

## Online counselling-based information services: How can it reduce students' academic stress?

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### Abstract

*This study aims to reduce students' academic stress through online counselling-based information services. The experimental group consisting of one psychologist, two counsellors, and two classes of students was given online counselling-based information services help (a total of 27 students). In contrast, the control group obtained conventional information services help (a total of 25 students). The participant technique uses purposive sampling. A quasi-experimental method using a nonrandomized pretest-posttest control group design with Mann-Whitney analysis was used. The research instrument used was a stress scale, which was adapted from Fathiyah (2019) consisting of 4 aspects, namely: physical, cognitive, affective and conative, and totaling 40 items. The results showed that there was a significant difference in the academic stress effect between students who received online counselling and conventional information-based service assistance. The benefit of this research is that efforts to reduce academic stress cannot be afforded only from one counselling service, but require a variety of services, such as online counselling-based information services and conventional information services.*

**Keywords:** academic stress; online counselling; website

### Abstrak

*Penelitian ini bertujuan untuk mengurangi stres akademik siswa melalui layanan informasi berbasis konseling online. Kelompok eksperimen memperoleh bantuan layanan informasi berbasis konseling dari satu orang psikolog, dua orang konselor (total 27 siswa). Sebaliknya kelompok kontrol memperoleh bantuan layanan informasi konvensional (total 25 siswa). Teknik pengambilan partisipan menggunakan purposive sampling. Metode yang digunakan adalah eksperimen kuasi dengan menggunakan desain kelompok kontrol nonrandomized pretest-posttest dengan analisis Mann-Whitney. Instrumen penelitian yang digunakan adalah skala stres yang diadaptasi dari Fathiyah (2019) yang terdiri dari 4 aspek yaitu: fisik, kognitif, afektif dan konatif yang berjumlah 40 item. Hasil penelitian menunjukkan bahwa terdapat perbedaan yang signifikan pengaruh stres akademik antara mahasiswa yang mendapat konseling online dan bantuan layanan berbasis informasi konvensional. Manfaat dari penelitian ini adalah upaya untuk mengurangi stres akademik tidak dapat dilakukan hanya dari satu layanan konseling saja, namun memerlukan berbagai layanan, seperti layanan informasi berbasis konseling online dan layanan informasi konvensional.*

**Kata kunci:** stres akademik; konseling online; website

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## Introduction

The COVID-19 pandemic, which occurred two years ago, affected the educational, economic, health, social, and cultural sectors. The impact, specifically in the academic field, led to ongoing online teaching and learning activities (Bozkurt & Sharma, 2020). All academic events were also closed down and executed from home. Online learning had a positive impact and was eased by using technology (Zapata-Cuerv et al., 2021). For example, the utilization of smartphones and pc or laptops alongside various learning platforms such as Zoom meetings, Google classrooms, and e-learning played a relevant role.

However, online learning has certain demerits, including poor internet networks, while some students and teachers are still not familiar with the various social media platforms (Argaheni, 2020). It is also confusing, makes students less creative, productive, and active, as well as causes them to experience academic stress (Argaheni, 2020). In addition, according to Rahayu (2022), most students had difficulties studying at home during the pandemic.

A survey carried out by the Indonesian Child Protection Commission reported that there was a decrease of 79.9% in the interaction between teachers and students. Most of the teachers only gave assignments, thereby leading to increased stress on the part of students (Rahayu, 2022). These usually emanate from several tasks, difficulty understanding the material studied, and the need to obtain the best possible academic achievement (Chraif, 2015). A systematic review carried out by Argaheni (2020) proved that students experienced some negative impacts due to online learning. These include 1) it confuses students, 2) they become passive, less creative, and productive, 3) it prevents information accumulation, 4) causes stress, and 5) it improves language literacy skills.

