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Information Services with the PBL Method to Reduce Student Academic Stress

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ABSTRACT

Academic stress is a major problem faced by students. This study aims to examine the effectiveness of information services using the problem based learning (PBL) method to reduce student academic stress. This study used a pre-experimental approach with the design of one group pretest-posttest design. The sample in this study were 20 students taken by purposive sampling technique. The instrument uses an academic stress scale developed from Aldwin theory by measuring physical, emotional and behavioral symptoms. Analysis techniques using the Wilcoxon Signed Ranks Test. The results showed that information services using the problem based learning method were effective to reducing student academic stress. This can be seen from the decrease in posttest scores that occurred in all students who were given information services using the PBL method.



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Introduction

Stress is a major problem for students (Lin & Huang, 2014), even since the beginning of stress studies became a major problem for students (García-ros, Pérez-gonzález, Pérez-blasco, & Natividad, 2012; Geng, Midford, & Geng, 2015; Yorke & Longden, 2008). The stress experienced by these students also varies from academic, sociocultural, environmental, and psychological stress (Brand & Schoonheim-Klein, 2009; Jayakumar & Sulthan, 2013). Academic activities are the main cause of stress on students (Baste & Gadkari, 2014; Bedewy & Gabriel, 2015; Persike & Seiffge-Krenke, 2012). Stress caused by academic activities is called academic stress. Academic stress arises because there are too many demands and tasks that must be done by students (Wilks, 2008).

Student academic stress is caused by many factors, such as expectations of high test results, parental pressure, tight schedules, contrary to lecturers during lectures, strengths information received, unrealistic ambitions, too high expectations, limited opportunities, anxiety about academic tasks (Huan, See, Ang, & Wan, 2008; Nakalema & Ssenyonga, 2013; Sheykhjan, 2015). The negative impact caused by academic stress leads to physical, emotional, and behavioral symptoms (Aldwin, 2007). The negative effects of academic stress such as frequent illnesses, eating patterns are disrupted (Emond et al., 2016), depression, irritability, decreased academic performance, use of drugs or alcohol and cheating on students (Sheykhjan, 2015). In addition, academic stress also has a negative impact on academic achievement and psychological health (Stoerber & Rambow, 2007; Wilks, 2008).

Academic stress must be coping to decrease, so that the negative impact is not experienced by students. Counseling and guidance services can be provided to help students reduce academic stress (Feldman, 2005). This is same with the role of guidance and counseling basically to reduce the minimum impact of the

source of the problem, overcome the problems experienced and develop the potential of individuals or groups (Prayitno, 2017). One of the guidance and counseling services that can be used to reduce stress is information services (Astutik, 2018; Nansar, Munir, & Nurwahyuni, 2016).

Information services can be provided with information on how to coping academic stress in order to reduce it. The information given refers to the theory of Aldwin (2007), namely problem focused coping and emotion focused coping. The material given is taken from the symptoms of academic stress that occur in students, namely physical, emotional, and behavioral symptoms. The provision of information through information services is carried out through learning activities (Prayitno, 2017), so that learning objectives are achieved, learning methods can be used as patterns of choice in information delivery (Rusman, 2012). Prayitno (2017) also explained that the implementation of information services can use a variety of methods so that the information provided is properly controlled. Based on the explanation, the implementation of information services can use learning methods to achieve service goals.

One learning method that can be used is the problem based learning (PBL) method. PBL is a learning method where students learn through problems given in the PBL implementation process, student learning is centered on issues discussed, then works in groups to identify what they need to learn to solve the problem (Hmelo-silver, 2004). PBL has the advantage of motivating students to learn, besides that it can also improve self-learning skills, ability to analyze problems, be able to express themselves and be cooperative in small groups (Cui, Zhong, He, & Zhang, 2011; Gao, 2015; Song, 2011).

Based on the explanation, information services with the PBL method are expected to help reduce academic stress. By providing information on how to manage academic stress, then using the PBL method helps students understand the material provided, and develops students' thinking skills and problem solving skills. The study of this research is to test the effectiveness of information services with the problem based learning method to reduce student academic stress.

Method

This study used one group pretest-posttest design. The research subjects were 20 students from the Faculty of Education in West Sumatra. The sampling technique uses purposive sampling. Data were collected using an academic stress scale developed from Aldwin (2007) theory by measuring physical, emotional, and behavioral symptoms. The instrument uses a Likert scale model with 5 point answer choices, namely always, often, sometimes, rarely, and never. The analysis technique used is nonparametric statistics using the Wilcoxon Signed Ranks Test formula to see the differences in pretest and posttest.

