



The Factors Influenced the Undergraduate Thesis Completion Among Engineering Students

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Abstract. This research was conducted by looking at the reality in the Faculty of Engineering based on the data of students who can complete their studies on time around 29.19%. The low number of students of the Faculty of Engineering who can complete their studies on time makes it necessary to find answers to the factors that cause the length of their studies. The purpose of this study was to obtain data on the factors that influence the completion of the study of students of the Faculty of Engineering, State University of Surabaya and the association between factors in influencing the study of students of the Faculty of Engineering. This research method used a survey approach, where data is taken from a questionnaire he study was aimed to. In conclusion, Internal actors who are the most dominant factors that cause students to experience obstacles in completing thesis are motivational factors. The main factor of study duration was off-campus business and economic factors, while the most dominant external factors that cause students to experience obstacles in the thesis completion process were friends factors.

Keywords: Undergraduate Thesis · Student · Study Completion

1 Introduction

In undergraduate or undergraduate studies, students need to complete four years or eight semesters. Regulation of the Minister of Education and Culture of the Republic of Indonesia number 49 of 2014 stated that the undergraduate program is an academic higher education level with a minimum completion of 144 semester credit units and a maximum of 160 credits with a duration of 7 or 8 semesters, and the program duration is between 7 to 14 semesters. The duration of study in the undergraduate program was the maximum seven years of academic years for the undergraduate program with a student learning load of at least 144 credits.

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However, in reality, there were still many students who complete undergraduate programs in extended period of time and delayed graduation time. These could also result in students being delayed in finding and getting a decent job after undergraduate studies. Another effect of delays in completing studies for students is the burden of paying for lectures which increases based on the time of completion of studies. There is a problem in working on the thesis that makes it difficult for students to complete the thesis, it is known that one of the obstacles when working on the thesis is influenced by the repetition of courses so that they do not focus on dividing the time to complete the thesis, lack of motivation to complete the thesis, inadequate facilities to complete the thesis. In completing the thesis, students also sometimes felt lazy to meet their supervisor, and have difficulty finding thesis reference materials.

Data in the academic section of the Faculty of Engineering, there are still many students whose study period is more than four years. From data taken from the Student Affairs section of Faculty of Engineering, State University of Surabaya, of the 733 new students in 2017, who could complete their studies on time, only 214 students or approximately 29.19%. Based on these data, the researchers were interested in further examine the problem research with the title “The Factors of Influencing the Undegraduate Thesis Completion among Students in Faculty of Engineering, State University of Surabaya”. The purpose of this study was to obtain data on the factors that influence the completion of the study of students of the Faculty of Engineering, State University of Surabaya and the association between the factors in influencing the study completion of students of the Faculty of Engineering.

2 Research Methods

The research design was quantitative study used the survey. The study was conducted in July 2022 and located in Faculty of Engineering, State University of Surabaya. The total of respondents were 81 Faculty of Engineering, State University of Surabaya students who had not completed their studies within 8 semesters at Faculty of Engineering, State University of Surabaya. The data collection technique was using a questionnaire that contained questions and statements that distributed online through the google form. The questionnaire was consisted of three components, include internal factor, external factor and study duration. The questionnaire was adapted from Wulandari and Asrizal study [1, 2]. The question response were consisted of four multiple choice scoring, very agree (4), agree (3), disagree (2), and very disagree (1). The data was analyzed by descriptive method and univariate analysis.

3 Results and Discussions

The total of 81 students of Faculty of Engineering Students, State University of Surabaya had participated in this study. The participants consisted of 41 students from Home Economics Department (50,6%), 16 students from Mechanical Engineering Department (19,7%), 16 students from Civil Engineering Department (19,7%), 4 students from Informatics Engineering Department (4,9%), and 4 students from Electrical Engineering Department (4,9%).

Table 1. Descriptive Analysis of Each Factors that Influencing the Undergraduate Thesis Completion

Factors	Averages	Standard Deviation	Min	Max
Internal	30.49	4.24	17	40
External	21.26	4.26	11	29
Study Duration	29.19	3.04	23	36

From Table 1, we suggested that main factor that influencing the undergraduate thesis completion is internal factor. The second factor was study duration and the last factor was external.

