

## Cognitive Behavior Group Counseling with Cognitive Restructuring and Problem Solving Techniques to Reduce Anxiety

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### Abstract

This study aimed to examine the effectiveness of cognitive behavior therapy group counseling with cognitive restructuring and problem-solving techniques to reduce the anxiety of the students of Akademi Kebidanan Abdi Husada Semarang. The study used an experimental method with the randomized pre-test – post-test comparison group. It involved 18 female students of AKBID Abdi Husada who had anxiety in the clinical clerkship. These 18 students were divided into three groups, namely the group of group counseling with cognitive restructuring technique, group counseling with problem-solving technique, and group counseling with the combination of cognitive restructuring and problem-solving techniques. The results showed that students who joined group counseling could reduce their anxiety. However, the reduction was more effective when using the combination of both cognitive restructuring and problem-solving techniques. These findings showed that group counseling with cognitive restructuring and problem-solving techniques is effective to reduce female students' anxiety.

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## INTRODUCTION

Everyone commonly experiences anxiety. It appears because of fear or worries about something which has not happened yet. Stuart, and Sandra (2006) argues that anxiety is an unclear and diffuse worry about uncertainty and helplessness feelings. Hawari (2006) explains that anxiety is a feeling disorder (affective) indicated by deep fear or worry and progressiveness. Yusuf (2012) states that anxiety is the neurotic helplessness, insecurity, immaturity, and inability to face reality demands (environment), difficulties and daily life pressures.

Nadeem, Ali, Maqbool, and Zaidi (2012) in his study concludes that anxiety gives high impact on academic achievement. There is a reversed relationship between anxiety and academic achievement, namely when anxiety increases, academic achievement gets decreased. For more, anxiety causes difficulties in controlling attention, memory, and concentration. As a result, it can cause low academic performance (Nadeem, Ali, Maqbool, and Zaidi, 2012). Also, anxiety decreases students' problem-solving ability (Moscaritolo, 2009).

Clinical clerkship education is a major part of the learning process in diploma III study program of midwifery. Therefore, it was decided in 2011 that the educational curriculum for DIII of midwifery covers 96 credits, including theoretical study = 39 credits, practicum = 34 credits, and clinics = 23 credits with theoretical learning of 40% and practical learning of 60%. (Ministry of Health of the Republic of Indonesia, 2011).

In clinical education, high level of anxiety will decrease the quality of clinical experiences. It is also known that anxiety is often experienced by students when they are in clinical education (Watmough, and Flynn, 2011). Additionally, Melincavage study (2011) explains that when the level of anxiety experienced by students gets decreased, practical learning in the clinic can improve, and reduce the number of students who do not finish the learning.

Utami, and Afifah (2010) show that the majority of students in Health Science Faculty (FIK) of Universitas Indonesia (UI) batch 2010 had 75.5% portion of the fair level of anxiety, and 24.5% had a low level of anxiety when doing invasive action in nursing practice at their places of practice. Another study comes from Anggraeni (2015) who mentions that anxiety is generally experienced by almost half portion of university students, namely 48% experienced low level of anxiety when facing competency test of nursing. In her study, Anggraini also states when the low level of anxiety gets abandoned, it will possibly increase and turn into a high level of anxiety.

Rathnayake, and Ekanayaka (2016) says that the bachelor degree of nursing department students experienced stress, depression, and anxiety. Mental and physical health contribute to such phenomena, but the most influencing one is a negative emotion. Hence, university students' mental health needs to be improved, and there is a need for counseling facilities for students. Cognitive behavior therapy can be used to reduce the level of anxiety in social anxiety disorder, even improve the self-confidence of the subjects in social interaction (Asrori, 2015).

Cognitive behavior group counseling with the problem-solving technique was the intervention done by the researchers. According to Wibowo (2005) group counseling can create condition and atmosphere which might enable individuals to reassess their thoughts, feelings, and behaviors, change their perceptions, attitudes, and feelings or their actions and equip them to face life obligations. CBT approach assumes that anything on human's mind defines how they perform and feel (Gladding, 2012).

