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Effectiveness of brief CBT cognitive restructuring and self-instruction counseling for increasing academic hardiness of boarding school students

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Article Info	Abstract
Keywords: Group counseling, brief CBT, cognitive restructuring, self instruction, academic hardiness.	Boarding school is an educational system in which students reside in dormitories as an integral part of an academically demanding and challenging process. Therefore, students in boarding schools are expected to possess a high level of academic hardiness. This study aims to examine the effectiveness of brief cognitive behavioral therapy (CBT) group counseling using cognitive restructuring and self-instruction techniques in enhancing the academic hardiness of junior high school boarding students in Demak Regency. This research employed a Pretest-Posttest Two Experimental Groups Design with Follow-Up, involving a sample of 20 students selected through purposive sampling. Data were collected using the Academic Hardiness Scale (Kamtsios), consisting of 36 statement items with validity coefficients ranging from 0.403 to 0.754 and a reliability coefficient (Cronbach's alpha) of 0.749. Data analysis techniques included the paired sample t-test to assess effectiveness and repeated measures ANOVA to evaluate changes over time. The results indicated a significant positive effect of brief CBT group counseling using cognitive restructuring and self-instruction techniques in improving the academic hardiness of boarding school students in Demak Regency. The findings also showed that the counseling interventions remained effective over time despite the interaction effects of time. Furthermore, there was no significant difference in the level of effectiveness between the cognitive restructuring and self-instruction techniques in enhancing students' academic hardiness. Based on these findings, it is recommended that school counselors implement more effective counseling services aimed at maintaining and improving academic hardiness, particularly for students in boarding schools.

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Introduction

Academic hardiness plays a crucial role in helping students cope with pressure and stress arising from high academic demands. Students with a strong level of hardiness tend to exhibit greater commitment to academic tasks, good self-control, and the ability to perceive challenges as opportunities for growth. Research has shown that students with high hardiness possess better adaptability and are more capable of managing academic stress, which in turn enhances their learning performance. Academic hardiness refers to a student's ability to face academic challenges with resilience and flexibility. Findings from Wardani (2020) suggest that a strong personality is not easily threatened or disturbed by the various pressures that often arise in human life. A resilient personality equips individuals with the capacity to maintain a positive outlook, remain optimistic and active, demonstrate persistence both cognitively and emotionally, and show strong self-control when facing challenges. Li et al. (2023) indicate that resilience is a personality trait that is essential for students' adaptation and learning.

According to Maddi & Khoshaba (2005), hardiness is the capacity to survive and thrive even in stressful conditions. Resilience maintains a person's performance and well-being by helping them think and act constructively when stressful situations arise. There are two types of stress. The first involves disruptive changes

in routines or circumstances. The second involves a persistent gap between what an individual desires and what they actually receive.

Boarding school is an educational system in which each student resides in a dormitory (Simpson et al., 2022). As an integral part of the academic process (Masyud in Dewi, 2025), it is deeply rooted in religious values and knowledge (Auliyah et al., 2025), and serves to fulfill parents' goals in educating their children (Kolbe, 2025). Over time, humans experience various dynamics in life, one of which involves relocation. Activities in boarding schools are often very demanding. If boarding school students are unable to manage their time effectively, it can lead to pressure that may result in a sense of unhappiness. Internal factors that support student happiness include acceptance, openness, calmness, resilience, self-control, and good time management (Muslikah et al., 2024). Research conducted by Menon in Dewi (2025) indicates that the main source of stress among adolescent students is related to academic problems. Several studies have been conducted to explore the relationship between academic stress and adolescent mental health.

Another study involving 1,120 adolescents aimed at examining the correlation between academic stress and depression in teenagers found that 612 adolescents were diagnosed with depression during their studies (Jayanthi in Dewi, 2025). Karimah et al. (2021) conducted a study to examine the hardiness profile of students (santri) in Islamic boarding schools and to explore the practical impact of hardiness on the students through the pesantren environment, using challenge, control, and commitment as the main indicators. The results of the study revealed that the level of hardiness among the students was still in the moderate category, indicating that it had not yet reached an optimal level.

Schultz and Schultz, as cited in Romadhoni et al. (2024), explain that individuals with a high level of hardiness possess attitudes that make them more capable of coping with academic stress. Students who have good self-control will demonstrate behaviors such as the ability to regulate their actions, control stimuli, anticipate events, interpret phenomena, and make independent decisions (Ghufron & Risnawita in Harahap, 2023). Adolescent students are vulnerable to impulsive thoughts and actions. Students who experience failure in exams are prone to thinking that they are not capable enough to be proud students; if this continues unchecked, it can cause the student to become increasingly overwhelmed by their own thoughts (Corey, 2024).

