

## Group counseling with behavioral contract technique: is it effective to reduce academic procrastination among junior high school students?

Alfiani Fernita Sari<sup>\*)</sup>, Yulia Ayryza

Graduate School, Yogyakarta State University, Indonesia

\*Corresponding author, e-mail: [alfianifernita.2017@student.uny.ac.id](mailto:alfianifernita.2017@student.uny.ac.id)

### Abstract

This study aims at knowing the effectiveness of group counseling with the behavioral contract technique to reduce academic procrastination among junior high school students. This study was a quasi-experimental design with a pretest-posttest nonequivalent control group in Ma'arif 9 Way Jepara Junior High School, East Lampung, Lampung Province. It involved 14 students who were determined through the purposive sampling technique. The data collection technique used an academic procrastination scale. The validity of the scale was assessed with content validity of expert judgment. The reliability test result of the academic procrastination scale with the Alpha Cronbach formula was 0.854. This study employed the non-parametric statistical data analysis techniques of the Wilcoxon and the Mann-Whitney test. The results showed that the group counseling with the behavioral contract technique was effective to reduce academic procrastination among the VIII grade students as evidenced with the value of  $Z = -3.134$ ,  $p\text{-value} = 0.002$  ( $p < 0.05$ ).

**Keywords:** Group counseling, academic procrastination

**How to Cite:** Alfiani Fernita Sari, Yulia Ayryza. 2022. Group counseling with behavioral contract technique: is it effective to reduce academic procrastination among junior high school students. *Konselor*. 11 (1): pp. 25-31, DOI: [10.24036/02021103112063-0-00](https://doi.org/10.24036/02021103112063-0-00)



This is an open access article distributed under the Creative Commons 4.0 Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. ©2022 by author.

## Introduction

Guidance and counseling help individuals to aware of themselves, make adjustments to others and the environment to become healthy people (Vishala, 2008). In school settings, the role of counselors or guidance and counseling teachers is to support and nurture students' interpersonal skills and academic achievement (Shaterloo & Mohammadyari, 2011). To lower various student problems, guidance and counseling teachers will provide counseling services, one of which is group counseling. This counseling model is a problem-oriented strategy as prevention and solution in which the group members set goals to overcome their existing problems (Corey, 2016).

The behavior approach is one of the counseling approaches that can be used to solve students' problems including the operant conditioning concept, i.e. the behavior contract technique. Schunk (2009) explains that the behavioral contract refers to a written agreement which is mutually formulated between students and teachers about the targeted tasks and the expected results (reinforcement) for successful performance. According to Miltenberger (2012), the components in the behavior contract are a) identification of the target behavior, b) description of how the target behavior will be measured, c) timing of the target behavior, d) identification of reinforcement and punishment, e) identification of those who carry out the contract.

The behavior has been viewed as the result of learning and behavioral change as an impact of its consequences. As mentioned by Skinner (Corey, 2013) that the concept of operant conditioning involves a type of learning in which behavior is influenced by the consequences that follow. The basic assumption of the behavior approach is that behavior is obtained from learning outcomes and human personality developed through a process of maturity and learning (Syahrul & Setiawati, 2020). Habituation is seen as

---

learned behavior of which students may learn it correctly and others can be in a wrong way. The development of appropriate behavior can be realized through a proper study.

Students' behaviors like responsibility, discipline, high learning motivation, or good learning management are behaviors that can affect the quality of their learning activities and outcomes. In fact, few students show high learning motivation or proper behavior based on the school rules since most students tend to procrastinate their assignments. Procrastination is an act of delaying academic tasks that are important or should be a top priority, but most students prefer to do other activities which are just for fun. (Newton, 2014). Fiore (2007) states several indications of procrastination behavior including a) time-wasting, b) aimlessness, c) low self-esteem and self-determination. When someone is around those who often procrastinate their tasks, he/she tends to do the same. In social behavior, they mostly spend their time joking with friends, family, co-workers, or virtual friends, and most people find it hard to resist (Tullier, 2012).