The complex problems due to the pandemic have led to unhealthy psychological conditions, such as anxiety (Christianto et al., 2022), academic stress (Andiarna & Kusumawati, 2020), difficulties (Annur & Hermansyah, 2020), boredom in learning (Pawicara & Conilie, 2020), and tardiness (Taufiqy, 2021). However, certain positive attributes tend to minimize these negative impacts. For example, students can reduce anxiety with resilience (Sari et al., 2020) and religiosity (Andika, 2020), minimize academic stress through self-efficacy (Utami et al., 2020), and possess psychological well-being (Nurcahyo & Valentina, 2020).

Academic stress is the pressure caused by a subjective perspective on an educational condition (Barseli et al., 2017). Fathiyah (2019) researched 724 students in Indonesia using the academic stress model. It was further reported that academic stress is mental distress that shows students' helplessness and problems in adapting to the educational field due to demands, pressures, and burdens that exceed their available resources. Therefore, it inhibits adjustment and negatively affects biochemical, physiological, cognitive, affective, motivational, and behavioral states. Jayakumar and Sulthan (2013) described academic stress as the peak of students' difficulties in carrying



out educational activities caused by innumerable assignments and the drastic changes experienced after enrolling in a new school or college.

According to various preliminary studies, several sources of academic stress include innumerable tasks (Chraif, 2015), high educational burden (Fathiyah, 2016; 2019), students' academic expectations to achieve high grades, the development of guilt feelings when the reverse is the case (Zhang et al., 2015), and pressure related to the parents' expectation to achieve good performance (Deb et al., 2014).

Academic stress is caused by the fact that students have various internal and external demands that are perceived as a source of pressure when it exceeds their limits. This leads to distress in the form of physical or mental fatigue, reduced body resistance, and emotions that tend to be unstable. Each student experiences different stress responses, depending on their health condition, personality, previous encounters, gender, age, the stressor magnitude, and the ability to manage emotions.

Academic stress is the main problem that affects the educational success and deserves absolute attention from various parties. Related study is in high demand, specifically during COVID-19. Several studies proved that counselling services play an important role in reducing academic stress. This includes the minimization process through the development of group counselling guidance programs (Mahardika, 2016; Armila, 2020; Khusaina, 2019; Warno et al. 2015), and proper management of students' stress management skills through information services (Astutik, 2018). Others include the rational emotive behavioral therapeutic approach (Konadi et al., 2017), art therapy (Fitria & Putri, 2022) and behavioral approach (Prayuli, 2018). This is in addition to assertive training techniques (Muarif, 2020), individual counselling services (Badri, 2020), individual counselling with a rational-emotive behavioral therapeutic approach (Suriatika & Nursalim, 2019), and the orientation service. Academic stress is minimized by providing counselling services and the ability to adapt to existing situations and conditions. According to Wibowo (2019), it is a process carried out using a network tool as a liaison between the BK (Counselor Teachers) and clients. The recent research proves that online counselling is more useful than conventional counselling because it is felt to help facilitate solving client problems more quickly and cost-effectively (Daulay, et al. 2022), although basically all counselling, both online and conventional, is equally good (Duniawati, et al. 2020).

During the pandemic, guidance and counselling services were smoothly rendered when meetings were restricted. Counselling is a series of the most basic guidance activities to assist the counselee or client physically to ensure they take responsibility of various problems. Online counselling is an alternative effort that counsellors use to prevent, reduce, develop self-correction awareness, improve and help solve clients' problems virtually or using internet methods. The media in this industrial era is extremely diverse and up-to-date, such as cellular phones, the internet, and computers. This also includes social media, which are increasingly developing and easily accessible through smartphones. These media tend to facilitate access between the counsellor and

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the client in providing assistance especially in situations where both parties are not in the same place. The advantages of online counselling compared to conventional counselling have also been studied by several previous researchers, including: being able to treat gadget addiction over a distance (Prasetiawan, 2016); Android-based online counselling service solution (Sangiba et al. 2022).

