PET◊ER

Psychology, Evaluation, and Technology
in Educational Research

Stress reduction in thesis completion through peer tutoring method

Budi Astuti * [1], Diana Septi Purnama [1], Eko Pramudya Laksana [2]

[1] Department of Guidance and Counseling, Universitas Negeri Yogyakarta
Jalan Colombo No 1, Karangmalang, Yogyakarta, 55281, Indonesia
[2] Universitas Negeri Malang. Jalan Semarang No. 5 Malang, Jawa TImur, 65145 Indonesia
Corresponding Author. E-mail: budi_astuti@uny.ac.id

Abstract

This study aims to reduce stress in the completion of thesis through peer tutoring method in student of the Guidance and Counseling Study Program, UNY. This research is a classroom action research. The research subjects were 70 Guidance and Counseling Study Program students. Sampling techniques used purposive technique. Data collection used stress scale in the completion of thesis and observation guideline. The result of the pretest with the scale of stress in the completion of the thesis obtained a number of 14 students who were given an action. Data analysis technique used quantitative technique. The results showed a decrease in stress level in Guidance and Counseling student through peer tutoring method. This was indicated by the pretest average score of 104.8 (high category). After being given the action in cycle I, the average post test I score was 90.3 (medium category). This means that in cycle I there was a decrease in the average score of 14.5%. Provision of action continued in cycle II with the result of post test II obtained an average score of 72.2 (low category). This means that in cycle II there is a decrease in the average score of 18.1%. The decrease in the average score in the post test I and II obtained a total of 32.6%.

Keywords: stress; thesis completion; peer tutoring method; college student

INTRODUCTION

Owusu & Essel (2017) explained that stress affects student's academic performance. This happens to most students who are completing their thesis final project in the Department of Guidance and Counseling, Universitas Negeri Yogyakarta. One of the student academic tasks that must be completed is the task of completing the thesis. This task becomes the final task in the lecture range before students are declared to graduate. However, not all students respond to this matter responsibly. Some students completed well, but not a few students ignore the completion of the final assignment, so that the result of the graduation becomes longer and suffered a loss of costs, time, and energy that is sometimes not realized. This is reinforced by (Dumitrescu, 2016) in his research which states that doctoral students face many challenges in the process of completing their degree.

Universitas Negeri Yogyakarta (UNY) is one of the Educational Institutions and Education Personnel (LPTK) in Indonesia that organizes the education process for students. In the UNY Academic Rules article 15 and 16, it is stated that the undergraduate program is required to complete the final project, namely the thesis. Undergraduate student can start working on the final assignment if the student has completed at least 110 credits with a GPA of at least 2.00. Thus, in accordance with the Academic Regulation, the preparation of the thesis final project is one of the obligations that must be fulfilled to obtain a degree, including student of the Guidance and Counseling Study Program.

Based on the initial survey conducted by researcher on several thesis supervisors throughout 2017, the problem of completion of the thesis as above often occurs in some students in the Guidance

and Counseling Study Program. The majority of students have completed lectures that are theoretical and practical, but the thesis has not been completed until the end of their study period. In fact, there are cases that student dares to lie to their parents if they have finished college and just follow the graduation, even though in reality the thesis has not been done.

This is reinforced by the result of the research data at the pretest stage by using a stress scale in the completion of thesis. In 70 students of Guidance and Counseling Study Program, in 2014, there were 12 people (17.1%) had low stress level, 44 people (62.9%) had medium stress level, 13 people (18.6%) had high stress level, and 1 person (1.4%) had a very high level of stress. These data indicate that most students experience stress in completing the thesis with the medium and high category. As explained by (Looker & Gregson, 2005, p. 44) stress is a situation experienced when there is a discrepancy between the demands received and the ability to overcome them. In everyday life, stress is unavoidable in life, and humans cannot avoid stress, but the important thing is to find ways to respond to and manage stress so that it can be resolved and life is better.

On the other hand, (Losyk, 2007, p. 10) says that stress is difficult to interpret, because stress appears in many forms. Everyone looks at stress differently. Stress can be dangerous or can help, depending on the circumstance. Some stresses are beneficial because they motivate themselves to improve performance and make positive changes in life. If someone does not have stress, someone will not be able to do anything.