Similarly, based on interviews with the guidance and counseling teachers of Ma'arif 9 Way Jepara Junior High School in Lampung, it was revealed that most students procrastinate their assignments. They are often failed to submit their tasks on time. Also, they were not making notes during classroom learning and only studying before the semester exams. They prefer to play games other fun activities due to their friends' influences. Another influence is from students' internal factors who often forget about their assignment because they do not write what they are assigned, and lack learning awareness. They often do homework at school by copying from peers. In the interview session with the VIII grade students related to their procrastination problem, they admitted that they delayed assignments because they chose to hang out with friends or play games before doing homework. Besides, the workload of assignments and laziness are other prominent factors that cause procrastination.

Behavioral contracting techniques have been widely used to overcome students' academic procrastination behavior. A study from Rokhman, et al (2019) in Senior High School 1 Gebog Kudus with qualitative research types of case studies involving 3 students of high academic procrastination as the subjects can be solved with behavioral contract counseling. A similar study from Purnama, et al (2019) among XII grade students of Senior Islamic School 2 Banyuwangi with as many as 20 students as subjects who are divided into the experimental group and the control group shows significant differences between the experimental group and the control group after treated with the behavioral contract technique.

Referring to the researches from Rokhman, et al (2019) and Purnama, et al (2019), it will be beneficial to test whether group counseling with the behavioral contract technique has a similar effect in reducing academic procrastination among the VIII grade students of Ma'arif 9 Way Jepara Lampung Junior High School. Though previous studies have found it effective to overcome the academic procrastination, there are several differences of this study in terms of setting, sample size, research design, educational level, class, and counseling service model. This study employs group counseling model with behavioral contract techniques. Group counseling services is expected to alleviate students' problems as an appropriate technique for academic procrastination.

## Method

This study employed a quasi-experimental research design with a nonequivalent pre-test and post-test control group design. The experimental group and the control group were both given a pretest and posttest. Purposive sampling technique was used in selecting the research subjects involving 14 students who were categorized as high academic procrastination. The research subjects were divided into 2 groups, namely the experimental and the control group. The experimental group was given treatment of group counseling with the behavioral contract technique and a posttest were given in the form of academic procrastination scale at the end of the meeting. Meanwhile, the control group was not given the treatment and, at the end of the meeting, they were also done a posttest of the academic procrastination scale. The control group functioned as a comparison group to examine the effectiveness of the given treatment to the experimental group.

The procedure for group counseling using the behavioral contract technique for the experimental group consisted of three stages, i.e. beginning stage, working stage, termination stage (Jacobs, Masson, & Harvill, 2012). The initial stage is building interactions among group members, fostering self-confidence, developing a sense of belonging, creating cohesiveness with group dynamics, arranging norms and rules in group counseling. In the working stage, the group leader explores the problems of each group member and

provides a behavior contract to group members. The group leader helps other members to identify target behaviors and design a behavior contract as well as provides consequences in the form of reinforcement or punishment for group members' behavior after activating the contract behavior. If all group members can carry out the behavior contract well and the target behavior can be realized, all group members will get a reward as written on the contract. The final stage contains the evaluation from the group leader towards the group members during the counseling process. The group leader praises and supports the achievement of targeted behavior, and explores the impressions and expectations from the group members during group counseling.

The data collection technique of this study used the academic procrastination scale developed by McCloskey & Scielzo (2015). It was then modified based on the characteristics of the research subject. The items on the academic procrastination scale were 25 items, but it was reduced to 21 after the trial. The deleted items were numbers 3, 5, 11, and 14 because they did not meet the criteria  $r \geq 0.30$ . The results of the reliability test of the academic procrastination scale using SPSS 16.0 showed the coefficient of 0.854 that can be categorized as high.

These data analysis techniques were done with the Wilcoxon and the Mann-Whitney test. The SPSS Version 16 software was used to conduct both tests. The rule of decision-making for this hypothesis is that if probability  $< \text{sig. } 0.05$ , then  $H_0$  is rejected and  $H_a$  is accepted.

## Results and Discussion

Based on the distribution results of the academic procrastination scale among 80 students of the VIII grade in Ma'arif 9 Way Jepara Junior High School, it was revealed that 23 students (28.75%) were in a low category, 43 students (53.75%) was in a moderate category, and 14 students (17.5%) was in a high category. This study took 14 students who were categorized as a high level of academic procrastination and divided into two groups, the experimental and the control group. The experimental group was treated with the behavioral contract technique of group counseling. The following is the data of the experimental and the control group:

**Table 1.** Pretest and Posttest Results of Academic Procrastination in Experimental Group

No	Name	Pretest	Category	Posttest	Category
1	DA	65	High	35	Low
2	DAM	64	High	39	Low
3	ET	66	High	36	Low
4	IH	68	High	39	Low
5	MT	65	High	33	Low
6	MY	68	High	43	Low
7	SK	67	High	38	Low

Based on Table 1 above, it can be seen a decrease from the pretest to posttest scores. It means that the high academic procrastination category reduces to the low and medium categories.

