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Effectiveness of Group Cognitive Behavior Therapy to Reduce Academic Procrastination Behavior of High School Students During Distance Learning

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Abstract

The policy of implementing Distance Learning (PJJ) in Indonesia during the COVID-19 pandemic made various changes to student academic activities. This condition is known to have a risk of leading to academic procrastination behavior, especially for high school (SMA) high school boys who were previously known to be prone to academic procrastination behavior. This study aims to determine the effectiveness of applying the Group Cognitive Behavior Therapy (CBT) approach to reduce academic procrastination and develop adaptive strategies for adolescents. The participants in this study were 4 high school students, male, and aged 16-17 years who were recruited online through a purposive sampling technique. Changes in the level of academic procrastination were measured using the irrational procrastination scale (IPS) and tested using Friedman's ANOVA. The results of the intervention showed that there was no significant reduction in the participants' academic procrastination scores after participating in the intervention. However, based on the qualitative results, all participants reported positive changes felt and increased knowledge after participating in the intervention. Individual differences and environmental factors around the participants are thought to influence the dynamics of intervention effectiveness in this study.

Keywords: *Group CBT; academic procrastination; distance learning.*

Introduction

The spread of Corona Virus Disease (COVID-19) throughout the world was declared a global pandemic that affected all aspects of people's lives, including the aspect of education (WHO, 2020; APA, 2020). As one of the steps to prevent the spread of COVID-19, the Indonesian government has established a Distance Learning (PJJ) policy for all students at the educational level (Kemendikbud, 2020). The sudden change in learning methods creates various problems. Among them are students who feel unprepared for online learning methods, have difficulty understanding learning, do not get enough exposure to subject matter, feel bored with monotonous learning activities, have difficulty managing time, are easily distracted while studying, have difficulty self-regulating, limited opportunities for interaction and feel anxious (Sadhegi, 2019; Zhang et al, 2020; Suhadianto, et al, 2020; Teng, Putra, Ilham, and Pratama, 2020). Therefore, changes in learning methods in the midst of this pandemic will eventually lead to various problems in student academic activities, which can be seen from the declining student learning outcomes (Kuhfeld et al., 2020).

The survey results from the Indonesian Child Protection Commission also revealed that as many as 73.2% of students felt burdened by the increasing number of assignments from teachers and

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the difficulty of completing assignments in a short time (KPAI, 2020). The many assignments given by the teacher make students feel depressed, show excessive worry, experience increased levels of anxiety, and lack of time to rest (Fatimah & Mahmudah, 2020). Several previous studies have also stated that the negative emotions that students get during a pandemic allow for an increase in procrastination that comes from situations of uncertainty that students feel both in terms of health, academics, and finances (Biricik and Sivrikaya, 2020; Brooks et al., 2020; Jenei et al. al., 2020; Wang and Zhao, 2020; Rahimi and Vallerand, 2021). Procrastination is a delaying behavior that occurs intentionally even though the individual already knows the negative consequences that will be obtained when procrastinating (Steel, 2007).

The behavior of delaying tasks related to academic activities and assignments can be called academic procrastination. Several previous studies reported that in the COVID-19 pandemic situation, students tend to experience pressure related to carrying out assignments which makes them vulnerable to academic procrastination (Akram et al., 2019; Ergene & Kurtca, 2020; Jia, Jiang, & Lin 2020). In addition, distance learning also makes students need better skills in dealing with situations and challenges in learning independently, so that students who take part in distance learning have greater opportunities to increase academic procrastination behavior (Drumm and Jong, 2020; Rasheed et al. ., 2020; Hong et al., 2021).

The results of an initial survey conducted by researchers in October-November 2020 on 100 adolescents aged 12-18 years who live in DKI Jakarta, West Java, East Java, Central Java, Aceh, Central Sulawesi, South Sulawesi, North Sumatra, Bangka Belitung Islands, and Bengkulu also reported difficulties in dealing with academic procrastination behavior during the distance learning process. The measurement results using the Irrational Procrastination scale (IPS; Steel, 2010) revealed that 34% of adolescents had academic procrastination in the high category and 54% of adolescents had academic procrastination in the moderate category. Participants also revealed that their academic procrastination caused assignments not to be collected according to the time allotted, working on assignments in a hurry, reduced rest time, feeling anxious, feeling guilty, and obtaining unsatisfactory grades. These results are consistent with previous studies which also revealed that academic procrastination behavior if not given treatment can make students experience psychological distress, anxiety, decreased health conditions, poor health behavior, reduced welfare, low academic performance, continuous self-blame and avoiding social relationships (Kim & Seo, 2015; Krause & Fruend, 2014; Sirois & Pychyl, 2013; Steel & Ferrari, 2013).