Online counselling (Ifdil & Ardi, 2013) consists of three stages, which are reported as follows: Stage I (Preparation). This covers the technical aspects of using hardware that supports online counselling. For instance, computer and laptop devices support its implementation. Additionally, counsellors are also trained concerning skills, academic eligibility, ethical and legal assessment, suitable issues to be discussed, and governance; Stage II (Counselling Process). The online counselling processes are not much different from the ordinary procedure, which consists of four stages, namely delivery, assessment, interpretation, and coaching. Moreover, more emphasis is placed on solving clients' problems in online counselling sessions compared to the approach, technique, or therapy used. At this stage, this selection is adjusted to the problems faced by clients; Stage III (Post Counselling). The third stage is the post-online counselling process, which is carried out after the assessment.

Furthermore, there are some limitations associated with the ease of performing e-counselling. For instance the network availability determines the success or failure of its implementation. The difficulty of developing a therapeutic relationship with clients who are not close also results in psychological contact that is dissimilar to the face-to-face method. Counsellors do not pay adequate attention to clients' facial expressions, body language, and verbal cues because this technique only focuses on solving problems. Therefore, students need to be able to combine empathic abilities with the media to render online counselling services (Petrus & Hanung, 2017).

For universities with guidance services, online counselling is extremely useful for clients or students. However, implementing a standardized method requires adequate support for smooth operation. This includes providing a counselling web service as a medium that functions as a liaison between clients and providers in discharging related activities. Arlena and Prasetya (2022) also studied the effectiveness of online counselling web-based information services. The results of the study contain the website-based information services development. The difference is that it compared students who were provided with this service with those assisted by the conventional-based method to test the effectiveness of both methods.

Therefore, this study examines the development of an online counselling model to reduce students' academic stress. Generally, knowledge and information are expected to help reduce academic stress experienced by mostly Islamic Education Counselling Guidance students. Samsudin (2021) stated that the media website was developed to provide information services to fulfill students needs. Therefore, the usefulness of providing this information service assistance is one of the main objectives of this study.



**Method**

**Study Design**

This study employed a quasi-experimental method to determine the effect of online counselling-based information services. It is an experimental design that uses two groups for the entire design, where one applied repeated treatments and measurements (Saifuddin, 2019). The experimental design in this study refers to the pre- and post-test control groups. It aims to compare the treatment's impact on the experimental and control groups (Sugiyono, 2017). The research design is as follows Table 1.

**Table 1**

Pretest-posttest control group design research design

Group	Pretest		Posttest
Experiment	O1	X1	O2
Control	O3	X2	O4

Reference: (Sugiyono, 2017)

Note :

- O1 = academic stress condition of the experimental group at pretest
- O2 = academic stress condition of the experimental group at posttest
- O3 = academic stress condition of the control group at pretest
- O4 = academic stress condition of the control group at pretest
- X1 = treatment (providing online counselling)
- X2 = treatment (providing conventional counselling)

**Study Procedure**

This study consisted of three stages. First, the preparation phase starts with conducting a literature review to ascertain the effectiveness of counselling and guidance services in terms of reducing academic stress. Furthermore, the distributed questionnaires aided in determining students' academic stress condition. The instrument used is the academic stress scale adaptation designed by Fathiyah (2019), which comprised of four aspects namely physical, cognitive, affective, and conative. A total of 40 items were realized, and when placed on a scale with five answer choices never, rarely, sometimes, often, and always, they were all favourable. The score ranges from one to five. Scores of one, two, three, four, and five indicate that the statement presented is never, rarely, sometimes, often, and always experienced, respectively. The activities took place in class for the control group with conventional counselling intervention, and took place via Zoom for the experimental group for online counselling intervention.

The second stage is the implementation phase, to test the effectiveness of the online counselling service model, which was carried out for four weeks. The first and second weeks were used for the online counselling-based information services provision, while the third and fourth were for the conventional process. The experimental group

was given online counselling in the form of information services in the first and second weeks, each week consisting of two meetings. The control group was given conventional counselling services in the form of face-to-face information services in the third and fourth weeks, with two meetings held each week. So that a total of four meetings were carried out over two weeks for each counselling service, both online and conventional. The third stage is the data processing phase. The information concerning the academic stress scale was obtained by scoring each respondents' answer. After all the data was collected, it was further processed using SPSS version 23.0 for windows.

