



Research article

The Effectiveness of Group Counseling Using SIBOL Techniques in the Academic Context

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Abstract.

This study examines the effectiveness of group counseling using the self-instruction technique empirically based on observational learning (SIBOL) to foster a steady and great attitude in life as a student. The study used quantitative methods of "within-group or individual design" using equivalent time series, pre-test, post-test1, and post-test2 with a self-efficacy scale. The study included six students of Madiun with low self-efficacy in the academic context. Data analysis was done using the *T*-test calculations. It was found that group counseling through SIBOL techniques improved students' self-efficacy, as evidenced by an increase in the students' scores from pre-test to post-test2.

Keywords: Group Counseling, SIBOL, Academic Contexts

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1. Introduction

The student degree that was embedded not only like a formality attribute that given to individuals when they become one of the 'residents' of a university or campus (graduation), but also created individuals who were responsible for language, morality, thought and self-regulation whether written and orally. Students who were able to be responsible for language, morality, thinking and self-regulation, not just imitating the mechanism by observing the surrounding environment, but also they would doing cognitive process automatically and consider each experience, morals, perspectives or critical thinking ways.[1] revealed that "observational learning is a cognitive process that involves language, morality, and perception of a person's behavior." It meant that when they have to respond, students as an individual still considered the positive and negative impacts to give respond through their style and languages.

These considerations that was being the task of development[2], sometimes made students feel that what they have done was appropriate or not ethically when they faced people who more higher than their level (such as Lecturer, Chancellor, Dean, Head of Study Program, Study Program Secretary, Activity Coordinator, Administration or staff and so on) and people who was in same level with them (such as their classmates



or another friends from study programs, partner organizations, etc.). Their concerns in socializing with the campus community to the academic context in the classroom, among the organization and university, was required them to become a 'smart' personality to create the expected student characteristics without becoming an *inlander* who only bowed to the campus authorities.

The constancy of student self was caused by having a great life stance. Yusuf in[3] stated that the "age range of students is 18 to 25 years (late adolescence), so that task of development for students in this age is stability in the establishment of life." However, after doing a self-efficacy scale (stability in the establishment of life) that became a pilot test, there were still some students who did not have stability in their establishment of life, including these results of (1) High 9,2%, (2) Medium 36,3%, (3) Low 54,5%. If it viewed from the results of pilot tests that have been conducted, it was necessary to conduct services that related to learning skills by observing, maintaining and imitating behavior explicitly from students or other agents. It was in line with the research of[4] and[5], who states that "most students learn by observing the behavior of other individuals with emerging learning mechanisms such as role modeling, imitation or observational learning."

Observing learning was the ability of individuals to change behavior based on native information obtained from other individuals or agents in their environment indirectly and modeled explicitly, especially if the agent was not far of their age. It was in line with Christiana's research[6] who states that "peer modeling is an effective way of giving confidence to students in making wise decisions through seeing directly the same age model (peer)."[7] also proved that "peer group counseling students are able to improve their confidence by optimizing their potential without taking an attitude that can harm themselves or intended person." Observational learning was not only an activity that imitated the behavior of other agents but also could learn about the dynamics of social life and tried to infer the strengthening functions of other agents by rebuilding the cognition systems so that they would able to achieve their successes with these agents in their lives together[8].

Observational learning that used the cognition system would provide a filter for students to change their inappropriate behaviors (maladaptive) into positive behavior through presented live modeling. This confirms that there was still needs a technique that strengthened observational learning, in order to be able to improve the stability of life (principles) for students. [9,10,11] said that "four theoretical foundations in directing themselves firmly include: attribution theory, theory process in presenting information, self-efficacy theory, and self-regulation theory." Based on these, it became the



researchers' basic considerations to integrate the perspective observational learning through self-instruction that implemented for all students in each group format.