**Table 2.** Pretest and Posttest Results of Academic Procrastination in Control Group

No	Name	Pretest	Category	Posttest	Category
1	AZL	67	High	63	High
2	NAA	64	High	62	Moderate
3	PA	63	High	60	Moderate
4	RS	66	High	64	High
5	RR	69	High	67	High
6	RRD	66	High	68	High
7	TAP	63	High	66	High

Based on Table 2, it can be seen that 5 students were in the high category of academic procrastination, and 2 students categorized as the moderate category.

The results of the Wilcoxon test for academic procrastination variables to determine the difference between pretest and posttest in the experimental group can be seen in Table 3 below.

**Table 3.** Results of Wilcoxon test of Academic Procrastination in Experimental Group

Test Statistics <sup>b</sup>	
Z	Posttest – Pretest
Asymp. Sig. (2-tailed)	-2.379 <sup>a</sup>
a. Based on positive ranks.	.017
<b>b. Wilcoxon Signed Ranks Test</b>	

Based on the results of the Wilcoxon test in Table 3 above, the academic procrastination in the experimental group was shown in the calculated Z value of -2.379 and the sig value of 0.017 which was smaller than 0.05. It means that there is a change in students' academic procrastination before and after the treatment.

The results of the Wilcoxon test for academic procrastination variables to determine the difference between pretest and posttest in the control group can be seen in Table 4 below.

**Table 4.** Wilcoxon Test Results of Academic Procrastination in Control Group

Test Statistics <sup>b</sup>	
Z	post – pre
Asymp. Sig. (2-tailed)	-1.035 <sup>a</sup>
a. Based on positive ranks.	.301
<b>b. Wilcoxon Signed Ranks Test</b>	

Based on the results of the Wilcoxon test in Table 4 above, the academic procrastination in the control group was indicated with the calculated Z value of -1.035 and the sig value of 0.301 which was bigger than 0.05. It means that there is no change in academic procrastination in the pretest and posttest scores.

The Mann-Whitney hypothesis test was used to know the effectiveness of the treatment. This hypothesis testing examined the pretest data in the experimental and the control group as well as the posttest data in the experimental and the control group. Below is the result of hypothesis testing using the Mann Whitney test:

**Table 5.** Hypothesis Test Results of Academic Procrastination Pretest in the Experimental and Control Group

Test Statistics <sup>b</sup>	
Mann-Whitney U	Pretest
Wilcoxon W	19.000
Z	47.000
Asymp. Sig. (2-tailed)	-.710
Exact Sig. [2*(1-tailed Sig.)]	.478
a. Not corrected for ties.	.535 <sup>a</sup>
<b>b. Grouping Variable: kelompok</b>	

Table 5 above shows the sig value of 0.478 which was bigger than 0.05, so the conclusion is that there is no difference in the pretest academic procrastination value between the experimental and the control group. Based on Table 6, it shows that the sig value is 0.002 which is smaller than 0.05, so there is a difference in academic procrastination posttest scores between the experimental and the control group.

Based on the results of the hypothesis testing as evidenced with the results of the Wilcoxon test and the Mann Whitney test, the group counseling of the behavioral contract technique is proven effective to reduce students' academic procrastination. It can be seen from the results of the Wilcoxon test with a sig of 0.017  $\leq$  0.05, and the Mann Whitney test with a sig of 0.002  $\leq$  0.05. It indicates that there are differences in the level of academic procrastination before and after the treatment. The behavioral contract technique is significantly effective in lowering students' academic procrastination based on the gap between the group that is given the group counseling with behavioral contract technique and the class that does not receive the treatment. It can be concluded that the group counseling of the behavioral contract technique is effective in

reducing academic procrastination among the VIII grade students of Ma'arif 9 Way Jepara Junior High School. The following is the behavioral contract that has been formulated by the DA counselee in figure 1.