One of the competencies learned by Guidance and Counseling study program student is the skill of providing guidance and counseling service, namely the skill on how to solve a problem. Student should already have adequate ability and skill about responding to a problem, but in reality the problem of stress is still experienced by student, especially stress in the completion of the thesis. Some students who experience stress have an impact on the completion of their thesis. However, students who are able to manage stress well they can pass and be able to complete the thesis in accordance with the expected time.

This is interesting for researcher to conduct an action research namely stress reduction to help student who experiences stress in the completion of their thesis. One method used is peer tutoring method, which involves students who have successfully completed their thesis to help students who experience thesis obstacle because they experience stress.

This method is important to do because by using peer tutoring method, student can freely issue complaints, devote their heart and mind and there is a deep and open discussion to reduce stress in completing the thesis. This explanation is in accordance with the research of Buckley and Zamora (Dehghani, Amini, Kojuri, & Nabeiei, 2014, p. 71) reporting that the benefit of peer tutoring method enables student to overcome various personal difficulties during their studies, one of which is difficulties in completing student thesis. Thus, the problem or obstacle experienced in the completion of the thesis can find a solution through peer tutoring activity.

With research on stress reduction through peer tutoring method, student of this guidance and counseling study program is expected to contribute to the institution to improve the quality and number of graduates. In addition, the result of the research is expected to be one of the considerations and inputs in improving the quality of academic activity in the Guidance and Counseling study program. Based on the background of the above problem, then the formulation of the problem in this study is how to reduce stress in the thesis completion through peer tutoring method on student of Guidance and Counseling, Faculty of Education, Yogyakarta State University? This study aims to reduce stress in the completion of thesis through peer tutoring method in student of Guidance and Counseling, Faculty of Education, Yogyakarta State University.

Warshaw (1979, p. 12) states that stress is a symptom of general adaptation in the form of psychological reaction to varied environmental change. Causes of stress can occur from internal and external factor. It also conveyed by Santrock (2010, p. 457) that stress is an individual's response to stressor which is situation or event that threaten and reduce the ability to overcome them. In reality, students who are completing their thesis cannot avoid stress. This depends on the intensity and the way the individual handles stress. Stress research was conducted by Misra and Castillo (2004) which aimed to compare academic stress and reaction to stress between American and non-American student.

Things that can be done certainly reduce stress with the right solution and step. Some tips on how to stop stress, including: time management, avoiding delaying, making a list of things to do, getting enough rest, eating, and exercising, avoiding being a person who feels versatile, and realizing

self-limitation (Mitchell, 2004, p. 72) In line with Oon (2007, p. 34) that one of the most effective ways of dealing with stress is by optimizing its ability to manage stress and manage appropriate learning strategy.

In this study, the constraints that cause the stress of this student need to be handled with the right method. Peer tutoring method provides many benefits and convenience for student to become alternative solution. Guidance activity carried out by peer tutor has a positive impact on friend who is under their supervision or guidance. Buckley and Zamora (Dehghani et al., 2014, p. 71) report that the benefit of peer tutoring enables student to overcome various personal difficulties during college, one of which is difficulties in completing student's thesis. Peer tutor produces motivation, social interaction, and change from independent learning to social activity. Students who are involved in peer tutoring can be said to be counselors for other students where prior experience is suitable to help others and become expert instructors in the situation of guidance (Colvin, 2007, p. 166).

Peer tutoring method is a potentially powerful way to share knowledge in order to make changes to an assignment. This learning involves exchanging knowledge and experience with each other and spreading learning back to their learning activity to ensure the impact of change (Andrews & Manning, 2016, p. 5). Peer tutor also develops the character of virtue and personal attitude such as respect, responsibility, empathy, cooperation and perseverance, and that is important in affective development (Dehghani et al., 2014, p. 71). Based on the literature review, an action hypothesis can be proposed in this study, namely peer tutoring method that can reduce stress in the completion of the thesis of the Guidance and Counseling study program student.