The group format that integrated with observational learning based on self-instruction techniques, summarized in several activities, including: (1) The researcher played a video for example self-instruction technique to students in the first step namely overt (voiced loudly and strongly), (2) students imitated self-instruction in the second step namely overt external guidance (still voiced loudly and strongly), then the third step namely overt self-guidance (by verbalization within a loud voice and strongly), (3) the researcher did monitors and directed students to do self-instruction with the fourth step, namely faded overt self-guidance (applying performance properly like whispering self-instruction repeatedly and praising self alone, (4) students familiarized their self to covert self-instruction without external guidance's.

These steps would be monitored sequentially using a success indicator sheet based on observational learning. (a) The first step of the self-instruction was integrated with the attentional process, (b) The second, third and fourth steps would be integrated directly with the retentional process based on a review of success or failure when doing the complete self-instruction process, (c) The motor reproduction processes was application steps with behavior, by changing the cognitive picture into behavior through evaluating based on the goals of a learner, (d) The final step and needed for self-awareness of the learner was the motivational process. Through high motivation would stimulate students to do a behavior that was similar to what they wanted to do (object: video self-instruction and ideal attitudes that exemplified by students)[1,12,13]. For more details, it could be seen in Figure 2. On the basis above, the purpose of this study was to examine the effect of SIBOL technique group counseling to improve student self-efficacy in an academic context. The hypothesis that would be answered about the significant influence of SIBOL technique of group counseling on student's self-efficacy.

2. Methodology

2.1. Method

This research was a quantitative study through a within group or individual design study, because this research design's was used to test the effect of treatment on individual research subjects[14]. The experimental research designs through within group or individual design that used equivalent time series designs[15]. This design consisted of pretest 1 and posttests 2, with forms A, B, and C.



2.2. Table and Figures

2.2.1. Time Series Design According to Cresswell

The design pattern had the following characteristics namely: (1) Participant selection by adjusting the required criteria, (2) it should give pretest before an intervention of experimental groups done, (3) after doing pretest, the experimental groups is given an intervention using self-instruction based on observational learning, and (4) finally, doing posttest. These design would be held twice posttest that applied after 2 treatments (the first round), and the second after 2 treatments (the second round). Before giving the intervention, it should doing a meeting as a pre-treatment stages and doing one more meeting again as the post-treatment stage.

TM	0	1	2	3	4	5	6	7	8	9	10	Е
KE	0	X1	X2	X3	X4	01	X5	X6	X7	X8	02	Е

Figure 1: Time series design according to Cresswell.

Meaning:

TM : Meeting

KE : Selecting participants to be an experimental

groups

O : Pretest or first measuring about the subject's

condition before giving treatment

Xn: Treatment through technical procedure of self

-instruction in observational learning in the

experimental group

O1: Posttest 1 or second measuring of subject

conditions after giving 4 times of the first

round treatment

O2: Posttest 2 or third measuring of subject

conditions after giving 4 times of the second

round treatment

E: Evaluation

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2.2.2. SIBOL Procedure

Learning by observing was begin from social learning theories of[1], who explained that the interrelated mutual relationships between cognitive, behavior and environment. Based on this theory, environmental conditions would affect the individual lives, the environment provided a great position in daily life, and the environment could create the student's personality. Social learning was being the background of observational learning (learning by observing), the point showed that most humans learned through selective observation and remember behavior from other agents. The main of this learning was modeling, [5,16,17].

Modeling could help to create the personality of students, but it did not close about the possibility of negative thoughts that made students became doubting people about what they did and could be accepted by their environment or not. To minimize the occurrence of negative thoughts, it could be added self-instruction techniques. Kendell & Braswell in[18] said that "self-instruction is a statement of self-direction that applies thinking strategies to individuals by reducing the area (negative thinking) and guiding individuals in the problem solving process." According to Meichenbaum[19] individuals who experienced maladjustment behaviors was due to irrational thoughts that caused by self-verbalization problem. By integrating these techniques above into group counseling activities. Visually, group counseling through self-instruction techniques based on observational learning could be visualized in Figure 2 below:

2.2.3. Data Analysis

The T-test analysis was used to test the results of self-efficacy scores (stability in the establishment of life) on the effectiveness of group counseling through the SIBOL techniques. The diversity of self-efficacy (stability in the establishment of life) was influenced by the sequences of the treatment and students that are given. Calculation of differences has been used in the T-test, a decision is taken if the value of T fell at a probability < 0.05 or H₀ is rejected.

