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Cognitive Behavioral Therapy to Improve Self-Efficacy and Reduce Academic Procrastination

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Abstract

Self-efficacy is a considerable predictor in improving university students' academic achievement. Therefore, it is important for university counselors to decide the right treatment for self-efficacy and academic procrastination matters. Regarding this issue, this study was attempted to identify and analyze the effectiveness and effectiveness degree of CBT and self-talk technique in improving self-efficacy and reducing academic procrastination behavior. The subjects involved were 16 university students chosen using purposive sampling technique. Their data of self-efficacy and academic procrastination were collected using College Academic Self-efficacy scale and Tuckman Procrastination scale. Upon the analysis, it was found that the use of CBT with self-talk technique was effective to improve self-efficacy and reduce academic procrastination. These findings prove that the use of CBT with self-talk technique is effective to improve self-efficacy and reduce academic procrastination

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INTRODUCTION

Self-efficacy is a positive predictor in improving university students' academic achievement, while academic procrastination is any activity which degrades or reduces students' performance in learning (Kiamarsi & Abolghasemi, 2014; Kim, Fernandez, & Terrier, 2017; Malkoç & Mutlu, 2018). Self-efficacy refers to one's belief in his abilities to do particular actions (Bandura, 1997). It affects choices made by individuals and goals of their learning (Schnell, Ringeisen, Raufelder, & Rohrmann, 2015), efforts they make (Galla et al., 2014; Komarraju & Nadler, 2013), and their persistence in assignment (Schnell et al., 2015). Individuals with high self-efficacy can effectively make better preparation and more succeed in tasks accomplishment (Bandura, 1982). Hence, self-efficacy holds an important role in abilities and academic, such as in terms of working on assignments. As a result, both variables are worth investigate.

Self-efficacy is one of influential factors that leads to students' success in learning process (Rustika, 2012; Köseoğlu, 2015). If the students believe in all potential they have got, they will strive for optimum achievement. Through this factor, metacognitive strategies required for academic performance will arise (Köseoğlu, 2015). Students with high level of self-efficacy are better at controlling impulses when learning challenging materials or facing learning disruption. When they are under pressure, self-efficacy will maintain their discipline, motivation, and adjust students' efforts to adapt with the urgency (Jung, Zhou, & Lee, 2017).

Unfortunately, it was found that self-efficacy also contributes to students' procrastination. Some studies have revealed the negative effects of self-efficacy on academic procrastination (Rosmayati, Sunawan, 2017). Individuals with high self-efficacy will gain more academic motivation and tend to have low academic procrastination (Malkoç & Mutlu, 2018). Based on these previous studies, it can be concluded that the increase in university students' academic procrastination is influenced by low self-efficacy. Hence, to reduce students' academic procrastination, self-efficacy should be improved first.

There are some problems exist in university student's life that make them shirked. One of which is academic procrastination. According to Rothblum (1986), this concept can be realized in students' behavior, such as not studying during exams and delaying homework sometimes or continuously (Rothblum,., Solomon, & Murakami, 1986). In addition, Ferrari (1995) argues that academic procrastination is behavior of avoiding academic assignments that causes students to experience academic failure. Similarly, it can be said that academic procrastination behavior makes students put off academic work and result in failure, academic unhappiness and stress (Ferrari, Johnson & McCown, 1995).

Apart from the above findings, there also found that students intentionally procrastinate their homework. Meta-analysis findings found that academic procrastination is in line with poor academic achievement, such as lower score in assignment, subjects, and average than other students (Richardson, Abraham, & Bond, 2012; Ryung & Hee, 2015). The impact of this procrastination affects students' length of study as well due to their low score that further makes them do not pass the minimum score of the subject (Corkin, Yu, Wolters, & Wiesner, 2014).

Basically, self-efficacy and academic procrastination are interrelated that whoever has high level of self-efficacy tends to avoid academic procrastination (Malkoc & Mutlu, 2018). Besides, both self-efficacy and procrastination require motivation as a controller (Hatzigeorgiadis et al., 2008, Walter, Nikoleizig, & Alfermann, 2019) and cognition as a means of changing distorted thinking towards more relevant ones (Bardideh, Bardideh, & Kakabaraee, 2016; Keshi & Jappa, 2013). Thus, the researchers assumed that CBT counseling with self-talk technique could improve self-efficacy and reduce students' academic procrastination.