METHOD

The research approach used in this study is classroom action research from (Kemmis & Mc Taggart, 1988; Kemmis, McTaggart, & Nixon, 2014). The research subject included in this study was 2014 class year students of the Guidance and Counseling Study Program. The technique of determining research subject used purposive technique. The consideration used to determine the students involved in this study were: (a) students were active as students of the Guidance and Counseling Study Program, UNY (b) students were 2014 class students who were taking thesis courses in their study plan card, and (c) students have high and very high level of stress shown from the pretest score using stress scale in completing the scoring. Overall students of 2014 have number of 70 people. Based on the predetermined criteria, 14 students were involved in classroom action research. This study used an instrument in the form of stress scale in the completion of the thesis and observation guideline. Data analysis technique was carried out using quantitative analysis and described to find out the success of stress reduction in students' thesis completion through peer tutoring method. This action research was revealed to be successful if there was a change, namely a decrease in the stress level of student in the completion of the thesis. Indicator of success in this study quantitatively achieved a stress reduction of 30%.

RESULTS AND DISCUSSION

Result

In this action research it has 14 students, in the high category (13 people) and in the very high category (1 person). A number of students were subjected to action in two cycles of PTK. The results of the implementation of classroom action research can be explained as follows:

Cycle 1

it is a stage of drafting an action plan. Classroom action research in cycle I at this stage was used by researchers to (a) compile material design and observation sheet, (b) set schedule and place of implementation, (c) determine the subject of research and socialization of activity, and (d) determine, equate perception and collaboration with peer tutor. The selected research subjects were 14 students according to the result of the pretest with the stress scale in the completion of the thesis, which had high and very high stress category. The chosen peer tutor named Mitta Kurniasari (Alumni of post graduate program of Guidance and Counseling Study Program, UNY) and Nurul Lafitah (Student of post graduate program of Guidance and Counseling Study Program, UNY) Both of them were chosen on the ground that they had experience in thesis coaching, had the potential to establish psychological

closeness with UNY FIP BK undergraduate students as research subject, and had the ability to become peer tutors for the research subject. Researcher collaborates with peer tutor in giving action so that there is a positive interaction between researcher and peer tutor with the research subject. In this case there is a discussion of the difficulty when working on the thesis.

It is the implementation phase of the action. At this stage, the form of delivery of action material aims to reduce stress on students who are completing the thesis. Cycle I was held in the Meeting Room I of FIP UNY for four times, were (1) on Wednesday, May 2 2018 with material for reducing physical and emotional stress in completing the thesis with an allocation of 120 minutes, (2) on Wednesday, May 9 2018 with cognitive stress reduction material in completing the thesis with a time allocation of 60 minutes, (3) on Wednesday, May 16 2018 with behavioral stress reduction material in completing the thesis with a time allocation of 60 minutes. Submission of material using the method of lecture, discussion, question and answer, brainstorming, and assignment.

Observation phase. At this stage the researcher is assisted by two student assistants to make observation when the process of implementing the action. The aspects observed were enthusiasm in participating in peer tutoring activity, actively participating in peer tutoring activity, active opinion in peer tutoring activity, daring to express stress problem experienced in completing thesis, receiving input from peer tutor, and having commitment in completing the thesis. Based on the results of the observation sheet in the cycle I obtained an average score of 24.6 (with a score range of 5-30) with a percentage of 81.9% (good category). At this stage post test is carried out for cycle I as an evaluation for the next phase of improvement. Post test results in cycle I obtained an average score of 90.3 (medium category). The post-test results were compared with the results of the pretest obtained an average score of 104.8 (high category). The difference between pretest and post test in cycle I obtained an average score of 14.5. This means that students who get action in cycle I experience a decrease in stress in completing thesis as much as 14.5%.

Reflection phase. At this stage, researcher together with peer tutor evaluates the result of implementing the action. The evaluation results revealed that the post-test results showed a decrease in score. This means that student has experienced a decrease in the level of stress felt in completing the thesis. Observation result shows high score with good category. This means that the level of student participation is classified as good indicated by the attitude of enthusiasm, active in giving opinion, and committed in doing thesis. Obstacles that are encountered are more in cases that are individual, such as WH who has a problem that is quite severe that is not yet started working on the thesis but has not shown significant progress. This is known from the observation made by researcher that the attitude of the WH still seems passive in arguing to describe its superiority in working on the thesis. In contrast to DW who experienced stress in the very high category at the beginning of the measurement through pretest, in the process of implementing DW's action showed high participation. This was indicated by DW's open attitude in conveying his difficulty in working on the thesis. DW experienced obstacles in finding references recommended by the supervisor. The effort to improve the action in the first cycle is to provide more intensive focus on every difficulty in working on the crisis faced by student. Identification of various student difficulties is then formulated in the form of the most appropriate solution so that difficulty is overcome and stress levels are reduced.