3. Result and Discussion

Based on the analysis results above, it showed that there were changes in the initial conditions of self-efficacy (stability in the establishment of life), and marked by rising up the score of self-efficacy scale (stability in the establishment of life) of students, both





Figure 2: SIBOL (Self Instruction Based on Observational Learning) Teqhnique.

on the total score or the score of each indicator. Increasing of self-efficacy behavior (stability in the establishment of life) of students between the initial condition and the final condition could be seen in the following table:

TABLE 1: Changes of self-efficacy (stability in the establishment of life) among students through Pretest and Post-test

Sampling (Students)	Before Treatment		1 st Treatment		2 nd Treatment		Changes Before doing Twice Treatment	
	Pretest Score	%	1 st Post- test Score	%	2 nd Post- test Score	%	Score	%
1	68	62	98	90	99	91	23	21
2	69	63	70	64	87	80	18	16
3	74	68	93	86	94	87	20	18
4	72	66	74	68	77	71	5	5
5	71	65	88	81	91	84	20	18
6	50	46	70	64	72	66	22	20
Σ	67	61	82	75	75	79	15	16

The T-test was carried out to test the effectiveness of group counseling through the SIBOL techniques. T-test could be used if the data that would be analyzed had a normal distribution[14], meanwhile, the basic test of the T-test was not seen from the number of samples. Based on the results of data analysis with T-test that showed the goal of group



counseling through the SIBOL techniques to improve student self-efficacy (stability in life establishment) that has been achieved, namely there were changes in the results of pre-test and post-test especially on self-efficacy behavior of students in Madiun. To prove this process, it was necessary to do a statistical test using T-test. The results could be seen in the table below:

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre test	2.0300E2	6	3.62267	.31894
	Pos test 1	5.035600	6	3.80275	.39907
Pair 2	Pos test 1	5.035600	6	3.80275	.39907
	Pos test 2	7.459082	6	5.30671	.42098
Pair3	Pre test	2.0300E2	6	3.62267	.31894
	Pos test 2	7.459082	6	5.30671	.42098

TABLE 3: T-test Calculation by SPSS.

	Paired Differences							df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	pre – post1	-3.005600	9.34666	11.78983	- 25.37851	- 10.62149	-4.760	4	.001
Pair 2	post1– post2	-2.423482	9.97540	13.56010	- 21.37851	-8.62149	-4.920	4	.002
Pair 3	pre – post2	-5,429082	11. 00691	17.92018	- 20.37851	-6.62149	-8.720	4	.004

From **Table 2** above, it is known that the experimental group (M = 2.030E2) had a higher change than the control group (M = -0.9287). While based on **Table 3**, the "Paired samples test" of the output table in pair3 showed the Sig value. (2-tailed) was 0.004 <0.05, then H₀ is rejected and H_a is accepted. So it could be concluded that there were average differences between the results of increasing academic self-efficacy of students in pretest and 2nd posttest that meant there was an influence of group counseling through the SIBOL techniques especially in improving student's self-efficacy in the academic context. Table output of "paired samples test" (review of pair3) that has been presented also contains information about the value of "Mean Paired Differences" of -2.0300E2 - 7.459082 = -3.005600 and the difference started from -20,378 to - 6,621 (95% Confidence Interval of the Difference Lower and Upper). **KnE Social Sciences**



4. Conclusion

In fostering the stability of student attitudes in the establishment of life (principle) was not only by imitating other agents but also by making the process through cognitive observing selectively, then retaining and motivating oneself that abled to improve the same opportunities like other successful agents. Then, doing an action to obtain reinforcement that would create success for oneself. The essence that could be examined from the description above namely the attempt to synthesize formulations of group counseling using self-instruction based on observational learning techniques (SIBOL) in the academic context at the University. The research aimed to assist students in providing a place of group counseling services through self-instruction based on observational learning techniques to foster their stability in the establishment of life. Preliminary studies that studied group counseling through observational learning based on self-instruction techniques naturally required a lot of criticism from other scientists and researchers especially for guidance and counseling studies that could deepen about similar studies.

