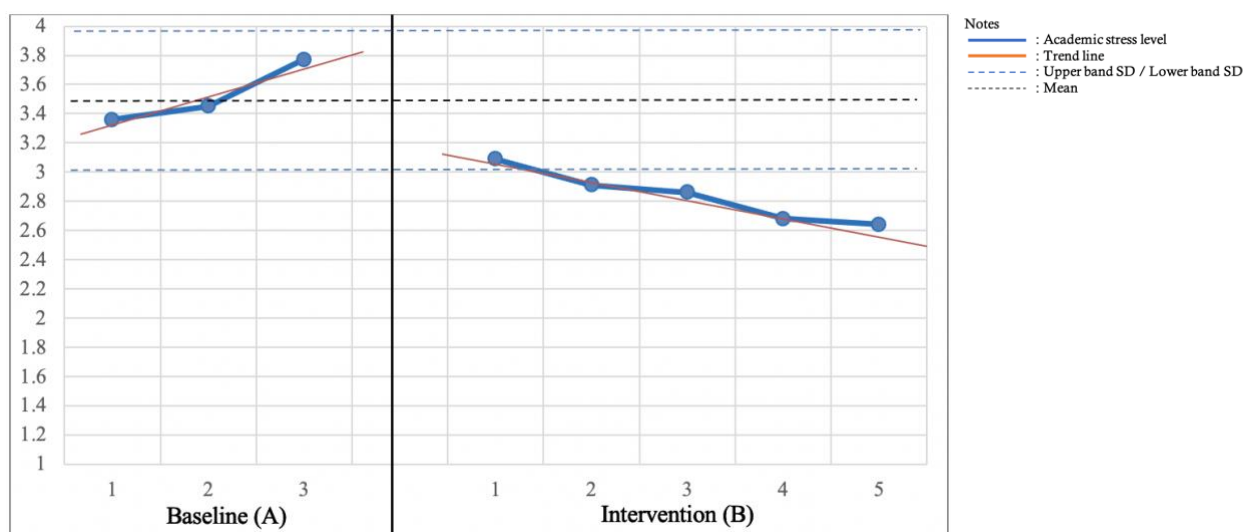


Figure 2. Client "NS" Academic Stress Condition Graph

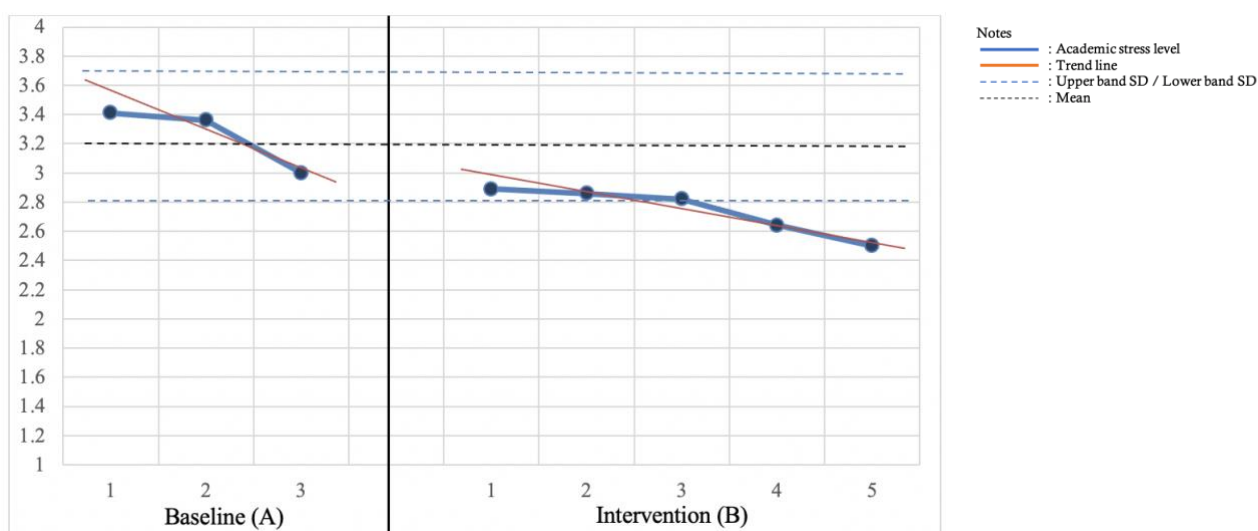


Figure 3. Client "DAN" Academic Stress Condition Graph

In the baseline phase, the DAN client's academic stress data showed a decreasing trend. Other factors cause a decrease before the intervention is carried out on the subject. Nonetheless, in the visualization of the data, there is a tendency to decrease academic stress conditions after being treated through online counseling. The trend line of academic stress experienced by DAN subjects continues to decline. This condition can be observed in the acquisition of a final score of 2.50 with an interpretation of the level of academic stress in moderate conditions. Even though the intervention phase data overlap is at 60%, the 2-Standard Deviation Band analysis shows that 2 data points are below the Lower Band SD. These findings still indicate significant changes in the subject's academic stress condition during the intervention phase. In other words, there is an impact the treatment on the academic stress conditions of the test subjects.