One of the services that can be used to help students improve academic hardiness is group counseling, which aims to assist individuals in a group setting with both preventive and curative approaches, and is intended to provide comfort for the development and growth of the counselees (Wibowo, 2019). Cognitive behavior therapy can help adolescent students by slowing down their thought processes and providing opportunities to evaluate their cognitions (Corey, 2024), as well as serving as a means of prevention and intervention (Matar et al., 2024). It also helps in identifying the most fundamental problems (Männikkö et al., 2025). CBT can be a useful approach in school-based group counseling. Adolescents highly value feedback from their peers, making this setting an ideal agent of change. Collaborative empiricism may involve working with several students simultaneously (Corey, 2024).

In practice, the form of CBT used is Brief CBT or brief cognitive counseling. Its duration is shortened from 12–20 sessions to just 4–8 sessions, making it more efficient and targeted in improving students' hardiness. Due to the limited time, Brief CBT assumes that counselees will be motivated to actively participate in counseling and make cognitive and behavioral changes (Bond et al., 2004).

One technique that can be applied is cognitive restructuring, which focuses on changing negative or irrational thought patterns into more positive and rational ones. According to Craig and Austin in Agustin et al (2023), cognitive restructuring is very helpful for adolescents because it focuses on identifying and modifying maladaptive thoughts and behaviors, developing effective coping skills, creating social support networks, increasing positive activities, and emphasizing the importance of perception (i.e., cognition) in stressful situations and subsequent emotional states and behaviors. Another technique that can be used to enhance academic hardiness is the self-instruction technique, where individuals are taught to use positive self-directed commands or instructions when facing challenging situations (Gladding, 2021).

This study contains a novelty that distinguishes it from previous research. Khoiriyah's (2020) study tested the effectiveness of group counseling using self-instruction and cognitive restructuring techniques to improve hardiness. The focus of that research was on conventional CBT to enhance resilience, but it did not examine Brief CBT applied to boarding school students, who experience unique learning environments and specific academic pressures. Another study by Sophia (2023) showed that Cognitive Behavior Therapy (CBT) counseling is effective in improving academic hardiness among santri. However, that study did not combine two techniques simultaneously within a brief counseling design.

Ultimately, this study offers a new perspective by applying a more modern and time-efficient form of CBT counseling without compromising the quality of the counseling outcomes. This research also combines

two counseling techniques, cognitive restructuring and self-instruction, both of which are expected to make a significant contribution to helping students improve their academic hardiness. Furthermore, this study is conducted on students living in dormitories, where they experience a distinct learning environment and higher academic pressure. Therefore, this research is highly valuable to carry out in order to help boarding school students develop strong academic hardiness.

Method

This study uses a quantitative design with a Pretest-Posttest Two Experimental Groups Design with Follow-Up, as it aims to examine the effectiveness of brief CBT group counseling using cognitive restructuring and self-instruction techniques in improving academic hardiness among boarding school students. This study is an experimental research. After the sample was selected based on pretest results using the academic hardiness scale, the students were divided into two groups. Group I received brief CBT group counseling using the cognitive restructuring technique, while Group II received brief CBT group counseling using the self-instruction technique.

The population of this study consists of junior high school students living in boarding schools in Demak Regency. The research respondents were selected using purposive sampling, based on the results of the academic hardiness scale. Students categorized as having low to moderate academic hardiness were included as the study sample. A total of 20 students were selected as participants and randomly assigned to two experimental groups.

Data on students' academic hardiness were collected using an academic hardiness scale developed based on Spiron Kamtsios' theory. The scale consists of 36 statement items with response options ranging from "strongly disagree" (1) to "strongly agree" (5). The validity values range from 0.403 to 0.754, and the Cronbach's alpha reliability coefficient is 0.749. After conducting the prerequisite tests, the results showed that the academic hardiness data were normally distributed and had equal variances (homogeneous), allowing for the use of parametric analysis. For the first and second hypotheses, the analysis used was the paired sample t-test. Meanwhile, for testing the third hypothesis, repeated measures ANOVA was used.

Result and Discussion

The results of descriptive analysis using SPSS version 27 include data on students' academic hardiness before (pretest) and after (posttest) participating in brief CBT group counseling using cognitive restructuring and self-instruction techniques. The results indicate a significant increase in academic hardiness in both Experimental Group I and Experimental Group II following the intervention. Table 1 below presents the academic hardiness data from both groups.