### Participants

This present study involved all Department of Islamic Education Counselling Guidance students. At the initial stage, their academic stress conditions were surveyed by distributing questionnaires. The survey results showed that of 1154 active students, only 629 were willing to complete the questionnaire. Furthermore, they were identified by categorizing the academic stress condition. Students who experienced the highest and moderate academic stress categorization were involved in the experimental and control groups, respectively. However, all participants filled out the informed consent form to prove they had volunteered to participate in this study.

Overall, based on the demographic data of research respondents, it can be seen that the majority of students are female (73%), aged 19 years (62%), most of whom come from within the city of Medan so the majority live with their parents (53%) (Table 2). Respondents are classified into 3 categories (Azwar, 2000), with the formula:

Low :  $x < (\mu - 1.0 \text{ SD})$

Medium :  $(\mu - 1.0 \text{ SD}) \leq x < (\mu + 1.0 \text{ SD})$

Height :  $(\mu + 1.0 \text{ SD}) \leq x$

Note:  $\mu$  = empirical mean

SD = empirical standar deviation

**Table 2**

Categorization of academic stress scores.

Category	Range Value	Frequency	Percentage
Low	38-53	293	45.6%
Medium	54-69	256	40.7%
Height	70-85	80	12.7%

### Instrument

The academic stress instrument is an adaptation of the academic stress scale by Fathiyah (2019), which consists of four aspects of academic stress, namely: physical (example item: difficulty concentrating when memorizing lessons), cognitive (example item: thoughts are disturbed by target grades from school), affective (example item: anxious about exams), and conative (example item: bored doing school assignments), and a total of 40 items. In the licensing process for using the instrument, the researcher



contacted the author directly via email and the author permitted and provided the instrument via email. All items on the scale are a favorable scale and consist of 5 answer choices, namely never, rarely, sometimes, often and always. Ratings move from 1 to 5. A value of 1 indicates that the statement presented is almost never experienced, a value of 2 is rarely experienced, a value of 3 is sometimes experienced, a value of 4 is often experienced, and a value of 5 is almost always experienced. The construct validity for this instrument has been empirically confirmed well based on goodness of fit criteria, namely chi-square 12.235 with  $p=0.346$ ; chi-square/df=1.112; GFI=0.990; AGFI=0.975; TLI=0.998; CFI=0.999; and RMSEA=0.018 (Fathiyah, 2019). In this study, the academic stress scale had good reliability with a Cronbach's alpha value of 0.824.

### Study Analysis

Data analysis aims to test the study hypotheses, namely the effect of online counselling-based information services in reducing student academic stress. The difference between the experimental and the control groups was tested using descriptive and independent sample t-test analyses.

### Results

The proposed hypothesis states that there are certain differences between students who were given online counselling-based information services and those subjected to the conventional approach. The Mann-Whitney test was used to determine the counselling service model's effectiveness in reducing academic stress. However, this study failed to test assumptions due to the small number of participants, with 35 and 20 students making up the online and offline counselling groups. Therefore, the data analysis performed by nonparametric tests is useful when the sample is small and easier to calculate than the parametric method. Nonparametric approaches were used when the data is abnormal and homogeneous or normal and heterogeneous, as well as involving a few study subjects (Saifuddin, 2019). The data analysis was carried out using the SPSS version 23 program (Table 3).