Results and Discussion

Result

The results of this study indicate that there was a decrease in the scores of students' academic stress conditions after being given information services using the problem based learning method. To be more clearly seen in the following picture.

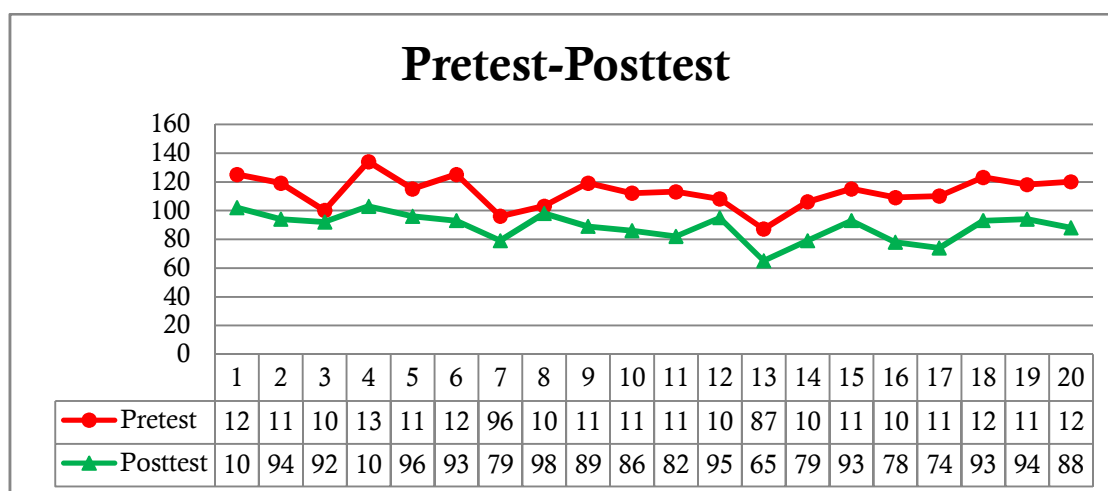


Figure 1. Differences in Pretest and Posttest Results Academic Stress Students

Figure 1 shows a green line (posttest) lower than the red line (pretest), which means there is a decrease in student academic stress scores after being given information services using the problem based learning method. Furthermore, the Wilcoxon Signed Ranks Test was conducted to see whether there were significant differences from the results of the posttest pretestboth groups.

Table 1. Results of Analysis Wilcoxon Signed Ranks Test Student Academic Stress

Nilai	Wilcoxon Signed Rank Test
	Sig. (2-tailed)
Pretest and Posttests Perlakuan	.000

Table 1 shows the value of Asymp. Sig. (2-tailed) student academic stress (sig = 0.000), this states p -value <0.05, meaning there are significant differences in academic stress before and after being given information services by the problem based learning method. This significant difference is the result of providing information services with the PBL method in reducing student academic stress.

Discussion

Decreasing student academic stress scores is the result of providing information services with the PBL method. The decline in student academic stress scores is clearly seen in Figure 1, all students experienced a decrease in scores after being given information services using the PBL method. This shows that students understand the information provided through information services using the PBL method.

In the implementation of information services with PBL, there were active and enthusiastic students participating in all service activities. They actively convey their knowledge and work together to discuss the material. The PBL method provides different learning styles for students, the learning style of the PBL method leads to a visual learning style. Visual learning style is the most dominant learning style used by students (Zahri, Yusuf, & Neviyarni, 2017). This is one reason the information provided is understood by students, so that students' academic stress decreases after being given information services using the PBL method. However, there are studies that find the PBL method well known that there is no significant difference with the lecture learning method that is usually given to students (Miller, 2003). This happens because the PBL method is considered to be a new student, so students are still not familiar with this learning method and the results obtained there are no significant differences.

Information services with the PBL method can also be used for other needs, such as improving study habits (Nova, Firman, & Sukmawati, 2016) and improving critical thinking skills (Subekti, 2015). It can even be used to improve career planning (Rizka, 2017). These results are in accordance with previous studies, the PBL method helps students understand the information provided. In addition, PBL makes students more interested in participating in learning, develops independent learning skills, develops the scope of knowledge, and develops analytical skills (Huo, Yang, & Gong, 2016; Imran et al., 2015; Pan, 2014).

Conclusion

The results of this study indicate that there is the influence of information services with the problem based learning method to reduce student academic stress in the Faculty of Education in West Sumatra. This can be seen from the decrease in scores that occurred in all students given treatment. Based on these findings, information services using the problem based learning method can be used by counselors to reduce student academic stress. The limitations in this study, the research subjects tested using information services using the problem based learning method were only conducted on 20 students. For further researchers to increase the subject of research and testing using other learning approaches.

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