**Tabel 6.** Hypothesis Test Results of Academic Procrastination Posttest in the Experimental and Control Group

<b>Test Statistics<sup>b</sup></b>	
	Pretest
<b>Mann-Whitney U</b>	.000
<b>Wilcoxon W</b>	28.000
<b>Z</b>	-3.134
<b>Asymp. Sig. (2-tailed)</b>	.002
<b>Exact Sig. [2*(1-tailed Sig.)]</b>	.001 <sup>a</sup>
<b>a. Not corrected for ties.</b>	
<b>b. Grouping Variable: kelompok</b>	

<b>Behavioral Contract</b>	
I am DA (counselee's name) agreeing to complete my two assignments/ homework starting from 9-9-2020 to 12-9-2020.	
Also, I will submit my homework to be approved by Alfiani Fernita Sari (group leader) on 15-9-2020 as a documentary proof of homework completion. If I don't collect my homework to the group leader at the scheduled meeting, I will receive the consequences of 20 push-ups.	
If I complete the assignment in the arranged date and show it to the group leader, I will get a reward of 5gb XL voucher.	
Signed:	
Counselee	Group Leader
DA	Alfiani Fernita Sari

**Figure 1.** The behavioral contract of DA counselee

As explained by [Zacks & Hen \(2018\)](#) the counseling method is to reduce students' behavior of academic procrastination. This behavior approach seems better than general counseling and psychotherapy techniques to overcome academic procrastination. The treatment of group counseling with the behavioral contract technique in the experimental group is proven effective to reduce students' academic procrastination. All group members did well the behavioral contracts that had been made with the group leader. Behavioral contracts as antecedents of manipulation make group members being responsible to complete and submit the assignments on time. Coupled with the existence of positive reinforcement makes group members motivated to do their tasks.

[Miltenberger \(2012\)](#) utters that the involved party in the behavioral contract must negotiate the contents, such as the target behaviors; deadlines; punishments, and rewards. The contents of the contract must be approved by the involved parties. In this study, the group members and the group leader make behavioral contracts mutually, the group leader helps to direct the counselee regarding their readiness in submitting the assignments based on the mutually agreed deadline between the counselee and the group leader. The group leaders and counselees make an agreement on the rewards as positive reinforcement and punishment that are appropriate and acceptable to the counselee. It is supported by [Gooding \(2009\)](#) that the behavioral contract implies reinforcement when the objectives in the contract have been achieved. The purpose of providing reinforcement is to achieve target behavior, such as positive reinforcement that involves valuable things to the individual, such as praise, food, money, objects/ goods, or attention ([Corey, 2013](#)).

[Sarafino \(2012\)](#) points out that, in operant conditioning, there should be reinforcement and punishment. Punishment is the process by which the consequences of behavior can suppress the behavior, lowering its

---

frequency, duration, or intensity. It can be natural, unplanned, or even by design. The planned punishments are the consequences that are arranged and used systematically to reduce negative behavior. The written punishment in the behavior contract of each group member will be a stimulus so that unwanted behavior can be minimized. In the same view, Malik Fadjar (Rosyid dan Abdullah, 2018) emphasizes that punishment contains motivation for students to complete their learning tasks and to avoid punishment. Punishment is not always used to encourage students to change their behavior during the treatment process (Rosyid & Abdullah, 2018) since punishment can make students avoid learning situations, lower self-confidence, even hate school environments. It is more to educate students when they can no longer be given reprimands and advice. However, verbal or physical punishment seems ineffective because it can give negative impressions.

Giving group counseling with behavior contract techniques among students has shown the desired change in which the students are motivated to complete their schoolwork and submit it on time. Students also become aware that procrastination will result in late task submission and lower their grades. The behavior contract technique is proven successful to enhance the students' responsibility, effort, motivation, and self-determination. The behavioral contracts in general have been used to improve students' social and academic performance (Perkins & Mclaughlin, 2015). The behavioral contracts can assist to create learning goals and performance by emphasizing the individual needs of each student. In line with this, Abdullah (2020) declares that the application of behavior contracts can be done at school or home by involving students' parents, friends, or siblings. Behavior contracts can be implemented to teach various academic skills, non-academic skills, social skills, and manage different individual behaviors. It can also be applied to every child with different learning characteristics and abilities.

Group counseling with the behavioral contract technique provides new experiences to students because they will provide input and encourage each other in the group to finish assignments on time. They feel happy with group counseling activities, and gain higher motivation to do their assignments since they practice new positive behaviors for the future.