**Table 3**

Test Results for Differences in Academic Stress Scores Between the Experimental Group and the Control Group

Mann-Whitney U	Z Score	Sig.
237.500	-2.203	0.028

The Mann-Whitney test was further used to obtain significant results with Z and p values of -2.203 and 0.028 ( $p < 0.05$ ), respectively. The mean of 63.43 ( $p < 0.05$ ) in the control group of conventional information services, is greater than the experimental counselling category at 53.40 ( $p < 0.05$ ). This is in line with the t-tests performed before both online and conventional counselling services rendered in the experimental and control groups, respectively. Furthermore, the difference in the information services

provided between the two groups was based on the analysis of the independent sample t-test ( $F = 6.929$ ,  $t = -1.952$ ,  $p = 0.013$ ,  $p < 0.05$ ). Based on gain score analysis, it is proven that the mean value shows that the effectiveness of conventional information services is 34.69 ( $p < 0.05$ ) which is higher than the mean mean in the online counselling group which was provided with online counselling-based information services of 24.79 ( $p < 0.05$ ).

**Table 4**

Differences in Well-being Scores for Psychoeducation and Control Groups

Group	N	Mean	Std. Deviation	Std. Error Mean
Pre 1.00	15	53.4000	17.75950	4.58548
2.00	16	63.4375	9.30211	2.32553

\*\*  $p < 0.01$ ; \*  $p < 0.05$

## Discussion

Students need to be provided with guidance and counselling services to solve their numerous problems. The purpose is to assist and ensure they develop optimally. Therefore, guidance and counselling services are integral and inseparable parts of diverse educational programs. Pautina (2017) emphasized that the counselling process ensures that an individual is happy and prosperous when employed in an applicative way or manner.

Guidance and counselling are some assistance counsellors render to clients through face-to-face meetings or reciprocal relationships between the two to ensure clients problems are solved (Aqib, 2020). The importance of improving students' well-being, reducing academic stress during online learning, and ensuring the proper functioning of their psychological condition is an interesting theme continuously investigated during the pandemic. Handling academic stress experienced by students requires the involvement of various parties, such as teachers who assist them through online counselling services.

Prayitno (2012) also emphasized that the recent counselling procedure is inseparable from the influence of technological development. Although, at first, it was limited to face-to-face meetings between counsellors and clients, currently, it can be held using various media. Therefore, it is possible to implement a long-distance counselling relationship. Haryati (2020) added that the development of communication technology requires counsellors to innovate, especially in providing e-counselling services as a forum for counsellors to provide alternative solutions to problems faced by counselees. This was also investigated in this present study, as well as how website-based online counselling services can assist students in reducing academic stress.

These results indicated that online counselling services have an insignificant effect on reducing students' academic stress. It simply means that the experimental group has a low desire and interest in participating in the online counselling service provided





through the website. The students were first introduced to this meaningful approach and its benefits. They were then instructed to read and analyze the news in the information service column. Furthermore, nine materials were presented, namely exercise and stress, learning saturation and styles, recognizing procrastination and academic stress, tips for completing college assignments, managing study time, stress management for students, as well as exercise and academic stress. These were aimed at reducing academic stress. After reading and analyzing these materials, students can consult psychologists and counsellors through chats.

The experimental group comprised of 35 students from the Department of Islamic Education Counselling Guidance 4 in the fifth semester. Among these, only one chatted online to follow up on related services closely. This was proven after the website statistics were checked to review the number of visitors. Furthermore, the services commenced with the website's opening, to chat with clients or students. The following are the results of the services provided for the experimental group.

Low interest in online counselling services because they are from the department of Islamic Education Counselling Guidance 4. The survey results showed that these students experienced high academic stress due to the demand for several piled-up tasks. Students' concentration in the experimental group was divided because they visited websites to read various news stories with interesting pictures. In addition, students were less interested in reading the news in the information service column.

Karneli, et al. (2019) also stated that students' academic stress can be reduced through counselling services. This procedure can be carried out face-to-face, through the adoption of a cognitive behavioral modification counselling (CBMC) approach. It is used to modify the maladaptive thoughts, emotions, and behavior of students independently in addition to the application of time management techniques. Various studies also confirmed that the number of tasks during online learning is one of the reasons students experience academic stress and learning saturation (Lubis, Ramadhani & Rasyid, 2021). It hinders educational achievement and progress due to difficulty concentrating, remembering, and understanding the material, procrastination in completing assigned tasks, negative thoughts, anxiety, and frustration (Aryani, 2016).