Although academic procrastination can be experienced by students of all ages, previous research has found that older students have a greater tendency to procrastinate (Owens & Newbegin, 1997). In addition, male students are reported to have a higher level of academic procrastination so that they experience more of the impact of poor academic performance and low life satisfaction (Balkis & Duru; 2017; Grusnschel, Patrzek, & Fries, 2013; Özer & Ferrari, 2011 ; Yong, 2010; Hempton, 2005; Milgram & Toubiana, 1999). This is because male students are reported to tend to show reluctance in doing tasks that are considered 'feminine' such as doing homework or studying for exam preparation (Özer, 2005; Özer & Ferrari, 2011). Based on the explanation above, male students who are at the senior secondary education level are becoming increasingly vulnerable to carrying out academic procrastination behavior during the COVID-19 pandemic, therefore handling of this problem needs to

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be done so as to prevent students from experiencing a worse impact in the future .

There are several treatment methods and interventions that are considered to have the potential to effectively deal with the problem of procrastination. Recommended handling methods include implementing time management strategies (Hafner et al., 2014; Tuckman & Schouwenburg, 2004; Ariely and Wertenbroch, 2000), interventions related to self-regulation (Steel, 2007), and Cognitive Behavioral Therapy interventions (CBT; Steel , 2007, Rozental et al., 2018). Based on the results of the CBT intervention meta-analysis, it showed a moderate effect (N=3, g=0.55, 95% CI [0.32,0.77]). in dealing with procrastination behavior compared to other interventions (Rozental et al., 2018). CBT intervention is a recommended option in dealing with procrastination because in CBT interventions the treatment methods mentioned earlier are also involved as an integrated intervention (van Earde & Klingsieck, 2018). These results are in line with research conducted by Steel (2007) which revealed that CBT interventions are effective in dealing with the problem of academic procrastination. The use of CBT interventions is known to have the goal of making participants increase their self-understanding, have better self-awareness, and have self-control which also increases by developing adaptive cognitive and behavioral skills (Stallard, 2002). Based on these considerations, the CBT intervention was chosen in this study.

Besides being able to be carried out individually, the CBT intervention program can also be carried out in groups. Based on previous studies, there was a decrease in academic procrastination scores using CBT-based group interventions (Toker & Avci, 2015; Ozer & Ferrari, 2013). The use of group intervention was chosen because it can provide support and opportunities for participants to get feedback from fellow group members who are struggling with the same problem, so that it can increase changes in the participants' mindsets, feelings, and behaviors (Corey & Corey, 1997). In addition, in the COVID-19 pandemic situation and the implementation of Large-Scale Social Restrictions (PSBB), conducting interventions online is an option to stay connected with participants who need them and comply with the established health protocols. According to Kazdin (2015, in Herrero., 2019) the use of interventions via the internet can be an effective medium for providing interventions related to mental health because it is more accessible and available to most people, including adolescents.

Methods

Participants

The participants in this study were four young boys aged 15-16 who are currently in grades 2 and 3 of senior high school (SMA) with academic procrastination problems. Based on measurements using the Irrational Procrastination Scale (IPS; Steel, 2010) the four participants demonstrated academic procrastination behavior in the high category.

Research Design

This study used a quasi-experimental method to find out how the influence of giving interventions using the Group Cognitive Behavior Therapy approach to reducing academic procrastination in high school male adolescents. The research design used was one group pretest-posttest design. Changes in participant academic procrastination behavior were measured by comparing IPS scores before intervention (O1), after all intervention sessions were given (O2), and 1 month after not receiving intervention (O3).

Instruments

This study used the Irrational Procrastination Scale (IPS) to measure the effectiveness of interventions. Irrational Procrastination Scale is a measuring tool

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used to measure adolescent procrastination related to their academic activities. IPS is an instrument prepared by Steel (2010) and has been adapted into Indonesian by Prayitno (2013). IPS is a measurement tool that consists of 9 self-report items in the form of a Likert scale. Participants were asked to answer by choosing 1 of 5 answer choices that best described the situation/circumstances experienced by adolescents at this time with choices ranging from (1) which means very rarely to (5) which means very often. The responses given by each participant were added up to obtain a total score of procrastination. There were 3 items that were unfavorable, namely item numbers 2, 5, and 8. The total IPS scale score obtained by the participants was then categorized into five categories, namely 1) very low procrastination = score ≤19, 2) low procrastination = score 20-23, 3) average procrastination = score 24-31, 4) high procrastination = score 32-36, 5) very high procrastination score = score ≥ 37. Before using this measuring instrument PI conducted readability tests, expert judgment, and trials on teenagers who are junior and senior high school students because previously this measurement tool was used for adult participants. The test results obtained the reliability coefficient value of the IPS measuring instrument of 0.8 with an IRT value between 0.235 - 0.741. These results indicate that this measuring instrument has a good reliability value.