Cycle II

It is stage of drafting an action plan. In this second cycle, an action plan was prepared based on the result of evaluation and reflection in cycle I. The action plan in cycle II consisted of: (a) intensive mentoring with toturial method, (b) observing with observation sheet, and (c) setting schedule and place of execution.

The implementation phase of the action. In this second cycle, it was emphasized to be able to facilitate student by conducting intensive mentoring conducted by researcher and peer tutor. In the second cycle, the following actions were carried out (1) on Wednesday, May 23, 2018, I did a tutorial on starting to do thesis and composing title with an allocation of 150 minutes, (2) on Wednesday, May 30 2018 did a tutorial on CHAPTER I and CHAPTER II with a time allocation of 150 minutes, and (3) on Wednesday, June 6 2018, did a tutorial on CHAPTER I and CHAPTER II with a time allocation of 150 minutes.

At this stage, 14 participants were divided into two groups, each group was paired with 1 peer tutor and 1 researcher. Student carried files and thesis file for discussion together. Problems in the

form of obstacle and difficultie are presented by each student. Obstacles faced by student includes: difficulty in finding problem, difficulty in getting idea, difficulty in finding reference, difficulty in arranging instruments, difficulty in analyzing data, frequency of meeting with supervisor for not optimal guidance, factor within oneself (afraid of meeting a supervisor, not understanding the input of a supervisor, reluctant to meet with a supervisor, confused about where to start when working on a thesis, delaying meeting a supervisor). These obstacles and problems are discussed in groups to find solution. Assistance through toturial is done to overcome individual difficulty but it is packaged in a small group. The small group is expected to help provide solution based on their respective experience. For example; there is a student who has the same thesis supervisor so they can provide information about the characteristic or style of guiding student both content and technical. Another example of students who have the same type of research, they can share knowledge about methodological concept. Student who has reached more CHAPTERS (CHAPTER 1, CHAPTER 2, and so on) can provide input for student who is just starting to consult the title of their thesis.

Observation phase. In the second cycle, observation was made with observation sheet, while the evaluation phase was carried out by measuring stress levels through the provision of a post-test. The aspect observed in cycle II was the same as those in cycle I, namely the aspect of enthusiasm in participating in peer tutoring activity, actively participate in peer tutoring activity, active in giving opinion in peer tutoring activity, daring to express stress problemsexperienced in completing thesis, receiving input from peer tutor, and having a commitment in completing a thesis. Based on the result of the observation sheet analysis in cycle II, it was obtained an average score of 28.1 (with a score range of 5-30) with a percentage of 93.8% (very good category). Post test result in cycle I obtained an average score of 90.3 (medium category). Meanwhile, the post test result in cycle II obtained an average score of 72.2 (low category). Post test difference in cycle I and post test in cycle II obtained an average score of 18.1. This means that students who get action in the second cycle experience a decrease in stress in completing the thesis as much as 18.1%.

Tabel 1. Summary of Comparison of Pretest Result, Post Test I and Post Test II

No	Initial name	Gender	Pretest score	Category	Post test I score	Category	Cycle I (%)	Post test II score	Category	Cycle II (%)	Total (%)
1	AF	W	100	High	83	Medium	17	73	Low	10	27
2	FA	W	103	High	89	Medium	14	70	Low	19	33
3	SA	W	105	High	87	Medium	18	69	Low	18	36
4	SN	W	98	High	88	Medium	10	66	Low	22	32
5	AN	W	105	High	92	Medium	13	72	Low	20	33
6	AR	W	101	High	82	Medium	19	72	Low	10	29
7	RR	W	101	High	89	Medium	12	74	Low	15	27
8	WH	W	110	High	96	Medium	14	78	Medium	18	32
9	DI	M	101	High	85	Medium	16	65	Low	20	36
10	DW	W	122	Very High	112	High	10	90	Medium	22	32
11	NF	W	101	High	86	Medium	15	66	Low	20	35
12	AD	W	111	High	92	Medium	19	71	Low	21	40
13	NK	W	108	High	92	Medium	16	75	Low	17	33
14	MR	W	101	High	91	Medium	10	70	Low	21	31
	Total		1467		1264		203	1011		253	456
	Average		104,8	High	90,3	Medium	14,5	72,2	Low	18,1	32,6