After two weeks of providing online counselling services, this study examined the reasons for the lack of interest in the experimental group. This was followed up by conducting interviews with the Islamic Education Counselling Guidance 4 students to find out how they felt after participating in these activities. Students admitted to being subjected to stress, which was reduced by traveling with friends, gathering, joking, playing, and visiting new places. Similarly, some studies proved that this method does not provide significant benefits due to several obstacles. According to Kit et al. (2017), the loss of non-verbal cues hinders the goals' smoothness and achievement, as well as basic technical problems in the use of information technology.

However, several other studies proved the usefulness and effectiveness of this method in accordance with behavioral and self-management techniques in terms of

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reducing game addiction tendencies in students (Reza & Mulawarman, 2021). Zeren et al. (2020) conducted study in Turkey and reported that its benefits are similar to face-to-face with respect to life satisfaction. Furthermore, it is preferred due to financial reasons, living far from a mental health center, worrying about stigma, etc.

This differs from the control group, who were given conventional information services consisting of the Islamic Education Counselling and Counselling 5'students in the fifth semester who were not provided with online counselling services.. The control group was provided with similar materials as in the experimental category, the only difference is that these were delivered through face-to-face meetings. The present study results showed that after providing face-to-face information services, a significant score was realized compared to the online counselling group. Its effect is considered to be more effective, because the counsellors directly ensured that students followed the materials delivered from beginning to end. Moreover, they were given space for discussion, questions, and answers about the submitted material.

In the control group, students can interact directly with counsellors as well as discuss and ask questions answered by providing face-to-face information services. They also received counselling services in both cognitive and affective fields. As a result, students are able to understand the problems and conditions that are being felt properly.

This differs from the experimental group, where students only obtain cognitive services by receiving information on the online counselling website. The problem is that they can only read and analyze information themselves. Meanwhile, students are tired of the existing workload and still expected to read the news in the information column uploaded on the website.

The effectiveness of the face-to-face information services is also evident after the counselling activity has ended. Students from the control group were more intense in contacting the counsellors to conduct face-to-face counselling services than those from the experimental class. Overall, online counselling has less effect in reducing the academic stress of Islamic Education Counselling Guidance students. This is because they have ways of solving certain problems, for example, spending quality time joking, telling stories, and taking a walk with friends instead of reading material from information services on online counselling.

Several obstacles were encountered during the implementation of online counselling. However, it raises various constructive suggestions, which have been disclosed in the sub-chapter. Several previous literature reviews reinforced by the results of this study enrich information related to the benefits and obstacles encountered in implementing online counselling. The perceived benefit of online counselling is it is practical and effective for distance services. However, on the one hand, it prevents the subjects to be unable to freely express themselves because without meeting the counsellor directly.



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## Conclusions

The results of this research show that there is no effect of online counselling services in reducing students' academic stress, meaning that the experimental group, namely the group that was provided with online counselling-based information services, had a low desire and interest in participating in the online counselling service process via the website. In the experimental group, students were first introduced to the meaning of online counselling and the benefits it can provide, then students were instructed to read and analyze the news in the information services column.

Several suggestions were made from the study results. Firstly, the online counselling service that allows students to access news in the information service column needs to be redesigned with lighter themes and attractive images. It enables students to be directly connected to the counsellors as well as benefit from this service after registration without reading the news in the information service column. Secondly, this process is appropriate for long-distance services, even though face-to-face is more effective for students. This is because undergraduates prefer to talk directly to counsellors about their problems instead of chatting through WhatsApp or Zoom. Thirdly, from a financial perspective, this process is not optimal and has had minimal effect on students. For instance the numerous assignments, and lecture meetings sometimes held online, makes them spend much money on other related activities. This makes it difficult for them to engage in online counselling, which is considered more practical and time-saving. However, from a financial point of view, it is considered expensive because many students are forced to use internet data.

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