Based on the online counseling process given to subject N, it is known that N feels the burden of taking online lectures. Session 1 of online counseling lasted 40 minutes and the subject successfully formulated solutions and steps that must be taken before continuing with the next session. The intervention phase shows a very sharp trend of decreasing academic stress levels. This is evidenced by the acquisition of a score on data

point 5 of 1.95 with a low academic stress level interpretation. This trend of decreasing academic stress has occurred in session 1 and data point 1, where previously the score was 3.50, and after the intervention was given, the academic stress score decreased to 3.27. Nonetheless, at data points 1 and 2 the intervention phase is in the 2SD baseline phase with an overlapping percentage of 40%. This means that the decrease occurred significantly in the second and third sessions of the intervention phase. In other words, the online counseling intervention had an impact on substantially reducing academic stress after the second session was carried out.

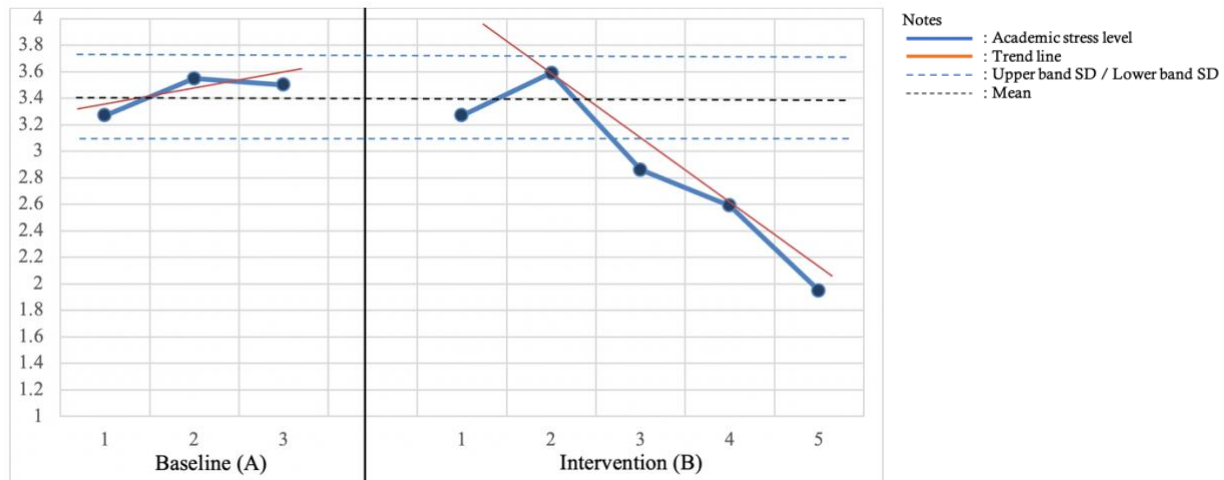


Figure 4. Client "N" Academic Stress Condition Graph

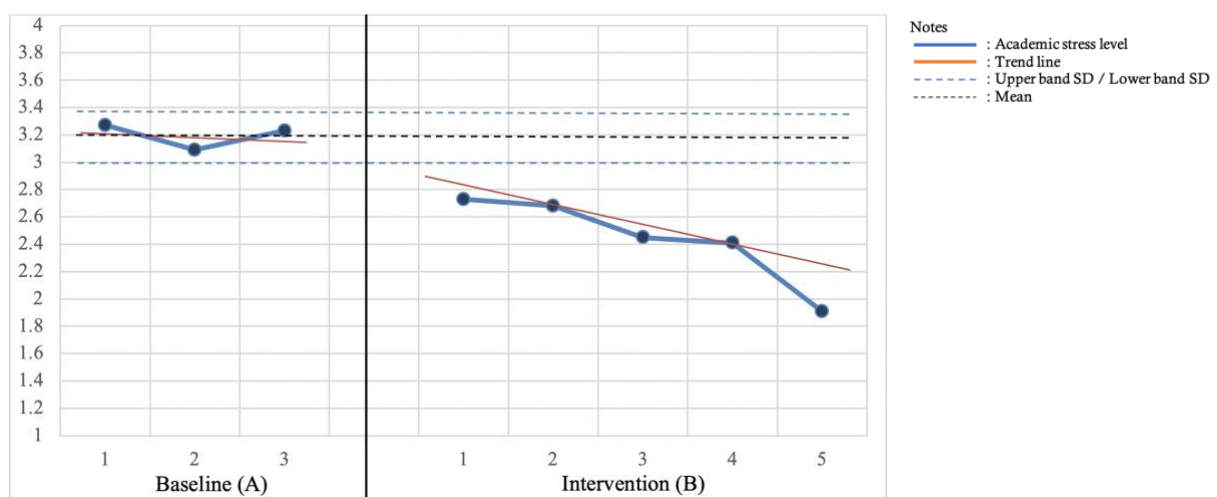


Figure 5. Client "DSF" Academic Stress Condition Graph

Based on the online counseling process given to the DSF subject, it is known that the DSF feels academic pressure because it cannot keep up with the online lecture process and pressure from parents who ask the subject to help their parents with work at home. Session 1 of online counseling lasted 50 minutes, and the subject successfully formulated solutions and steps that must be taken before continuing with the next session. After the treatment was given to the subject, based on visual exposure, it was found that there was a tendency to decrease the academic stress score in session 1 by 0.51 points from the baseline phase. In addition, the trend chart also shows a decline until the third session. The sharpest decrease was seen in the fifth data point in the intervention phase, where the subject's academic stress score was in position 1.91. To increase the constancy of the visual analysis results, an analysis of the 2-Standard Deviation Band was carried out on the trial results by applying the upper and lower bands with a standard deviation benchmark and testing for overlapping data in the intervention phase. This analysis found that all the results of the subject's academic stress testing in the intervention phase were far from the 2SD area with a percentage of overlapping data of 0%. In other words, there was a change in the subject's academic stress condition during the intervention phase.