Reflection phase. In this second cycle, the reflection stage can be seen that the peer tutoring method is able to reduce student stress in handling the difficulties faced. At the implementation stage it appears that quantitatively there was a decrease in the average post test I score of 14.5% and post test II of 18.1%. The total decrease in the average score in both post test result was 32.6%. This means that students who in the first cycle still encounter obstacles in working on the crisis can break down the problem in this cycle II. Student is accompanied by peer tutor and researcher intensively discusses the progress of each thesis. Student conveyed the problem so that they get the right feedback from friends, peer tutorsand researcher. Observation result also showed very good category, meaning that 93.8% of students showed a positive attitude in following the PTK process that took place in stage II. Based on the result of reflection, the researcher concluded that this research had been carried out in

two cycles and the research objective had been achieved, namely students experienced a decrease in stress in completing theses through peer tutoring method.

Comparison of the average pretest score, the average post test I score in the first cycle, and the average post test II score in the second cycle showed a decrease in stress by 32.6%. This decrease gives the meaning that this research has achieved a success indicator that is above 30%. Comparative summary of the result of the pretest and post-test is as in Table 1.

Discussion

The result of the study revealed that stress in completing student thesis can be reduced through peer tutoring method. This is indicated by the pretest average score of 104.8 (high category). After being given the action in the first cycle, the average post test I score was 90.3 (medium category). It means that in the first cycle there was a decrease in the average score of 14.5%. Provision of action continued in cycle II with the result of post test II obtained an average score of 72.2 (low category). This means that in cycle II there is a decrease in the average score of 18.1%. The decrease in the average score in the post test I and post test II obtained a total of 32.6%.

The result of this study was in accordance with (Fitch & Semb, 1993) research which states that there are three components of effective peer tutoring, namely (1) the positive attitude of peer tutor towards teaching, (2) peer tutor has the ability and skill in teaching (listening, observing, encouraging, clarifying, giving feedback, and strengthening), and (3) peer tutoring knowledge about student. It is assumed that knowledge and attitude are boundary condition which requires a threshold level in the guiding process to be effective. Meanwhile, the skill becomes mediator for knowledge and attitude that influence coaching interaction. Peer tutor is conceptualized as "a trainer" who guides and shapes student learning. The purpose of effective coaching interaction is to shift responsibility for learning from peer tutor to student. In ideal interaction, student must communicate more intensively to peer tutor.

As explained by (Fitch & Semb, 1993) that based on behavioral, cognitive, and socio-cognitive theory and research integrated in the ASK (Attitude, Skills, Knowledge) model in peer tutoring method suggests several things to be implemented in higher education, namely (a) student must describe what is known and done, (b) as often as possible, academic behavior must be active and shared (c) student must collaborate in their own learning, and (d) provide opportunities for students to produce some expected academic behavior. These opportunities can be increased by knowledgeable and skilled peer tutor.

Peer tutoring method is an alternative solution to reduce student stress in completing thesis. Similar research result was carried out by (Gyllensten & Palmer, 2005) which produced finding that psychological coaching training can reduce stress in the workplace. A total of 31 participants from financial organization in the UK were involved in quasi-experimental study. Depression, anxiety and stress are measured before and after psychological coaching training. The level of anxiety and stress has decreased more in the coaching group compared to the control group.

The result of observation in this action research noted that student showed aspect of enthusiasm in participating peer tutoring activity, actively participating in peer tutoring activity, actively arguing in peer tutoring activity, daring to express stress problem experienced in completing thesis, receiving input from peer tutor, and has a commitment in completing a thesis. This is reinforced by the research of (Goldschmid & Goldschmid, 1976) which explains that peer tutoring method is recommended to be used because they have great potential on both sides, namely peer tutor and student, especially in increasing active participation and developing cooperation and social interaction skill.