Table 1. Description of academic hardiness data of boarding school students

Description	Experimental Class I Group counseling brief CBT group counseling with cognitive restructuring technique		Experimental Class II Group counseling brief CBT group counseling with self instruction	
	Pretest	Posttest	Pretest	Posttest
Mean	110.20	163.60	110	157.60
Std deviation	5.287	14.462	6.146	9.513
Highest score	118	181	119	176
Lowest score	104	132	101	147

Furthermore, to determine the effectiveness of brief CBT group counseling using the cognitive restructuring technique, refer to Table 2.

Table 2. Result paired t-test I

	<i>t</i>	<i>df</i>	<i>Sig (2-tailed)</i>	<i>Mean differences</i>
Kelompok I	-12.894	9	.000	-55,200

Based on the data presented in Table 2, the significance value is less than 0.05, indicating that there is a significant difference in the academic hardiness of boarding school students after receiving brief CBT group counseling using the cognitive restructuring technique.

Furthermore, to determine the effectiveness of brief CBT group counseling using the self-instruction technique, refer to Table 3.

Table 3. Result paired t-test II

	<i>t</i>	<i>df</i>	<i>Sig (2-tailed)</i>	<i>Mean differences</i>
Kelompok II	-15.775	9	.000	-46.900

Based on the data presented in Table 3, the significance value is less than 0.05, indicating that there is a significant difference in the academic hardiness of junior high school boarding students after receiving brief CBT group counseling using the self-instruction technique.

Furthermore, to determine the effectiveness of the interaction between brief CBT group counseling using the cognitive restructuring and self-instruction techniques in improving academic hardiness, the results of the two-factor repeated measures ANOVA analysis are presented in Table 4.

Table 4. Repeated measure anova

Within subjects effect	F	Sig
Maunchly's rest of sphericity		0.768
Sphericity assumed	307.604	<.001
Sphericity assumed AH*kelompok	1.396	0.261

Based on the data presented in Table 4, it can be concluded that there is a significant time effect of brief CBT group counseling using both the cognitive restructuring and self-instruction techniques in improving academic hardiness. Another conclusion drawn from Table 4 is that there is no significant difference between the effectiveness of brief Cognitive Behavior Therapy group counseling using the cognitive restructuring technique and the self-instruction technique in increasing academic hardiness among junior high school boarding students in Demak Regency. Both brief CBT techniques applied to each group produced equally strong effects.

This study confirms that junior high school boarding students in Demak Regency, who initially had low academic hardiness, showed improvement after participating in brief CBT group counseling using cognitive restructuring and self-instruction techniques. Through this process, the students gained new understanding, knowledge, and confidence, which contributed to the enhancement of their academic hardiness. Based on observations and the research process, the intervention implementation generally proceeded as expected and ran smoothly. The evaluation results of the intervention also showed that brief CBT group counseling using cognitive restructuring and self-instruction techniques had a positive impact on junior high school boarding students in Demak Regency by improving their academic hardiness, with the intervention evaluation criteria falling into the very good category.

The statistical results also show that the intervention interaction is significant, indicating that despite the time interval between the brief CBT group counseling using cognitive restructuring and self-instruction techniques, both are highly effective in improving academic hardiness among junior high school boarding students in Demak Regency. Supporting this result, a study conducted by Hikmah et al. (2020) successfully generalized the influence of cognitive behavioral therapy group counseling using cognitive restructuring techniques in enhancing control belief abilities and reducing academic fatigue. Another supporting study by Maullasari et al. (2021) found that the cognitive restructuring technique had a significant effect on academic hardiness among visually impaired students.

A study by Khoiriyah et al. (2020) showed that the experimental group receiving group counseling using self-instruction and cognitive restructuring techniques was significantly effective in improving hardiness compared to students' initial hardiness levels. Another supporting study Nawantara et al. (2019) investigated the use of self-instruction guidelines as a medium to improve self-discipline among high school students. This study found that self-instruction had a significant effect on increasing students' self-discipline. These findings indicate that brief CBT group counseling using cognitive restructuring and self-instruction techniques is effective in enhancing academic hardiness among junior high school boarding students.

These findings are expected to serve as a strong reference for school counselors to develop more effective counseling services aimed at enhancing students' academic hardiness. School counselors can adopt cognitive restructuring and self-instruction techniques applied in brief CBT group counseling to help students overcome academic challenges and improve their resilience. Furthermore, the results of this study are expected to be beneficial and serve as a consideration for future researchers to further explore brief CBT group counseling using cognitive restructuring and self-instruction techniques for improving academic hardiness among boarding school students, particularly from a gender perspective.