For students who are experiencing academic stress, finding time to schedule and attend in-person counseling sessions can be challenging, as they may already have busy schedules filled with classes, homework, and extracurricular activities (Butterfield, Price, Woody, Morris, & Silk, 2021; de la Fuente et al., 2020; Guldager, Jervelund, & Berg-Beckhoff, 2021; Rustam & Tentama, 2020). Online counseling can provide a more flexible and convenient alternative to traditional counseling, as you can schedule appointments around your academic schedule and attend sessions without having to leave your home or campus. Online counseling can also help reduce the barriers to accessing mental health services that can be present in traditional counseling settings (Ardi, 2021; Ardi, Neviyarni, & Daharnis, 2019; Liang, Cao, Zhou, Li, & Zhang, 2020). For example, some students may feel uncomfortable seeking counseling services in-person due to the perceived stigma associated with seeking mental health help. Online counseling can help address this issue by providing a level of anonymity and privacy that can make students feel more comfortable seeking help.

The flexibility of online counseling is another important advantage that makes it a good fit for academic stress. For students dealing with academic stress, finding time to attend in-person counseling sessions can be a challenge, as they may have a busy academic schedule, extracurricular activities, or part-time jobs (Jailani et al., 2020; Karaman, Lerma, Vela, & Watson, 2019; Liang et al., 2020; Zamroni, 2019). Online counseling can help alleviate this problem by providing more flexible scheduling options, making it easier to find a time that works for you. Online counseling platforms typically offer a variety of appointment times outside of regular business hours, allowing students to schedule sessions during evenings or weekends. This can be especially helpful for students who are studying full-time and have limited availability during typical office hours.

In conclusion, the flexibility of online counseling provides an advantage for students dealing with academic stress, as it allows for more convenient scheduling options that fit into their busy academic schedule. It also offers greater flexibility in terms of the frequency and duration of sessions, allowing students to tailor their counseling to meet their specific needs (Ardi, 2021; Huseini, Ajruli, & Memeti, 2020; Suranata, Rangka, & Permana, 2020; Yulastri, Dewi, Hidayat, Ardi, & Yuliana, 2021). This can help reduce the barriers to accessing mental health services and improve the likelihood that students will seek and receive the support they need to manage their academic stress.