In addition to measurements made using the IPS measurement tool, the PI also collects supporting data through unstructured interviews with participants during the intervention. Interviews were conducted to explore thoughts and feelings related to the experiences of academic procrastination that the participants had and the insights that the participants gained after being given material in each intervention session. In addition, the PI also observed participant behavior during the intervention session. This observation was made to see the participants' involvement in each session and the participants' interactions with the PI and other group members. Furthermore, the worksheets filled out by the participants and the debriefing forms filled out by the participants at the end of each session were also used by the PI as additional data to see how far the participants had understood the material provided. These four data will later be used as additional qualitative data in this study.

Procedure

There are four main stages in the implementation of this intervention, namely:

The Pre-Test stage, is the stage of data collection for participants before being given an intervention session. The data obtained at this stage is used to screen participants, participants who have a total score of Irrational Procrastination Scale (IPS) which are in the high and very high categories. Participants who had high IPS scores were then contacted again to confirm their willingness to participate in the intervention. Participants who are willing to take part in the intervention are asked to fill in their personal data and sign a consent form which is also signed by their parents.

The Intervention Phase, the intervention is carried out in 7 sessions which will run for 4 weeks with a duration of 60-90 minutes each session. All intervention sessions will be conducted online using the Zoom application. In addition, during the session, participants can also use the Google Document application to fill in worksheets or fill in manually by printing the worksheets distributed by the PI. The series of activities included in this intervention were adapted from the Putting of Procrastination module (Saulsman & Nathan, 2008) and are structured as follows.:

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Table 1.
Overview of Intervention Session

Session	CBT Technique Used	Activities
1	Psychoeducation and self-assessment	Opening of the intervention and explanation on academic procrastination
2	Psychoeducation and self-assessment	Recognizing Principles/Prejudices Related to Procrastination and the Consequences of Academic Procrastination
3	Psychoeducation and self-assessment	The Cycle of Academic Procrastination and Preparing for Change
4	Psychoeducation, self-assessment, cognitive restructuring	Changing Unhelpful Conclusions and Learning the Types of Self-talk (Self-Criticism and Self-Motivation)
5	Psychoeducation and problem solving training	Strategies for Reducing Academic Procrastination
6	Psychoeducation and problem solving training	Adjusting the Principles / Prejudices That Make Someone Procrastinate
7	Self-Assessment	Material Review, Sharing Impressions and Experiences during Intervention, and Post-test
8	Self-Assessment	Follow-up

In each intervention session there are activities such as delivering material by the researcher, working on worksheets according to the material presented, sharing and discussing the material studied with other participants and researchers, and finally in the debriefing session the participants fill out an evaluation form containing questions that aim to find out feelings the participants during the session, the activities that the participants found interesting, the participants' understanding of the material provided, and what lessons the participants got from the intervention session provided. Furthermore, there is homework given by the participants after session 5 has been given. This homework is intended so that participants can practice the strategies they have learned and can pay attention to how effective the strategies are in overcoming the problems of academic procrastination that participants have. This homework will be discussed in session 6 and participants are given the opportunity to share their experiences while using the strategies learned.

In the Post-Test Stage, participants were given the opportunity to share their thoughts and feelings while participating in the entire intervention, as well as jointly evaluate activities in the intervention in general. Finally, participants were asked to return to fill out a form containing the Irrational Procrastination Scale (IPS) measuring instrument which aims to measure the level of academic procrastination after participating in the intervention. All participants who successfully participated in the intervention until the end were given a reward in the form of a to-do list in acrylic form and sent it after the intervention session ended.

Follow-up stage is carried out after 1 month of participants participating in the intervention. At this stage there are data collection activities using the IPS scale and discussions discussing the experience of academic procrastination behavior and the application of strategies that have been taught in the intervention.

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Analysis

The intervention would be declared successful if it showed a decrease in academic procrastination scores as measured using the IPS scale (Steel, 2010) and data analysis was performed by comparing IPS scores before, after, and 1 month of intervention using the non-parametric test statistical method Repeated Measure ANOVA with Friedman's ANOVA test. In addition, the results of unstructured interviews were also processed as qualitative data to see whether there were positive changes felt by the participants after carrying out the intervention.

Result

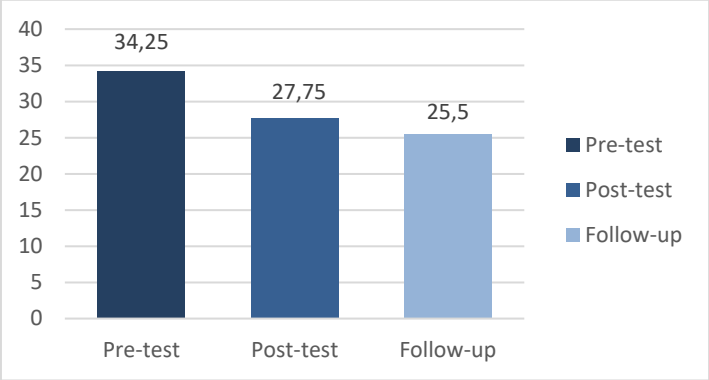

Figure 1. *Comparison of Average Academic Procrastination Scores*

Based on the results in figure 1, it appears that there is a decrease in the average academic procrastination score. However, the results of the analysis showed that there was no significant change in academic procrastination scores at the pre-test, post-test, and follow-up, $\chi 2$ (2) = 3,500, p = 0.174 (p> 0.05). This means that the CBT group-based academic procrastination intervention is less effective in reducing academic procrastination behavior. On the other hand, when viewed from a comparison of the pre-test, post-test and follow-up results of each participant, the following data is obtained:

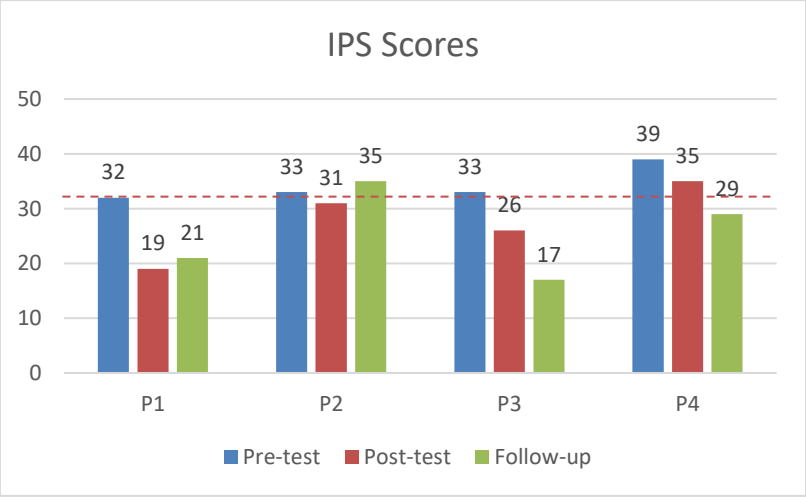

Figure 2. *Comparison of IPS scores for each participant*

In figure 2 above, it can be seen that before the intervention was given, all participants showed high (32-36) and very high academic procrastination scores (≥ 37). Furthermore, after giving the intervention, in general, there was a decrease in academic procrastination scores for all participants, P1, P2, and P3 showed a decrease in academic procrastination scores to an average (24-31) and P4 showed a decrease in academic procrastination scores to high (32-36).

Furthermore, based on the results of interviews during the intervention, it was found that in session 1, homework activities and studying material to prepare for exams were types of academic activities that were often postponed by participants. Furthermore, activities such as playing social media, watching, playing games, and doing hobbies are types of activities that are often used as diversion activities when postponing academic assignments. This causes the amount of time spent in one day to carry out diversion activities to be greater than the time students work on assignments, so that academic assignments are increasingly delayed.

In session 2, P1, P2, and P4 identified themselves as tending to prioritize pleasure. So that if they find the situation of working on academic activities boring, difficult, and causing feelings of discomfort they will easily distract themselves by doing activities that can make them get rid of these feelings and bring feelings of joy and comfort. The PJJ situation is also considered to make the learning situation less attractive because students spend more time studying alone so that students feel lonely and turn to looking for entertainment, especially those that can facilitate them to interact with others (for example playing social media and playing online games). Meanwhile P3, identifying himself tends to be afraid of failure and getting rejected. P3 revealed that during PJJ he felt that he did not get explanations and directions from the teacher regarding the subject matter and assignments given, this made him not understand the subject matter if he did not study the material given himself. However, this learning system makes it difficult for him to do the assignments given on time. If he does the assignments without studying the material further P3 has a prejudice that the assignments he is working on will get a bad grade and the teacher will be disappointed with the results he gets. Doing procrastination activities for P3 can reduce their feelings of anxiety. On the other hand, all participants also realized that there were negative consequences that they would get from their procrastination behavior, such as assignments piling up, assignments not being collected on time, getting grades that were not optimal, feeling uncomfortable (anxious, afraid, depressed, and feeling guilty), fatigue, as well as loss of self-confidence.

In session 3, all participants could understand the process of postponing their academic activities. For example, when having homework (homework) the task triggers unhelpful preconceptions such as 'putting fun first' and 'fear of failure or rejection' is activated. This causes discomfort (such as a bad mood, boredom, pressure, and difficulty doing assignments) so that students try to immediately release these feelings by making excuses such as needing time to rest, gathering motivation, and looking for entertainment to do substitute activities so that procrastination occurs. academic.