There were three components that contribute to study completion include internal, external and study duration. From Table 2, the internal factors were consisted of business from other non-academic activities, include student organization, remedial of several and already working. Most of the students in the study answered prioritize working as the main internal factor. In addition, students work while studying, were unable to focus on completing their undergraduate thesis.

Other internal factor that inhibit the study completion was psychological aspects include easily tired, and felt sleepy during study [1, 3]. Other studies pointed out that internal factors were also consisted of psychological aspects include feeling of shyness, laziness, intenal pressure and stresses during thesis guidance with lecturer [4, 5]. Low-esteem and low motivation during thesis writing could also one of the internal obstacle [6]. Hartato study also emphasized that the internal factors that become obstacles for students in completing thesis are motivational factors [7].

Aside the internal factors, Table 3 showed the external factors were also involved in influencing the undergraduate thesis completion. The main external factor was friends' supports. This study results showed similar finding to Widarto study which emphasized the close friends factors [8]. Motivation from friends especially from the same class showed beneficial effects in undergraduate study completion [9]. Also friends in group could discuss together and found out to solve the problem during the thesis writing [10]. Although, the respondents also might feel inferior that because many of the friends had already graduated. The motivation from friends may boosted the respondents to finish the study [11, 12].

Meanwhile, other external factors consisted of factors seeking material or thesis titles, literature searches, and problems with supervisors during consultations. The results of this study are also in line with the Kusnendar study which states that the motivational factor was also the factors that hinders students in completing thesis proposals [13]. Involving in student organization had negative impacts as decreasing the spent time of student to do undergraduate thesis writing [14].

Table 2. Descriptive Analysis of Internal Factors

No	Questions	Response			
		VA	A	D	VD
1	I'm easily tired	18	33	27	3
2	I'm often sleepy at class	7	22	48	4
3	I'm always sleeping while studying	2	12	58	9
4	I'm lazy when at class	–	6	61	14
5	I'm lazy to do college assignments	–	9	63	9
6	I'm lazy to consult proposals/thesis	–	11	58	12
7	I am confused about the problem to be researched	2	31	44	4
8	I am less critical of the problems that occur in the world of education and society	6	47	24	4
9	I submitted a title that has been researched many times so the title should be changed	1	14	59	7
10	I submitted a title that was not relevant to my area of expertise so the title was changed	1	9	60	12
11	I work while studying	21	35	19	7
12	I prefer work over college	3	21	46	12
13	I help my parents work at home so college is neglected	9	29	36	8

*VA = Very Agree, A = Agree, D = Disagree, VD = Very Disagree.

From Table 4, the indicators of the study duration was also involved in influencing the study completion. Most of the respondents felt that the lecturers were easy to contact and the guidance process and communication. However, sometimes there was disagreement between the first supervisor and the second supervisor 2 which might inhibited the study completion [2]. The results of this study was contradicted with the Alafgani study which states that the most dominant factor that causes students to experience difficulties in completing thesis is the guidance process with the lecturer [15, 16].

The main factors from study duration were home and campus location, off-campus business, and economic constraints. Most of the respondents had far away from campus and felt quite far, it also costed more money as transportation costs. While they were quite busy as they were already working and not much prioritizing the undergraduate study [17].

Table 3. Descriptive Analysis of External Factors

No	Questions	Response			
		VA	A	D	VD
1	I was not given facilities to support my studies	–	8	58	16
2	I'm in a society that doesn't really care about education	–	9	57	16
3	I don't have any supporting facilities around where I live	3	16	51	11
4	I was influenced by a naughty friend	–	3	53	25
5	I don't have close friends to discuss about college assignments	12	17	42	10
6	I hang out with unemployed children so I get affected	1	2	48	30
7	I hang out with friends who don't go to college	1	19	44	17
8	I'm too busy with useless associations so college is abandoned	1	10	41	29
9	I joined the wrong organization	–	–	55	26
10	I am too active in participating in organizational activities so that college is abandoned	–	4	50	27
11	I am not given motivation from friends	2	15	48	15

* VA = Very Agree, A = Agree, D = Disagree, VD = Very Disagree.