Studies have shown that online counseling can be an effective method for reducing student academic stress (Chan, 2020; Huseini et al., 2020; Jackson & Bussey, 2020; Pordelan, Sadeghi, Abedi, & Kaedi, 2020). Overall, these findings suggest that online counseling can be an effective and accessible method for reducing academic stress among students. Online counseling offers convenience, flexibility, and accessibility that traditional counseling may not provide, making it easier for students to seek and receive the support they need to manage academic stress. As the demand for mental health services on college campuses continues to grow, online counseling has the potential to play an increasingly important role in addressing the mental health needs of students.

Conclusion

Academic stress is a prevalent condition experienced by students. Assignment load, the pressure of learning activities, concerns about grades, and expectations for academic achievement are stressors (stressors) that impact decreasing student academic performance. Optimum efforts are needed for guidance and counseling service providers in tertiary institutions to alleviate student academic stress conditions, one of which is implementing an online counseling model using Solution Focused Brief Counseling (SFBC). Preliminary testing using the single-subject experimental design method showed that online counseling with the SFBC approach reduced students' severe academic stress.

References

- Al-Daghri, N. M., Al-Othman, A., Albanyan, A., Al-Attas, O. S., Alokail, M. S., Sabico, S., & Chrousos, G. P. (2014). Perceived stress scores among Saudi students entering universities: A prospective study during the first year of university life. *International journal of environmental research and public health*, 11(4), 3972-3981. doi:10.3390/ijerph110403972
- Ang, R. P., & Huan, V. S. (2006). Academic expectations stress inventory: Development, factor analysis, reliability, and validity. *Educational and Psychological Measurement*, 66(3), 522-539.
- Ardi, Z. (2021). *Development of Solution Focused Brief Counseling online counseling model to reduce student academic stress*. (Doctoral Dissertation). Universitas Negeri Padang, Padang.