In session 4, all participants can make new, more adaptive conclusions so that they can help them become more productive. For example, when getting homework, participants feel that they still have a lot of time, so they still have time to play social media. Then this thought was refuted with:

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> *"meskipun tenggat waktu tugas ini masih lama, apakah aku tidak perlu sama sekali mengerjakan tugas ini sedikit demi sedikit?*
>
> [Although the deadline for this task is still long, do I not need to do this task bit by bit at all]". (P1/s4)

Furthermore, if a feeling of tiredness arises before doing the task, previously the participant will think about resting first and doing the task later. This thought was then refuted with a sentence:

> "*saat ini seberapa lelah diriku dari skala 1-10? apakah saat ini diriku tidak bisa sama sekali mengerjakan tugas?*
>
> [How tired am I right now on a scale of 1-10? Am I currently not able to do the task at all?]". (P3/S4)

In addition, when they feel that they are in a bad mood beforehand, participants will do diversion activities to make their mood better and motivated to do the task. This thought is then refuted with a sentence:

> "*jika aku menunda mengerjakan tugas hari ini karena suasana hatiku buruk/ merasa malas, apakah aku bisa menjamin suasana hatiku/ perasaan malasku akan membaik ketika akan mengerjakan tugas keesokan hari?*
>
> [If I put off doing today's assignments because I'm in a bad mood/ feeling lazy, can I guarantee that my mood/lazy feeling will improve when I'm going to do assignments the next day?]". (P1/s4)

After trying to refute the thoughts they previously had, all participants came to new conclusions that could encourage them to be productive like:

> *"aku bisa mencicil mengerjakan tugas sedikit demi-sedikit, supaya aku lebih tenang dan memiliki lebih banyak waktu untuk bermain sosial media, melakukan hobi, dan beristirahat*
>
> [I can do my tasks little by little, so that I feel calmer and have more time to play social media, do hobbies and rest]*"*. (P1/S4)

In session 5, participants were able to choose a strategy that was suitable for themselves and would be used to help avoid the behavior of delaying academic assignments. The strategies of 'setting priorities' and 'making reminders' according to P1 and P3 can help them determine the tasks or activities they need to complete first so that the time for working on the tasks they have becomes more effective. Furthermore, the 'only 5 minutes' strategy according to P2 and P3 can help him try to start doing the task even though at first it is only 5 minutes. During this time they find it difficult to find reasons to start working on assignments. The strategy of 'using energetic moments' according to P1 can also help him to do assignments, according to him he can organize doing tasks that he thinks are easy first and use his enthusiasm to do tasks with a higher level of difficulty. Finally, the strategy of 'remember and do it immediately', can encourage participants to immediately do the tasks they have. The various strategies provided in this intervention also allow participants to try and adapt strategies that are suitable for themselves and their situation in the future.

In session 6, all participants changed their preconceived notions to be more

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positive. For P1, P2, and P4, who previously had the principle of 'prioritizing fun', began to consider that they needed to do tasks little by little because if they succeeded in getting academic achievement, the pleasure they would get would be even greater. So they not only need to prioritize pleasure but prioritize academic achievement which is equally important. On the other hand, P3, who has the prejudice of 'fear of failure and getting rejected', begins to think that nothing will be perfect and even the mistakes he makes can actually be learning, so the thing he can do is do the job as well as he can without worrying about people's judgment. others or worrying about failures that may not necessarily occur.

At the follow-up session. Participants shared their experiences in applying the knowledge and strategies gained during the intervention to their daily lives within a period of one month. In general, participants stated that they had more opportunities to try the strategies provided during the intervention. P1, P3, and P4 revealed that currently they felt their previous academic procrastination behavior had decreased, so that the assignments given were no longer piled up. Changes in mindset related to procrastination behavior are felt by all participants, the knowledge gained from the intervention makes participants consider the actions they take more if there is a desire to postpone academic activities. In addition, P4 revealed that his current situation was in third grade and preparing to enter lectures, which also encouraged him to change his academic procrastination behavior. On the other hand, P2 revealed that although initially his academic procrastination behavior decreased. The school holiday situation made him spend more time with his friends so that at the beginning of the semester it was difficult for him to refuse friends' requests so that he again postponed his academic assignments.

Discussion

The purpose of this meta-analysis is to find out the true relationship between In general, this intervention program has not significantly reduced the participants' academic procrastination behavior although there was a decrease in the average score during the post-test and follow-up. Specifically, this was seen in the decrease in the total IPS scores of all participants so that three out of four participants (P1, P3, and P4) showed a change in category from high academic procrastination to average or low levels of procrastination even after 1 month of the intervention. On the other hand, although P2 showed a decrease in the academic procrastination category during the post-test, these results did not last until follow-up. Based on these differences in results, various individual factors that also influence changes in the dynamics of academic procrastination scores and their application to the participants' daily lives need to be further investigated.