In CBT group counseling, students are assisted to control their cognitive and behavioral aspects. They will also be encouraged to not only have different thought patterns, but also attitude, imagination, and different assumptions so that their

irrational thought about putting off assignments can be changed. CBT facilitates individuals to improve their ability to cope with academic stress sourced from negative beliefs. (Ningtias, Wibowo & Purwanto, 2020).

One of motivational techniques in CBT used in this study was self-talk. Self-talk training can reinforce counselees' motivation, result in self-efficacy improvement (Hatzigeorgiadis et al., 2008, Keshi & Jappa, 2013, Walter, Nikoleizig, & Alfermann, 2019), and reduce academic procrastination (Schraw, Wadkins, & Olafson, 2007; Ljubin-Golub, Petričević, & Rovan, 2019).

By referring to the above descriptions, the current study attempted to examine and compare the effectiveness of CBT with self-talk technique to improve self-efficacy and reduce academic procrastination. The idea of using self-talk came from the fact that self-talk was rarely found to be used as an intervention given to university students, rather this technique was dominantly used to treat athletes.

In accordance with the above previous studies, a cognitive behavioral therapy was assumed to improve university students' self-efficacy and academic procrastination. In addition, the reason of using CBT with self-talk technique was inspired by studies that found this technique effective as a special approach to change distorted thinking and strengthen motivation. In general, this study aimed to examine the effectiveness of CBT group counseling therapy with self-talk technique to improve self-efficacy and reduce students' academic procrastination.

METHOD

This study used randomized pretest – posttest control group design. 16 students were selected by using purposive sampling technique with criteria of having low self-efficacy and high procrastination behavior. Those selected students were divided into 2 groups, namely 8 students were in experimental group that was given CBT group counseling intervention with self-talk technique, and the rest were in control group with conventional group counseling.

Self-efficacy was measured by using College Academic Self-Efficacy (CASES) instrument developed by Owen and Froman (1988). The aim of this instrument is to measure the level of students' confident while participating or completing any academic tasks., such as the ability to communicate with faculty members and take notes during class. CASES has 33 items of questions. Each participant rates each item based on 1 – 5 points Likert type scale that shows the level or number of their confident starting from 1 (very inappropriate) to 5 (very appropriate). Additionally, CASES showed satisfactory consistency with α coefficient of 0.90.

Furthermore, academic procrastination was measured by using Tuckman Procrastination Scale (TPS) instrument developed by Tuckman (1991). This instrument was used to identify whether students tended to procrastinate in completing college requirements. The scale gives general index of academic procrastination that is resulted from students' ability to manage or control the assignment schedule (Ferrari, Johnson & McCown., 1995), and procrastination to start or complete the tasks. TPS has 16 items of questions based on 1 – 4 points likert scale from 1 (very inappropriate) to 4 (very appropriate). TPS showed satisfactory consistency with an α coefficient of 0.77.

In the initial step, the researchers gave CASES and TPS instruments to 60 students. After that, researchers found that 16 students had low self-efficacy and high academic procrastination were selected to be the subject of this study. Then, they were divided into 2 groups consisting of 8 students of experimental group and 8 students of control group. Both groups were given the same pre-test before the treatment given.

The next step was giving different treatments for both groups. Experimental group was given CBT group counseling with self-talk, while control group was given group counselling. The treatments were given for 5 meetings in which 1 meeting was carried out for 90 minutes.

After 5 meetings completed, the researchers gave posttest to both groups. Then to test the effectiveness of CBT with self-talk in improving self-efficacy and reducing academic

procrastination, the researchers used Wicoxon signed rank test, while to find out the comparation of its effectiveness, researchers used Mancova test.

RESULT AND DISCUSSION

According to the data description, it was known that the mean and standard deviation of students' self-efficacy in pretest gained low score. After the students were treated using CBT group counselling with self-talk technique, their self-efficacy gained increase, namely pretest of (M = 73.50, SD = 2.51) to post-test of (M = 87.38, SD = 5.12). In the same way, academic procrastination was also successfully reduced after the treatment was given. In detail, the pretest data (M = 56,13, SD = 2,53) were reduced in the posttest (M = 39,25, SD = 1,91). All these data are presented in table 1.