- Ardi, Z., Neviyarni, & Daharnis. (2019). Konselo app: The future of distance counselling and therapy applications based on android technology. *International Journal of Innovation, Creativity and Change*, 5(6), 231-244. Retrieved from <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85084436048&partnerID=40&md5=fa9c4d31b0195e977e60383f7350523c>
- Arnekran, A. K., Calmes, S. A., Laux, J. M., Roseman, C. P., Piazza, N. J., Reynolds, J. L., . . . Scott, H. L. (2018). College Students' Experiences of Childhood Developmental Traumatic Stress: Resilience, First-Year Academic Performance, and Substance Use. *Journal of College Counseling*, 21(1), 2-14. doi:10.1002/jocc.12083
- Bai, S., Elavsky, S., Kishida, M., Dvořáková, K., & Greenberg, M. T. (2020). Effects of Mindfulness Training on Daily Stress Response in College Students: Ecological Momentary Assessment of a Randomized Controlled Trial. *Mindfulness*, 11(6), 1433-1445. doi:10.1007/s12671-020-01358-x
- Benton, S. A., Heesacker, M., Snowden, S. J., & Lee, G. (2016). Therapist-assisted, online (TAO) intervention for anxiety in college students: TAO outperformed treatment as usual. *Professional Psychology: Research and Practice*, 47(5), 363.
- Boyras, G., Zhu, Y., & Waits, J. B. (2019). Avoidance coping and academic locus of control as mediators of the relationship between posttraumatic stress and academic achievement among first-year college students. *Anxiety, Stress and Coping*, 32(5), 545-558. doi:10.1080/10615806.2019.1638681
- Butterfield, R. D., Price, R. B., Woody, M. L., Morris, A. S., & Silk, J. S. (2021). Adolescent girls' physiological reactivity to real-world peer feedback: A pilot study to validate a Peer Expressed Emotion task. *Journal of experimental child psychology*, 204. doi:10.1016/j.jecp.2020.105057
- Chan, G. H. (2020). A comparative analysis of online, offline, and integrated counseling among hidden youth in Hong Kong. *Children and Youth Services Review*, 114. doi:10.1016/j.childyouth.2020.105042
- Cheung, D. K., Tam, D. K. Y., Tsang, M. H., Zhang, D. L. W., & Lit, D. S. W. (2020). Depression, anxiety and stress in different subgroups of first-year university students from 4-year cohort data. *Journal of affective disorders*, 274, 305-314. doi:10.1016/j.jad.2020.05.041
- Corey, G. (2015). *Theory and practice of counseling and psychotherapy*: Nelson Education.
- de la Fuente, J., Amate, J., González-Torres, M. C., Artuch, R., García-Torrecillas, J. M., & Fadda, S. (2020). Effects of levels of self-regulation and regulatory teaching on strategies for coping with academic stress in undergraduate students. *Frontiers in Psychology*, 11, 22.
- Doriza, S., Irzal, M., Muhidin, A., & Sari, D. K. (2019). *Implication of the use of Android-based App Pie application on children counseling subject*. Paper presented at the Journal of Physics: Conference Series.
- Freire, C., Ferradás, M. D. M., Regueiro, B., Rodríguez, S., Valle, A., & Núñez, J. C. (2020). Coping Strategies and Self-Efficacy in University Students: A Person-Centered Approach. *Frontiers in Psychology*, 11. doi:10.3389/fpsyg.2020.00841
- Gadzella, B. M. (1994). Student-life stress inventory: Identification of and reactions to stressors. *Psychological reports*, 74(2), 395-402.
- Gadzella, B. M., Baloglu, M., Masten, W. G., & Wang, Q. (2012). Evaluation of the Student Life-stress Inventory-Revised. *Journal of Instructional Psychology*, 39(2), 82-91. doi:10.1109/DCS.1988.12507
- Guldager, J. D., Jervelund, S., & Berg-Beckhoff, G. (2021). Academic stress in danish medical and health science students during the covid-19 lock-down. *Danish Medical Journal*, 68(7). Retrieved from <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85109038676&partnerID=40&md5=7143835c774758e2a79912832b20079f>
- Guterman, J. T. (2014). *Mastering the art of solution-focused counseling*: Wiley Online Library.
- Heppner, P. P., Wampold, B. E., & Kivlighan, D. M. (2008). *Research Design in Counseling, Third Edition*. Belmont: Thomson Higher Education.
- Huseini, K., Ajruli, N., & Memeti, A. (2020) University Online Counseling: Recommended Model Using iOS and Android. In: *Vol. 1226 CCIS* (pp. 161-168): Springer.
- Jackson, E. F., & Bussey, K. (2020). Under Pressure: Differentiating Adolescents' Expectations Regarding Stereotypic Masculine and Feminine Behavior. *Sex Roles*, 83(5-6), 303-314. doi:10.1007/s11199-019-01113-0
- Jailani, O., Adli, A. H. T., Amat, M. A. C., Othman, S. M., Deylami, N., & Rahim, N. S. A. (2020). The Self-Perceived Problems among Malaysian Pre-university Students: Implications for College Counselling. *Asian Journal of University Education*, 16(3), 112-124. doi:10.24191/ajue.v16i3.11075
- Karaman, M. A., Lerma, E., Vela, J. C., & Watson, J. C. (2019). Predictors of academic stress among college students. *Journal of College Counseling*, 22(1), 41-55.
- Lam, L. T., & Lam, M. K. (2016). eHealth intervention for problematic internet use (PIU). *Current psychiatry reports*, 18(12), 107.
- Lazarus, R. S. (2006). *Stress and Emotion; A New Synthesis* (Vol. 34). New York: Springer Publishing Company.

- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*: Springer publishing company.
- Liang, Y., Cao, H., Zhou, N., Li, J., & Zhang, L. (2020). Early home learning environment predicts early adolescents' adjustment through cognitive abilities in middle childhood. *Journal of Family Psychology*, 34(8), 905-917. doi:10.1037/fam0000675
- Matyushkina, E. Y. (2016). Academic stress of students with different forms of learning. *Counseling Psychology and Psychotherapy*, 24(2), 47-63. doi:10.17759/cpp.2016240204
- Mirawati, I., Sugiana, D., & Wirakusumah, T. K. (2019). Online consulting mobile application for teens in Indonesia: Users perspective. *International Journal of Scientific and Technology Research*, 8(9), 1856-1859. Retrieved from <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85073471456&partnerID=40&md5=b4d727625852e931810cf1ba24abd54e>
- Navarro-Mateu, D., Alonso-Larza, L., Gómez-Domínguez, M. T., Prado-Gascó, V., & Valero-Moreno, S. (2020). I'm Not Good for Anything and That's Why I'm Stressed: Analysis of the Effect of Self-Efficacy and Emotional Intelligence on Student Stress Using SEM and QCA. *Frontiers in Psychology*, 11.
- Pordelan, N., Sadeghi, A., Abedi, M. R., & Kaedi, M. (2020). Promoting student career decision-making self-efficacy: An online intervention. *Education and Information Technologies*, 25(2), 985-996. doi:10.1007/s10639-019-10003-7
- Ramachandiran, M., & Dhanapal, S. (2018). Academic Stress Among University Students: A Quantitative Study of Generation Y and Z's Perception. *Pertanika J. Soc. Sci. & Hum.* 26, 26(3), 2115-2128.
- Rustam, H. K., & Tentama, F. (2020). Creating Academic Stress Scale And The Application For Students: Validity And Reliability Test In Psychometrics. *International Journal of Scientific & Technology Research*, 9(1), 661-667.
- Sang, B., Pan, T., Deng, X., & Zhao, X. (2018). Be cool with academic stress: the association between emotional states and regulatory strategies among Chinese adolescents. *Educational Psychology*, 38(1), 38-53. doi:10.1080/01443410.2017.1309008
- Saxena, Y., Shrivastava, A., & Singh, P. (2014). Gender correlation of stress levels and sources of stress among first year students in a medical college. *Indian Journal of Physiology and Pharmacology*, 58(2), 147-151. Retrieved from <https://www.scopus.com/inward/record.uri?eid=2-s2.0-84901682062&partnerID=40&md5=68ed29df7a82ff37c5a0830866be10cf>
- Scruggs, T. E., Mastropieri, M. A., & Regan, K. S. (2006). Statistical analysis for single subject research designs. *Applications of research methodology*.
- Scruggs, T. E., Mastropieri, M. A., & Regan, K. S. (2006). Statistical Analysis for Single Subject Research Designs. In T. E. Scruggs & M. A. Mastropieri (Eds.), *Applications of research methodology* (Vol. 19, pp. 33-53): Emerald Group Publishing Limited.
- Sukmawati, I., Ardi, Z., Irdil, I., & Zikra, Z. (2019). *Development and Validation of Acceptability of Mental-Health Mobile App Survey (AMMS) for Android-based Online Counseling Service Assessment*. Paper presented at the Journal of Physics: Conference Series.
- Sun, J., Dunne, M. P., Hou, X.-Y., & Xu, A.-q. (2011). Educational stress scale for adolescents: development, validity, and reliability with Chinese students. *Journal of Psychoeducational Assessment*, 29(6), 534-546.
- Suranata, K., Rangka, I. B., & Permana, A. A. J. (2020). The comparative effect of internet-based cognitive behavioral counseling versus face to face cognitive behavioral counseling in terms of student's resilience. *Cogent Psychology*, 7(1). doi:10.1080/23311908.2020.1751022
- Watson, J. C., & Watson, A. A. (2016). Coping Self-Efficacy and Academic Stress Among Hispanic First-Year College Students: The Moderating Role of Emotional Intelligence. *Journal of College Counseling*, 19(3), 218-230. doi:10.1002/jocc.12045
- White, A. V., & Perrone-McGovern, K. (2017). Influence of Generational Status and Financial Stress on Academic and Career Self-Efficacy. *Journal of Employment Counseling*, 54(1), 38-46. doi:10.1002/joec.12049
- Yan, Y.-W., Lin, R.-M., Su, Y.-K., & Liu, M.-Y. (2018). The relationship between adolescent academic stress and sleep quality: A multiple mediation model. *Social Behavior and Personality: an international journal*, 46(1), 63-77. doi:10.2224/sbp.6530
- Yu, F. Y., Hsieh, H. T., & Chang, B. (2017). The potential of Second Life for university counseling: a comparative approach examining media features and counseling problems. *Research and Practice in Technology Enhanced Learning*, 12(1). doi:10.1186/s41039-017-0064-6
- Yulastri, A., Dewi, M., Hidayat, H., Ardi, Z., & Yuliana. (2021). The Validation of Smart Entrepreneur Model (SEM) for Student Using Exploratory Factor Analysis (EFA). *International Journal on Advanced Science, Engineering and Information Technology*, 11(4), 1316-1323. doi:10.18517/ijaseit.11.4.13682

- Yussuf, A. D., Issa, B. A., Ajiboye, P. O., & Buhari, O. I. (2013). The correlates of stress, coping styles and psychiatric morbidity in the first year of medical education at a Nigerian University. *African journal of psychiatry*, 16(3), 206-215. doi:10.4314/ajpsy.v16i3.28
- Zamroni, Z. (2019). Academic stress and its sources among first year students of islamic higher education in Indonesia. *International Journal of Innovation, Creativity and Change*, 5(4), 535-551.
- Zhang, X., Shi, X., Xu, S., Qiu, J., Turel, O., & He, Q. (2020). The Effect of Solution-Focused Group Counseling Intervention on College Students' Internet Addiction: A Pilot Study. *International journal of environmental research and public health*, 17(7), 2519.