There are several individual factors known to influence academic procrastination. These factors include self-efficacy, impulsiveness, self-discipline, and distractibility (Steel, 2007). In this study, individual factors are believed to be one of the factors that influence the results of interventions that are less significant in reducing participant procrastination behavior. Individual distractibility factors were found to influence P2 which showed an increase in academic procrastination scores during the follow-up process even though previously it showed a decrease during the pre-test. Based on the results of the interviews, it is known that P2 has difficulty behaving assertively towards his friends when inviting him to do procrastination activities. During the

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intervention this factor was not very visible because the intervention schedule took place close to the exam schedule so that the intensity of P2 meeting with friends was low. However, after the intervention was finished P2 returned to normal activities with his friends, this made him postpone his academic assignments again even though he already knew that his behavior was inappropriate. In adolescents, even though sometimes they already know which things are good and bad, sometimes they still make decisions that are contrary to their understanding (Leijenhorst, 2010). In addition, the presence of friends can be categorized as a factor of distraction. The existence of distraction is known to be one of the top reasons that contribute to the occurrence of one's procrastination (Haycock, 1993).

Furthermore, the lack of self-discipline was also found to affect P4. Based on the results of observations and interviews, it was shown that P4 still carried out postponing activities to bring pleasure even though he knew that he still had tasks that needed to be completed. In addition, according to Tice and Baumeister (1997) someone who practices procrastination usually prefers to get short-term benefits rather than long-term benefits, this illustrates the main component of poor self-regulation. In addition, based on the results of observations, it was also shown that during the intervention P4 often did not pay full attention to the material, was late for the intervention session, did not attend the main class so he needed to take part in a substitute session, and was less active in participating in the group. According to Ozer & Ferrarri, 2013, one of the essential factors in the process of changing behavior in group-CBT interventions is the motivation to change that each member of the group has. The influence of this factor can be seen in the results of the IPS score which still has a total score in the high category during the post-test.

The effect of changing motivation and self-discipline can be seen in the results of the P4 interview at follow-up. P4 revealed that he is currently in grade 3 and will soon be preparing for college, making him think more about the long-term impact of his procrastination behavior if it doesn't change soon. Because of this change in motivation, P4 applies a method of challenging unhelpful principles/prejudices that it has regarding the behavior of delaying academic assignments, before making a decision. In this way P4 has time to think about the actions he is taking and becomes able to manage his behavior. Changes in P4 are also seen in the IPS score which shows a decrease in the average category. This result is in accordance with the opinion of Steel and Klingsieck (2016) which revealed that a person's motivation will increase if he has expectations of the results and value of the behavior he is carrying out. Based on this exposure, this factor is considered to influence the dynamics of P4 behavior change.

In addition to the changes felt by P4, even though the results of the analysis showed that the intervention did not show a significant change. Based on the results of interviews and debriefing it was found that all participants revealed that by participating in the intervention, they had increased knowledge regarding academic procrastination behavior in general, how to understand their procrastination behavior, and knew various strategies to reduce their procrastination behavior. Increased knowledge makes participants express that they have a changed mindset towards procrastination behavior, so that they can apply various strategies taught to direct their behavior to be adaptive even though they have not been implemented in the participants' daily lives. The positive changes felt by participants are in line with the goals of the CBT intervention, which

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are to make participants aware of their behavior, increase their knowledge, and have the ability to test their negative thoughts to be changed and directed into new, adaptive thoughts (Stallard, 2002).

In addition, participants also revealed that participating in group interventions was reported by participants as an activity that was considered to help participants dare to express their thoughts about the problems they faced and get support from listening to and learning how other participants faced similar problems. These results are in accordance with previous studies which revealed that the use of group interventions is also known to provide support and opportunities to get feedback from fellow group members who are struggling with the same problem, so as to increase changes in the mindset, feelings, and behavior of the participants (Corey & Corey, 1997).

Furthermore, it relates to the recognition of participants who have not applied the knowledge gained in daily life, influenced by the situation at the time of implementation of the intervention, all participants were also in a quiet week before carrying out the exam until the semester exam was carried out. So you don't have a lot of work to do. In addition, after the intervention was completed, the participants entered semester breaks, so they did not have academic activities. According to Reid and Kolvin (1993) slower psychotherapeutic effects may be experienced by individuals who participate in group interventions as opportunities increase to apply the knowledge gained in everyday situations. Therefore, choosing the timing of the intervention is one of the limitations in this study.

The duration of time between sessions which is 2-3 days makes the opportunity for participants to apply their knowledge and skills limited. Yet according to Hason and Razzavikina (2004) explained that doing assignments outside of psychotherapy sessions can increase the opportunity to apply the knowledge gained as well as an indicator of client motivation and commitment to change. Finally, even though this research was conducted in a group, the determination of the effectiveness of the intervention was only based on the intervention results of the 4 participants. So the results obtained cannot be generalized (Rozental & Carlbring, 2013). Follow-up research also needs to consider the existence of a control group to facilitate the generalization process of intervention results (Rozental & Carlbring, 2013) and overcome the limitations of quasi-experimental research that has the possibility that there are cofounding variables in intervention outcomes (Gravetter & Forzano, 2012).