The result of a study by (Calma & Eggins, 2012) in investigating peer tutoring training program, it can improve quality in helping peer tutor develop more effective teaching strategy. The study was conducted in 2007-2010 involving 343 students from accounting, economics, finance and management and marketing major. The result showed that peer tutoring method provides benefit to aspect of learning from friend. This means that through peer tutoring training program, student can learn more from their peers who act as tutor so that learning becomes effective. Based on the description of the discussion it can be concluded that student experienced a decrease in stress in completing the thesis. Stress reduction in completing thesis is obtained through action using peer tutoring method.

CONCLUSION

Based on the result of the study and discussion, it can be concluded that stress in the completion of the thesis can be reduced through peer tutoring method at the student of Guidance and Counseling study program, Faculty of Education, Universitas Negeri Yogyakarta. Thus, recommendation that can be given is that the Faculty of Education should evaluate the acceleration programs of study conducted by each study programs so that their effectiveness is known. Furthermore is developing various programs to facilitate the acceleration process of the study, for example scheduling thesis guidance clearly, monitoring for students who experience delay in working on thesis, and utilizing peer tutoring model as an alternative to assist student in completing thesis.

REFERENCES

Andrews, M., & Manning, N. (2016). A guide to peer-to-peer learning: How to make peer-to-peer support and learning effective in the public sector? Effective Institutions Platform.

Calma, A., & Eggins, M. (2012). Enhancing the quality of tutorials through peer-connected tutor training. *Issues in Educational Research*, *22*(3), 213–227.

Colvin, J. W. (2007). Peer tutoring and social dynamics in higher education. *Mentoring & Tutoring: Partnership in Learning*, *15*(2), 165–181. https://doi.org/10.1080/13611260601086345

Dehghani, M. R., Amini, M., Kojuri, J., & Nabeiei, P. (2014). *Evaluation of the efficacy of peer-learning method in nutrition students of Shiraz University of Medical Sciences*. *Journal of Advances in Medical Education & Professionalism* (Vol. 2). Shiraz University of Medical Sciences & Health Sciences. Retrieved from http://jamp.sums.ac.ir/index.php/JAMP/article/view/90

Dumitrescu, G. (2016, January 1). *Self-efficacy, locus of control, perceived stress and student satisfaction as correlates of dissertation completion*. Andrews University. Retrieved from https://digitalcommons.andrews.edu/dissertations/1615

Fitch, M. A., & Semb, G. B. (1993). *The ASK model of peer tutoring: Theory and research*. Defense Technical Information Center.

Goldschmid, B., & Goldschmid, M. L. (1976). Peer teaching in higher education: A review. *Higher Education*, *5*(1), 9–33. https://doi.org/10.1007/BF01677204

Gyllensten, K., & Palmer, S. (2005). Can coaching reduce workplace stress? A quasi-experimental study. *International Journal of Evidence Based Coaching and Mentoring*, *3*(2), 75–85.

Kemmis, S., & Mc Taggart, R. (1988). *The action research planner*. Deakin University Press.

Kemmis, S., McTaggart, R., & Nixon, R. (2014). *The action research planner: Doing critical participatory action research*. Singapore: Springer . https://doi.org/10.1007/978-981-4560-67-2

Looker, T., & Gregson, O. (2005). *Managing stress: Mengatasi stres secara mandiri*. London: Teach Yourself Book.

Losyk, B. (2007). *Kendalikan stres anda! Cara mengatasi stres dan sukses di tempat kerja*. Jakarta: Gramedia Pustaka Utama.

Misra, R., & Castillo, L. G. (2004). Academic stress among college students: Comparison of American and international students. *International Journal of Stress Management*, *11*(2), 132.

Mitchell, D. (2004). *Stress, coping, and appraisal in an HIV-Seropositive rural sample: a test of the goodness-of-fit hypothesis*. The College of Arts and Sciences of Ohio University.

Oon, A. N. (2007). *Handling study stress: Mengatasi stres belajar*. (trans. J.Gracinia, Ed.). Jakarta: Elex Media Komputindo.

Owusu, P., & Essel, G. (2017). *Causes of students' stress, its effects on their academic success, and stress management by students*. Seinäjoki University of Applied Sciences. Retrieved from https://www.theseus.fi/handle/10024/124792

Santrock, J. W. (2010). *Adolescence: An introduction*. New York, NY: Brown & Benchmark.

Warshaw, L. J. (1979). *Managing stress*. Addison-Wesley Reading, MA.