## Conclusion

Based on the research results and discussion, it can be concluded that the group counseling of the behavioral contract technique is effective to reduce academic procrastination among the VIII grade students of Ma'arif 9 Way Jepara Lampung Junior High School. The results of the hypothesis test show the significant value of  $0.002 < 0.05$ . It means that there are differences in academic procrastination behavior before and after the given treatment. It makes them aware that procrastination will result in late task submission and lower their grades. The behavior contract technique is proven effective to enhance the students' responsibility, effort, motivation, and self-determination.

## References

- Abdullah, A. (2020). The use of contingency contracting in educational settings: A review of the literature. *Educational Research and Reviews*, 15(6), 327–335. <https://doi.org/10.5897/err2020.3949>
- Corey, G. (2016). *Theory and practice of group counseling (9th ed.)*. USA: Brooks/Cole, Cengage Learning.
- Corey, Gerald. (2013). *Theory and practice of counseling and psychotherapy (9th ed.)*. USA: Brooks/Cole, Cengage Learning.
- Fiore, N. A. (2007). *The now habit. A strategic program for overcoming procrastination and enjoying guilt free play*. New York: Penguin Group (USA) Inc.
- Gooding, L. F. (2009). The effect of behavioral contracting on the acquisition of guitar performance skills in a college-level beginning guitar class. *Journal of Music Therapy*, 46(4), 323–338. <https://doi.org/10.1093/jmt/46.4.323>
- Jacobs, E. D. E., Masson, R. L., & Harvill, R. L. (2012). *Group Counseling Strategies and Skills (7th ed.)*. USA: Brooks/Cole, Cengage Learning.
- McCloskey, J., & Scielzo, S. (2015). Finally!: The development and validation of the academic procrastination scale. *Experiment Finding*, (March). <https://doi.org/10.13140/RG.2.2.23164.64640>
- Miltenberger, R. G. (2012). Behavior Modification: Principles and Procedures, Fifth Edition. In *Behavior modification: Principles and procedures (2nd ed.)*. (5th ed.). <https://doi.org/10.1080/01431161.2016.1204478>
- Newton, P. (2014). *How to Overcome Procrastination How to overcome Procrastination*. bookboon.
- Perkins, H. R., & Mclaughlin, T. F. (2015). Classroom interventions for elementary school children with

- 
- EBD : A brief review. *International Journal of Applied Research*, 1(4), 24–29.
- Purnama, A. S., Mursidi, A., & Trisnawati, A. (2019). Behavioral Counseling Effectiveness Behavior Contract Technique to Decrease Behavior Academic Procrastination of Students. *International Journal for Educational and Vocational Studies*, 1(7), 760–764.
- Rokhman, M. K., Sucipto, & Masturi. (2019). Mengatasi Prokrastinasi Akademik Melalui Behavioristik Dengan Teknik Behavior Contract Konseling. *Jurnal Prakarsa Paedagogia*, 2(1).
- Rosyid, M. Z., & Abdullah, A. R. (2018). *Reward & punishment dalam pendidikan*. Malang: Literasi Nusantara.
- Sarafino, E. P. (2012). *Applied behavior analysis: Principles and procedures in behavior modification*. <https://doi.org/10.1177/1069072715621532>
- Schunk, D. (2009). *Learning theories an educational perspective*. New Jersey: Pearson education, Inc., Upper Saddle River.
- Shaterloo, A., & Mohammadyari, G. (2011). Students counselling and academic achievement. *Procedia - Social and Behavioral Sciences*, 30, 625–628. <https://doi.org/10.1016/j.sbspro.2011.10.121>
- Syahrlul, M., & Setiawati, N. (2020). *Konseling (teori dan aplikasinya)*. Gowa Sulawesi Selatan: Aksara Timur.
- Tullier, M. (2012). *Overcoming procrastination* (2nd ed.). USA: Penguin Group (USA) Inc.
- Vishala, S. (2008). *Guidance and counseling (for teachers, parents, and students)*. New Delhi: S Chand & Company.
- Zacks, S., & Hen, M. (2018). Academic interventions for academic procrastination: A review of the literature. *Journal of Prevention and Intervention in the Community*, 46(2), 117–130. <https://doi.org/10.1080/10852352.2016.1198154>