Conclusion

The intervention program using Group-CBT that has been carried out can be concluded as less effective in reducing the participants' academic procrastination behavior even though it shows a decrease in the average IPS score at the pre-test and follow-up. There are various individual factors that are predicted to influence the results of the intervention, therefore further research is needed to understand the dynamics of giving group-CBT interventions and academic procrastination behavior in other groups of participants considering the various positive benefits participants can get while participating in this intervention.

Suggestion

Should this intervention is to be carried out again, future therapist or researchers need to provide a longer duration of time for participants to apply the strategies taught in dealing with academic procrastination behavior in their daily lives. Furthermore, in order for the session to run more optimally, researchers

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need to adjust the duration of the session with the amount of material provided. For example, in session 6, a large amount of material would be better divided into two sessions to assist researchers in conveying material and make it easier for participants to understand the material in that session. Researchers also need to consider the academic schedule so that the implementation of the intervention can run more effectively (for example, it does not coincide with exam schedules or school holidays)..

References

American Psychological Association (2020). Psychology's Understanding of the Challenges Related to the COVID-19 Global Pandemic in the United States. Retrieved from https://www.apa.org/about/policy/covid-statement.pdf

Akram, A., Fu, C., Li, Y., Javed, M. Y., Lin, R., Jiang, Y., & Tang, Y. (2019). Predicting Students' Academic Procrastination in Blended Learning Course Using Homework Submission Data. IEEE Access, 7, 102487–102498. https://doi.org/10.1109/access.2019.2930867

Balkis, M., & Duru, E. (2017). Gender differences in the relationship between academic procrastination, satifaction with academic life and academic performance. *Electronic Journal of Research in Educational Psychology, 15*(1), 105–125. https://doi.org/10.14204/ejrep.41.16042

Biricik, Y. S., & Sivrikaya, M. H. (2020). COVID-19 Fear in Sports Sciences Students and Its Effect on Academic Procrastination Behavior. *International Journal of Applied Exercise Physiology*, *9*(10), 50-56.

Brabender, V. M., Smolar, A. I., & Fallon, A. E. (2004). *Essentials of group therapy* (Vol. 29). John Wiley & Sons

Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. The Lancet, 395(10227), 912–920. https://doi.org/ 10.1016/S0140-6736(20)30460-8.

Corey, M. S., & Corey, G. (1997). Groups: Process and practice. Monterey: Brooks/Cole Publishing Company

Drumm, B. T., & Jong, A. S. (2020). A semester like no other: A student and lecturer perspective on the impact of Covid-19 on 3rd level academic life. *All Ireland Journal of Higher Education*, *12*(3).

Ergene, Ö., & Kurtça, T. T. (2020). Pre-Service Mathematics Teachers' Levels of Academic Procrastination and Online Learning Readiness. *Malaysian Online Journal of Educational Technology*, *8*(4), 52-66.

Fatimah, S., & Mahmudah, U. (2020). How E-Learning Affects Students' Mental Health During Covid-19 Pandemic: An Empirical Study. *Dwija Cendekia: Jurnal Riset Pedagogik*, *4*(1), 114-124.

Grunschel, C., Patrzek, J., & Fries, S. (2013). Exploring reasons and consequences of academic procrastination: An interview study. *European Journal of Psychology of Education*, *28*(3), 841-861.

Haycock, L. A. (1993). *The cognitive mediation of procrastination: An investigation of the relationship between procrastination and self-efficacy beliefs* (Doctoral dissertation, ProQuest Information & Learning).

Hong, J. C., Lee, Y. F., & Ye, J. H. (2021). Procrastination predicts online self-regulated learning and online learning ineffectiveness during the

ISSN 2614-7041 (online) | ISSN 2614-0403 (printed)

coronavirus lockdown. *Personality and individual differences*, *174*, 110673.

Jenei, K., Cassidy-Mathews, C., Virk, P., Lulie, B., & Closson, K. (2020). Challenges and opportunities for graduate students in public health during the COVID-19 pandemic. Canadian Journal of Public Health, 111(3), 408–409. https://doi.org/10.17269/ s41997-020-00349-8

Jia, J., Jiang, Q., & Lin, X. H. (2020). Academic anxiety and self-handicapping among medical students during the COVID-19 pandemic: A moderated mediation model. Research Square, 1–22. DOI: 10.21203/rs.3.rs-77015/v1

Kementerian Pendidikan dan Kebudayaan (Kemendikbud) (2020). Mendikbud Terbitkan SE Tentang Pelaksanaan Pendidikan dalam Masa Darurat Covid-19. https://www.kemdikbud.go.id/main/blog/2020/03/mendikbud-terbitkan-se-tentang-pelaksanaan-pendidikan-dalam-masa-darurat-covid19. Diakses 5 Maret 2021

Kim, K. R., & Seo, E. H. (2015). The relationship between procrastination and academic performance: A meta-analysis. *Personality and Individual Differences*, *82*, 26-33.