Conclusion

The findings of this study indicate that brief cognitive-behavioral group counseling incorporating cognitive restructuring and self-instruction techniques is effective in improving academic hardiness among junior high school students attending boarding schools in Demak Regency, Indonesia. The results also revealed an interaction effect involving measurement time and counseling interventions, suggesting that changes in academic hardiness varied across measurement occasions and intervention conditions. These findings highlight the potential of brief cognitive-behavioral group counseling as a structured intervention to strengthen students' capacity to manage academic challenges. Further research involving larger samples and longitudinal assessments is recommended to examine the sustainability and broader applicability of these intervention outcomes.

Author Contributions Statement

Lailie Luthfiatie Zullie: Investigation, Data curation, Formal analysis, Visualization, Writing – original draft. **Heru Mugiarto:** Conceptualization, Methodology, Supervision, Writing – review & editing. **Muslikah:** Validation, Project administration, Resources, Writing – review & editing. All authors reviewed and approved the final manuscript for publication.

Declaration of Generative AI

During the preparation of this article, the authors used ChatGPT to assist in refining the language and improving the overall clarity of the manuscript. The authors critically reviewed and revised the AI-assisted text where appropriate and remain responsible for the accuracy, integrity, and final content of the published work.

Declaration of Competing Interest

The authors declare that they are not aware of any financial interests or personal relationships that could have influenced the conduct of this research or the interpretation of its results.

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References

- Agustin, F., & Lengkanawati, N. S. (2023). Teacher agency in different teaching communities: A narrative inquiry into shifting teaching experiences. In *Proceedings of the 20th AsiaTEFL–68th TEFLIN–5th iNELLTAL Conference (ASIATEFL 2022)* (pp. 234–246). Atlantis Press. https://doi.org/10.2991/978-2-38476-054-1_20
- Auliyah, R., Nasih, M., & Agustia, D. (2025). Determinants of business success at Sunan Drajat Islamic Boarding School, east java Indonesia. *Cogent Business & Management*, 12(1), Article 2492828. <https://doi.org/10.1080/23311975.2025.2492828>
- Bond, A. J., Verheyden, S. L., Wingrove, J., & Curran, H. V. (2004). Angry cognitive bias, trait aggression and impulsivity in substance users. *Psychopharmacology*, 171(3), 331–339. <https://doi.org/10.1007/s00213-003-1585-9>
- Corey, G. (2024). *Theory and practice of counseling and psychotherapy* (11th ed.). Cengage Learning.
- Dewi, D. S., Wahyuni, E., & Hidayat, D. R. (2025). Gambaran stres akademik siswa baru sekolah boarding serta implikasinya terhadap bimbingan dan konseling. *G-Couns: Jurnal Bimbingan dan Konseling*, 9(2), 740–751. <https://doi.org/10.31316/g-couns.v9i2.7010>
- Dewi, K. C. (2025). Teachers' challenges in employing the assessment strategies within differentiated learning. *International Journal of Language and Literature*, 9(1), 74–82. <https://doi.org/10.23887/ijll.v9i1.98092>
- Gladding, S. T. (2021). *Theories of counseling* (3rd ed.). Rowman & Littlefield.
- Hikmah, M., Japar, M., & Sunawan, S. (2020). Improving control beliefs and reducing academic burnout using cognitive behavioral therapy group counseling with cognitive restructuring technique. *Jurnal Bimbingan Konseling*, 9(3), 138–144. <https://doi.org/10.15294/jubk.v9i3.41099>
- Karimah, U., Syamsu, Y., Juntika, N., & Nandang, B. (2021). The hardiness profile of Islamic boarding school student in Indonesian. *Al-Ishlah: Jurnal Pendidikan*, 13(3), 1806–1813. <https://doi.org/10.35445/alishlah.v13i3.747>