5. Authors' Contributions

The first author RATIH CHRISTIANA initiated the concept of article review material ideas, compiled the entire contents of the article, conducted a literature review, completed article writing. The second author, IBNU MAHMUDI responds to the pure concepts of



the article review, contributes to the literature review and discussion in the preparation of the article. ALL AUTHOR reread and approve the article.

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References

- [1] Bandura A. Self efficacy in changing societies. Stanford University; USA; 1977. www.cambridge.org/9780521474672.
- [2] Greer RD, Dudek-Singer J, Gautreaux G. Observational learning. International Journal of Psychology. 2006;41(6):486–99. https://doi.org/10.1080/00207590500492435
- [3] Havighurst RJ. Human development and education. New York: David Mckay Company; 1961.
- [4] Bandura A. Social foundations of thought and action: A social cognitive theory. Englewood Cliffs: Prentice-Hall; 1986.
- [5] Meichenbaum D. Changing conceptions of cognitive behavior modification: Retrospect and prospect. Journal of Consulting and Clinical Psychology. 2013;61(2):202–4. https://doi.org/10.4324/9781315748931
- [6] Borsa D, Heess N, Piot B et al. Observational learning by reinforcement learning. Proceedings of the International Joint Conference on Autonomous Agents and Multiagent Systems, AAMAS. 2019;2:1117–24.
- [7] Ambarsari BT, Fadhila RN, Christiana R. Peer-group counseling untuk mengurangi intensitas munculnya perilaku cyberstalking pada remaja. Prosiding SNBK (Seminar Nasional Bimbingan dan Konseling); 2017;1(1):118–25.
- [8] Bandura A, Walter RH. Social learning and personality development. Stanford: Univ. Waterloo Ontario Canada; 1963. Available from: https://psycnet.apa.org/record/1963-35030-000
- [9] Hulukati W, Djibran MR. Analisis tugas perkembangan mahasiswa fakultas ilmu pendidikan Universitas Negeri gorontalo. Bikotetik (Bimbingan Dan Konseling Teori Dan Praktik). 2018;2(1):73-80. https://doi.org/10.26740/bikotetik.v2n1.p73-80
- [10] Morse B A B. The role of observational learning in developing ecotourists' environmentally responsible behavioral intentions. Michigan USA; 2017.



- [11] TC J, Stanley S. Experimental and quasi-experimental designs for research. Contemporary Psychology: A Journal of Reviews. 1963;29(4):1–62. https://doi.org/10.1037/022808
- [12] Bandura A, Schunk D. Cultivating competence, self efficacy, and intrinsic interest through proximal self-motivation. Journal of Personality and Social Psychology. 1981;41(3):586–98. https://doi.org/https://psycnet.apa.org/doi/10.1037/0022-3514.41.3.586
- [13] Bandura A. Social learning theory. Prentice Hall; New Jersey; USA; 1977.
- [14] Christiana R. Keefektifan peer modeling untuk meningkatkan efikasi diri akademik mahasiswa dalam menguasai keterampilan berbahasa inggris. Hibualamo. 2018;2(2):61–65.
- [15] Pauly L. Defining the problem of observation learning. 2018. Available from: http://arxiv.org/abs/1808.08288
- [16] Creswell JW. Riset pendidikan (perencanaan, pelaksanaan, dan evaluasi riset kualitatif & kuantitatif). Helly PS, Sri MS, editors. Pustaka Pelajar; Yogyakarta;Indonesia; 2015.
- [17] Panah A, Boroujeni T. Merging two variables (observational learning and self-talk), is not preference one variable evermore. Research in Sport Management and Motor Behavior; 2017;9(17); 1-13
- [18] Baker SB, Butler JN. Effects of preventive cognitive self-instruction training on adolescent attitudes, experiences, and state anxiety. The Journal of Primary Prevention. 1984;5(1):17–26. https://doi.org/10.1007/BF01332030