Cognitive restructuring technique focuses its attention on the effort of identification and changes negative thoughts or opinion in oneself and irrational clients' beliefs into positive and rational thoughts (Nursalim, 2013). This technique is designed to help to reach out better emotional responses by changing the common habit of habitual assessment to be unusual on (Efrord, 2016).

Ghamari, Rafeie, and Kiani study findings (2015) show that cognitive restructuring technique reduces students' anxiety when facing tests. Also, Nia, Tahmasebian, and Kakabaraee study findings (2014) confirms that cognitive restructuring technique is more effective to reduce students' anxiety than training the mind. Alternatively, cognitive reconstruction helps students to focus on tasks and self-responses. This therapy makes students realize any thoughts which cause learning anxiety and learn to express their feelings and problems. Shikatani, Antony, Kuo, and Cassin (2014) in her study shows that cognitive restructuring technique contributes to the reduction of PEP and the betterment of condition (including reducing anxiety).

The problem-solving technique is a cognitive behavior strategy that teaches individuals ways to deal with their daily life problems with the major purpose of identifying the most effective solution for problems and giving systematic training in cognitive abilities and behaviors so that clients can implement and cope with any problems effectively (Corey, 2012). Garland, and Kinsella (2008) state that this problem-solving technique is very effective to use in a dilemmatic situation or facing difficult life choices, crisis, environmental adaptation, as well as deteriorating personal relationship.

Study findings by Olabisi (2014) reveal that the problem-solving technique is effective in reducing the level of anxiety of students when facing tests. In her study, a problem-solving technique not only reduces anxiety but also improves students' academic performance. Ramirez, Chang, Maloney, and Levine study (2016) explains that the problem-solving technique is effective to reduce Math subject anxiety. Ramirez mentions that bad problem-solving strategy can influence the level of anxiety. Next, Habibi, Zamani, Abedini, and Jamshidnejad (2015) find that problem-solving technique is effective to reduce the level of anxiety, stress, and depression of mothers who have children with special needs.

Furthermore, several studies mention that cognitive restructuring and problem-solving techniques are effective to reduce anxiety, as well

as when those techniques are combined with other techniques. However, there are also several studies reveal that cognitive restructuring technique only beneficial for good cognitive flexibility, and less effective for bad cognitive flexibility such as anxiety (Johnco, Wuthrich, and Rapee, 2014). The same also goes for Mokhtarifar, Amirbeyg, Jalalifar, Azinfard, and Safa study (2017) that problem-solving technique is only effective to reduce math anxiety, but less effective to reduce the anxiety on math teachers. That is why this study asserted the effectiveness of cognitive restructuring and problem-solving techniques to reduce the anxiety of female students of Akademi Kebidanan when they had clinical clerkship.

Based on Melincavage (2011), anxiety is the obstruction of learning majors at the clinic which causes students to enable to cooperate well. By referring to this elaboration, there is a need to do an investigation about the effectiveness of cognitive behavior group counseling with cognitive restructuring and problem-solving techniques to reduce the anxiety of the students of Akademi Kebidanan when facing clinical clerkship. It was predicted that group counseling with cognitive restructuring and problem-solving techniques were able to reduce female students' anxiety so that they can do the clinical clerkship well.

## METHODS

The subjects of this study were chosen by using purposive sampling technique and resulted from 18 people from 58 female students of Akademi Kebidanan Abdi Husada. These subjects were placed to the group of cognitive restructuring, problem-solving, and the combination of cognitive restructuring and problem solving through the random assignment with six students of each group.

The researchers used the anxiety scale adapted from Beck Anxiety Inventory (Beck, Epstein, Brown, and Steer, 1988) to collect the data. This instrument was assessed by three experts (expert judgment), namely guidance and counseling expert, language expert to examine

the appropriateness of items based on the investigated indicators. The validity and reliability tests were conducted by using product moment correlation test. It showed that 21 items were valid with the coefficient correlation of 0.325 – 0.649. Also, the reliability of the Beck Anxiety Inventory instrument had an Alpha coefficient of 0.774.