Komisi Perlindungan Anak Indonesia. (2020). Ada 246 Aduan di KPAI soal Belajar Daring, Siswa Keluhkan Tugas Menumpuk-Kuota. Retrieved from https://www.kpai.go.id/publikasi/ada-246-aduan-di-kpai-soal-belajar-daring-siswa-keluhkan-tugas-menumpuk-kuota

Krause, K., & Freund, A. M. (2014). Delay or procrastination–A comparison of self-report and behavioral measures of procrastination and their impact on affective well-being. *Personality and Individual Differences*, *63*, 75-80.

Kuhfeld, M., Soland, J., Tarasawa, B., Johnson, A., Ruzek, E., & Liu, J. (2020). Projecting the potential impacts of COVID-19 school closures on academic achievement. (EdWorkingPaper: 20-226). https://doi.org/10.26300/cdrv-yw05

Milgram, N., & Toubiana, Y. (1999). Academic anxiety, academic procrastination, and parental involvement in students and their parents. *British Journal of Educational Psychology*, *69*(3), 345-361

Owens, A., & Newbegin, I. (1997). Procrastination in high school achievement: A causal structural model. Journal of Social Behavior and Personality, 12, 869–887.

Özer, R.B.U. (2005). Academic Procrastination: Prevalence, Self-Reported Reasons, Gender Difference, and It's Relation with Academic Achievement. Thesis. Middle East Technical University.

Ozer, B. U., & Ferrari, J. R. (2011). Gender orientation and academic procrastination: Exploring Turkish high school students. *Individual Differences Research*, *9*(1), 33-40.

Ozer, B. U., Demir, A., & Ferrari, J. R. (2013). Reducing academic procrastination through a group treatment program: A pilot study. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, *31*(3), 127-135.

Prayitno, G. E., Siaputra, I. B., & Lasmono, H. K. (2013). Validasi Alat Ukur Irrational Procrastination Scale (IPS). *Calyptra*, *2*(1), 1-7.

Rahimi, S., & Vallerand, R. J. (2021). The role of passion and emotions in academic procrastination during a pandemic (COVID-19). *Personality and Individual Differences*, *179*, 110852.

Sadeghi. M. 2019. A shift from classroom to distance learning: Advantages

and limitations. Int. J. Res. English Educ., vol. 4, no. 1, pp. 80–88

Saulsman, L., & Nathan, P. (2008). Put Off Procrastinating. *Perth, Western Australia: Centre for Clinical.*

Stallard, P. (2002). Cognitive behaviour therapy with children and young people: A selective review of key issues. *Behavioural and Cognitive Psychotherapy*, *30*(3), 297.

Steel, P. (2007). The nature of procrastination: a meta-analytic and theoretical review of quintessential self-regulatory failure. *Psychological bulletin*, *133*(1), 65.

Steel, P. (2010). Arousal, avoidant and decisional procrastinators: Do they exist? Personality and Individual Differences, 48, 926-934.

Steel, P., & Ferrari, J. (2013). Sex, education and procrastination: An epidemiological study of procrastinators' characteristics from a global sample. *European Journal of Personality*, *27*(1), 51-58

Suhadianto, S., & Pratitis, N. (2020). Eksplorasi Faktor Penyebab, Dampak dan Strategi untuk Penanganan Prokrastinasi Akademik pada Mahasiswa. *Jurnal RAP (Riset Aktual Psikologi Universitas Negeri Padang)*, *10*(2), 204-223.

Sirois, F., & Pychyl, T. (2013). Procrastination and the priority of short-term mood regulation: Consequences for future self. *Social and personality psychology compass*, *7*(2), 115-127.

Teng, M. F., Putra, Y. K., Ilham, M., & Pratama, W. A. Y. (2020). How much does distance learning affect social life and psychology of growing adolescent. *Bulletin of Social Informatics Theory and Application*, *4*(2), 52-58.

Toker, B., & Avcı, R. (2015). Effect of cognitive-behavioral-theory-based skill training on academic procrastination behaviors of university students. *Educational Sciences: Theory & Practice*, *15*(5).

Tice, D. M., & Baumeister, R. F. (1997). Longitudinal study of procrastination, performance, stress, and health: The costs and benefits of dawdling. *Psychological science*, *8*(6), 454-458.

Wang, C., & Zhao, H. (2020). The impact of COVID-19 on anxiety in Chinese university students. Frontiers in Psychology, 11, 1168. https://doi.org/10.3389/ fpsyg.2020.01168.

World Health Organization. 2021. Covid-19 Clinical Management. https://www.who.int/publications/i/item/WHO-2019-nCoV-clinical-2021-1. Diakses 5 Maret 2021

Yong, L. F. (2010). A study of the assaertiveness and academic procrastination of English and communication students at a private university. American Journal of Scientific Research, 9, 62- 72.

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