- Khoiriyah, Z., Sugiharto, D. Y. P., & Japar, M. (2020). The effectiveness of group counseling with self-instruction and cognitive restructuring techniques to improve hardiness. *Jurnal Bimbingan Konseling*, 9(3), 152–157. <https://doi.org/10.15294/jubk.v9i3.43118>
- Kolbe, A. R. (2026). Ethical concerns with referral to privately-owned therapeutic boarding schools: The case of Iowa's Midwest Academy. *Child and Adolescent Social Work Journal*, 43, 309–323. <https://doi.org/10.1007/s10560-024-01001-x>
- Li, J., Huang, J., & Chen, J. (2023). Relationship between hardiness and the learning adaptation of Chinese college students: The mediating role of teacher support and the moderating role of an only-child status. *The Asia-Pacific Education Researcher*, 32, 753–768. <https://doi.org/10.1007/s40299-022-00692-z>
- Maddi, S. R., & Khoshaba, D. M. (2005). *Resilience at work: How to succeed no matter what life throws at you*. AMACOM.
- Männikkö, N., Hylkilä, K., Peltonen, A., Hurtig, T., Ali, R., Al-Shakhsi, S., & Kääriäinen, M. (2025). Associations between emotional and attentional problem characteristics and problematic internet use patterns: A prospective cohort study. *Behaviour & Information Technology*, 44(17), 4247–4263. <https://doi.org/10.1080/0144929X.2025.2469668>
- Männikkö, N., Mustonen, T., Tanner, N., Vähäniikkilä, H., & Kääriäinen, M. (2022). Effectiveness of a brief group intervention program for young adults with gaming-related problems. *International Journal of Mental Health and Addiction*, 20(5), 2956–2972. <https://doi.org/10.1007/s11469-021-00559-2>
- Matar, J. L., Laletas, S., & Lubman, D. I. (2024). Mental health concerns and help-seeking behaviors among adolescents in high socioeconomic status groups: A scoping review. *Adolescent Research Review*, 9, 93–134. <https://doi.org/10.1007/s40894-023-00214-y>
- Maullasari, S., Wibowo, M. E., & Awalya, A. (2021). Meningkatkan hardiness tunanetra dengan teknik cognitive restructuring dan self-talk. *Hisbah: Jurnal Bimbingan Konseling dan Dakwah Islam*, 18(2), 127–147. <https://doi.org/10.14421/hisbah.2021.182-03>
- Maurer, M. M., Maurer, J., Hoff, E., & Daukantaitė, D. (2023). What is the process of personal growth? Introducing the Personal Growth Process Model. *New Ideas in Psychology*, 70, Article 101024. <https://doi.org/10.1016/j.newideapsych.2023.101024>
- Muslikah, M., Sugiharto, D. Y. P., Sugiyo, S., & Sutoyo, A. (2024). Happiness at Pesantren: Qualitative studies on Salafiyah traditional Islamic boarding school student. *Journal of Nonformal Education*, 10(1), 22–32. <https://doi.org/10.15294/jone.v10i1.31>
- Nawantara, R. D., Arofah, L., & Setyaputri, N. Y. (2019). Penggunaan panduan teknik self instruction sebagai media untuk meningkatkan disiplin diri siswa SMA. *Nusantara of Research: Jurnal Hasil-Hasil Penelitian Universitas Nusantara PGRI Kediri*, 6(2), 88–94. <https://doi.org/10.29407/nor.v6i2.13609>
- Parsaoran, I., Sugiyo, S., & Mugiarto, H. (2023). The effect of self-control on academic procrastination. *Jurnal Bimbingan Konseling*, 12(3), 153–159. <https://doi.org/10.15294/jubk.v12i3.74237>
- Romadhoni, I. I., & Qibthiyyah, R. M. (2024). Program Keluarga Harapan and senior secondary out-of-school rates. *Signifikan: Jurnal Ilmu Ekonomi*, 13(1), 127–142. <https://doi.org/10.15408/sjie.v13i1.39891>
- Simpson, F., Haughton, M., & Van Gordon, W. (2022). An identity process theory account of the impact of boarding school on sense of self and mental health: An interpretative phenomenological analysis. *International Journal of Mental Health and Addiction*, 20(4), 2116–2133. <https://doi.org/10.1007/s11469-021-00503-4>
- Sopia, D. (2023). *Efektivitas konseling cognitive behavior therapy untuk meningkatkan hardiness pada santri remaja* [Undergraduate thesis, Universitas Muhammadiyah Tasikmalaya]. <https://repository.umtas.ac.id/1348/>
- Wardani, R. (2020). Academic hardiness, skills, and psychological well-being on new student. *Jurnal Psikologi*, 19(2), 188–200. <https://doi.org/10.14710/jp.19.2.188-200>
- Wibowo, M. E. (2019). *Konseling kelompok perkembangan*. UNNES Press.
- Zulpina, & Harahap, P. F. (2023). Existence of STM in building interreligious harmony in the residential environment of Parsaoran. *Journal of Religious and Social Studies*, 3(1), 1–10. <https://doi.org/10.53583/jrss05.01.2023>