This study used a randomized pre-test – post-test comparison group design. Further, the procedures were carried out in several stages. (1) Conducting pre-test by distributing Beck Anxiety Inventory scale to the female students of Akademi Kebidanan Abdi Usaha Semarang, (2) Giving intervention of cognitive behavior group counseling. The intervention given was group counseling with cognitive restructuring technique, group counseling with problem-solving technique, and group counseling with cognitive restructuring and problem-solving techniques. This counseling was given six times session with the time allotment of 2x50 minutes for each. The first session was group formation and delivering knowledge about anxiety. The second session was giving a further understanding of the impacts of anxiety being experienced, (3) Session was understanding and analyzing the causes of anxiety which disturb their activities, and processes to be done,

(4) Session was the application of techniques in group counseling and follow-up, (5) Session was observing any changes and closing all counseling session. Third steps of the research procedure were giving post-test by using Beck Anxiety Inventory scale to the female students. The last, the collected data were analyzed by using ANOVA test and paired sample t-test with the help of IBM SPSS 23.

## RESULTS AND DISCUSSION

Pre-test data showed that the 18 female students of Akademi Kebidanan Abdi Husada tended to have a high level of anxiety. Therefore, these students were given group counseling with cognitive restructuring technique, group counseling with problem-solving technique, and group counseling with a combination of cognitive restructuring and problem-solving techniques to reduce anxiety.

The analysis results showed that the scores in pre-test and post-test experienced inclination. In short, those three group counseling were effective to reduce the anxiety of the students of Akademi Kebidanan Abdi Husada Semarang. For more, the details can be seen in the following Table 1.

**Table 1.** The Results of the ANOVA test and Paired Sample t-test

Groups	Pre-test		Post-test		T	Gain score		F
	Mean	SD	Mean	SD		M	SD	
CR	41.50	3.93	15.33	7.42	7,250*	26.16	8.84	
PS	42.83	5.74	23.17	4.75	7,375*	19.66	6.53	12.628*
CR + PS	41.5	2.07	6.67	4.41	16.68*	34.83	5.11	

Information:

CR = Cognitive restructuring; PS =Problem solving; \*p < 0,01

Table 1 shows that the cognitive behavior group counseling with cognitive restructuring, problem, and the combination of both techniques were effective to reduce the female students' anxiety. Then, Table 2 shows that the three techniques had significant differences in reducing female students' anxiety.

These findings showed that group counseling with cognitive restructuring technique was effective to reduce students' anxiety when facing clinical clerkship at AKBID Abdi Husada

Semarang. Lahey (2011) expresses that cognitive restructuring is the most important method in cognitive behavior theory which arises based on the assumption that wrong cognition such as beliefs, hopes, and way of thinking of maladaptive individuals are the cause of abnormal behaviors.

That explanation is also similar to the study by Ireel, Elita, and Mishbahuddin (2018) showing that students' anxiety in facing tests got declined after receiving group counseling with

cognitive restructuring. This was seen from the results of pre-test and post-test that there was a significant influence on students' anxiety in facing the tests before and after the implementation of group counseling with self-instruction. It is also in line with Dumitrache, Neacsu, and Sfeatcu study (2014) which mentions that cognitive restructuring reduces anxiety significantly either global anxiety or its components on dental clients. After the intervention of cognitive behavior, the level of anxiety decreased significantly both for the index of global anxiety and its components.

**Table 2.** The Results of Post Hoc Test

Comparisons	MD	SE	P
CR vs PS	-7.83	3.28	< 0.05
CR vs CR + PS	8.66	3.28	< 0.05
PS vs CR + PS	16.5	3.28	< 0.01

Information:

CR = Cognitive restructuring  
 PS = Problem solving

Olubusayo study (2014) reveals that cognitive restructuring technique is effective to reduce Junior High School students' anxiety on math subject. His findings also show that anxiety is also influenced by gender. Next, Fernández, and Mairal study (2017) mentions that behavioral action and cognitive restructuring techniques are effective to reduce the intensity of anxiety responses. To reduce anxiety, Olubusayo used two techniques, namely behavioral action, and cognitive restructuring, and those techniques are effective to reduce anxiety.