Similar to the above explanation, the results of analysis showed that CBT counseling with self-talk technique could improve students' self-efficacy, namely F= 44.504, p = < 0,01, and reduce academic procrastination indicated by the value of F = 237.444, p = < 0.01. It meant that CBT group counseling with self-talk technique was effective to improve self-efficacy and reduce academic procrastination evidenced by the data before and after the treatment.

Table 1. The Results of Mancova Test between Subject Effects And Wilcoxon

Dependent Variable	Group	Pre-test		Post-test			
		M	SD	M	SD	*p*	Z
Self-Efficacy	Experimental	73.50	2.51	87.38	5.12	0.01	-2.524
	Control	73.13	3.27	73.50	5.21	0.08	-1.732
	F		44.504				
	p			0,01			
	ηp2			0.79			
Academic Procrastination	Experimental	56.13	2.53	39.25	1.91	0.01	-2.521
	Control	55.50	2.50	55,25	2.05	0.31	-1.000
	F		237.444				
	p		0.01				
	ηp2		0.96				

The results of Wilcoxon test on the experimental group self-efficacy gained (Z = -2.524; p = 0.01 <0.05). These explained significant improvement of self-efficacy after the provision of treatment of CBT group counseling with self-talk technique. In other words, CBT group counseling with self-talk technique was effective to improve self-efficacy. Oppositely, the self-efficacy of control group which received no treatment obtained no significant change.

Furthermore, the Wilcoxon test results on the academic procrastination of experimental group got (Z = -2.521; p = 0.01 <0.05). These results indicated that there was a significant reduction of academic procrastination after the students were treated using CBT group counseling with self-talk technique. The data also proved that CBT group counseling with self-talk technique was effective to reduce high academic procrastination. Conversely, the analysis results of control group interpersonal communication were (Z = -1,000; p = 0.31 <0.05). It can be assumed that the level of academic procrastination of the control group (without CBT with self-talk technique approach) remained the same.

Findings of this study are in line with the findings of previous studies. A study by Bardideh, et al. (2016) found that cognitive behavioral therapy can be used to identify irrational thoughts which result in the low level of self-efficacy. Through CBT, patients are given more comprehensive mental and control roles.

A study by Walter, Nikoleizig & Alfermann (2019) revealed that self-talk training given to athletes has some effects on self-efficacy. Apparently, improvement of self-efficacy results in the athletes' motivation and relevant training performances.

Another supporting study comes from Ozer, et al. (2013) which proves that CBT contributes to the process of change as a form of self-awareness, perfectionism reduction, anxiety reduction related to evaluation, better time management, ability to be against irrational beliefs, cognitive distortion, and misperceptions that trigger someone to perform academic procrastination.

In the same way, Schraw, (2007) conclude that self-talk seems beneficial for improving motivational regulation strategies among students because of its positive effects on academic procrastination, academic performance, and affective / cognitive well-being (Schraw, Wadkins, & Olafson, 2007). .

According to the findings of this study, there are some implications that counselors should do in dealing with improving self-efficacy and reducing academic procrastination of university students. First, they are suggested to use cognitive behavioral therapy group counseling with self-talk technique. Second, in applying this counseling, the counselors should provide sufficient time allotment.

The findings of this study proved that cognitive behavioral therapy group counseling with self-talk technique could improve self-efficacy and reduce the academic procrastination of university students. However, there were some limitations in it. First, there was no follow up plan to monitor the duration of the intervention effectiveness in improving self-efficacy and reducing academic procrastination. Second, this study did not perform repeated measure of the effect of time when the counseling was given. Therefore, the future studies are expected to conduct studies on broader subjects and use a repeated measurement design after the treatment is given (follow up).

CONCLUSION

The findings of this study prove that the use of CBT with self-talk technique is able to improve self-efficacy and reduce academic procrastination. Thus, it can be a reference or information for counsellors to minimize university students' academic procrastination and improve their self-efficacy.

Another contribution of these findings is related to theoretical basis that to reduce university students' academic procrastination, counsellors can use techniques or treatments that motivate students. However, in terms of self-efficacy, besides giving motivation, the counsellors should provide guides and support to achieve success.

The future researchers are recommended to use experimental method, mixed method, and model development as well as include other variables that have not been discussed in this study.

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