Another result showed that problem-solving technique was effective to reduce the female students' anxiety when joining clinical clerkship at AKBID Abdi Husada Semarang. The group counseling done in this study was aimed at helping students in solving problems which disturbed their minds and caused anxiety. These are relevant to Razieh, and Ashtiani study (2010) which states that problem-solving technique is effective to reduce the level of anxiety of the students of the third grade level in Senior High School who had anxiety in facing tests.

Group counseling with problem-solving technique was effective to reduce the female students' anxiety. This was proved by the

significant changes in the anxiety level before and after the implementation of group counseling with problem-solving technique. Connell (2010) in her study mentions that problem-solving technique is effective to reduce children's anxiety. Her study also argues that problem-solving technique can be combined with other techniques.

Cormier, Nurius, and Osborn (2009) elaborate that problem solving is realized as the process of cognitive, affective, and behaviors with the medium of person or groups by trying to identify, find or create effective ways to solve the ongoing problems. Karasel, Ayda, and Tezer (2010) shows that problem-solving technique is effective to reduce students' anxiety. This study was done by involving Junior High School students who experienced anxiety in the math learning process. After receiving treatment with problem-solving technique, there happened changes in the level of anxiety. Then, Muñoz, Penalba, Sánchez, and Santos study findings (2016) displays that problem-solving technique is effective to reduce anxiety on technology.

The use of problem-solving technique to reduce the female students' anxiety was based on a conceptualization to find problem solvers regarding problems which caused students experiencing anxiety. Cormier, Nurius, and Osborn (2009) argue that problem-solving is realized as a strategy when clients learn to systematically work through a series of stages to analyze problems, find new approaches, evaluate their approaches, and develop strategies to apply their approaches in real life.

The next results came from the combination of cognitive restructuring and problem-solving techniques which was found effective to reduce the anxiety of the female students of AKBID Abdi Husada Semarang. These ideas were in associated with Dobson, D., and Dobson, K. S. (2009) who divided cognitive therapy into three based on the focus of therapy purposes, namely: (1) Cognitive Restructuring therapy goal is to create adaptive paradigms, (2) Coping Skills Therapies therapy goal is focused on the development of repertoire of skills designed to help individuals face various stressful

situations, (3) Problem-Solving Therapies concerns about the development of common strategies to face various personal problems and emphasizes the importance of active collaboration between clients and therapists in the planning of the treatment program.

The combination of cognitive restructuring and problem-solving technique was found more effective because the female students got the treatment of two techniques to reduce their anxiety. In this combined techniques, the students were taught stages in cognitive restructuring and problem-solving techniques so that they knew more about how appropriate ways to change negative thoughts, and how to decide exact problem solvers to solve any problems which cause anxiety. Therefore, the combination of cognitive restructuring and problem solving were more effective than those who only used on technique.

Cormier, Nurius, and Osborn (2009) mention several techniques belong to cognitive therapy. There are 14 in total, and two of them are cognitive restructuring to help clients identify and change their negative feelings and problem-solving technique to help clients identify how they solve problems, evaluate the process, and develop more effective problem-solving strategies.

In conclusion, cognitive restructuring technique, problem-solving technique, and the combination of cognitive restructuring and problem-solving can be used to reduce the female students' anxiety in facing clinical clerkship.

## CONCLUSION

Based on the results of the study, it can be concluded that cognitive restructuring technique, problem-solving technique and the combination of both cognitive restructuring and problem-solving techniques are effective in reducing anxiety, and can be used by counselors to reduce anxiety. There are differences in the effectiveness of the three techniques in reducing student anxiety when facing clinical clerkship at AKBID Abdi Husada Semarang. The combination of cognitive restructuring and problem-solving

techniques is more effective in reducing anxiety compared to only using one cognitive restructuring or problem-solving technique.

Counselors are advised to use group counseling interventions with cognitive restructuring and problem-solving techniques to reduce students' anxiety. This needs to be done so that students' learning activities can run well, either learning in the campus or during the clinical clerkship. All subjects in this study were female, for the future researcher, it is suggested to choose subjects with gender diversity to be able to prove the effectiveness of group counseling with cognitive restructuring and problem-solving techniques.

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