Table 4. Descriptive Analysis of Study Duration Factors

No	Questions	Response			
		VA	A	D	VD
1	I'm busy with off-campus business	8	36	26	11
2	I'm not eager to learn because I don't like any of the courses	6	35	27	13
3	I have a hard time meeting the supervisor	3	19	43	16

(continued)

Table 4. (continued)

No	Questions	Response			
		VA	A	D	VD
4	I live far from campus so I'm lazy to come for consultation	11	23	40	7
5	I can't spare my time between home and campus	1	22	46	12
6	I rarely go to college because of economic constraints	10	31	39	1
7	I'm lazy to do difficult college assignments	4	20	45	12
8	It's easy for me to contact my supervisor when I want to do thesis guidance	24	35	9	1
9	My supervisor has the ability and experience related to the type of research of my thesis	34	45	2	–
10	I always get explanations, suggestions, and solutions from my supervisor regarding my thesis problems	28	48	5	–
11	I don't understand research methods that make it difficult for me to focus on research or find the core problem of the research I will do	5	33	41	2

*VA = Very Agree, A = Agree, D = Disagree, VD = Very Disagree.

4 Conclusion

Internal and external factors that hinder students' undergraduate thesis completion were internal factors including: business from other non-academic activities, include student organization, remedial of several and already working. In addition, external factors include: Family, peers, guidance, thesis administration, and references. Internal factors were the most dominant factors that cause students to experience obstacles in completing thesis are motivational factors. The main factor of study duration was off-campus business and economic factors, while the most dominant external factors that cause students to experience obstacles in the thesis completion process were friends factors.

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References

1. W. Wulandari, "Faktor-faktor yang mempengaruhi lama menyelesaikan studi pada mahasiswa jurusan IPS Ekonomi UIN Mataram." UIN Mataram, 2020.
2. I. Asrizal, H. Hurmaini, and M. Zulyanty, "Deskripsi Faktor-Faktor Penghambat Penyelesaian Skripsi Mahasiswa Program Studi Tadris Matematika Universitas Islam Negeri Sulthan Thaha Saifuddin Jambi." UIN Sulthan Thaha Saifuddin Jambi, 2020.
3. H. B. Modouw and P. I. Nugroho, "Faktor-Faktor Yang Mempengaruhi Penyelesaian Tugas Akhir Mahasiswa Program Studi Akuntansi Universitas Kristen Satya Wacana," *J. Akunt. Profesi*, vol. 12, no. 1, pp. 59–66, 2021.
4. C. Pamungkas, "Faktor-faktor yang mempengaruhi penyelesaian skripsi mahasiswa program studi S1 Pendidikan Teknik Bangunan angkatan 2011/2012 Jurusan Teknik Sipil Universitas negeri Malang." Universitas Negeri Malang, 2016.
5. S. Rismen, "Analisis kesulitan mahasiswa dalam penyelesaian skripsi di Prodi Pendidikan Matematika STKIP PGRI," *Lemma*, vol. 1, no. 2, p. 145551, 2015.
6. R. Wulandari, S. Ridlo, and W. Isnaeni, "PENGARUH FAKTOR INTERNAL DAN EKSTERNAL TERHADAP PENYELESAIAN SKRIPSI MAHASISWA PENDIDIKAN BIOLOGI UNIVERSITAS NEGERI SEMARANG," *J. Pendidik. Biol.*, vol. 12, no. 1, pp. 8–15, 2020.
7. U. Hartato, "Faktor-Faktor yang Mempengaruhi Penyelesaian Tugas Akhir Skripsi (TAS) Mahasiswa Program Studi Pendidikan Akuntansi Fakultas Ekonomi Universitas Negeri Yogyakarta Angkatan 2011," *A Thesis*, 2016.
8. W. Widarto, "Faktor Penghambat Studi Mahasiswa yang Tidak Lulus Tepat Waktu di Jurusan Pendidikan Teknik Mesin FT UNY," *J. Din. Vokasional Tek. Mesin*, vol. 2, no. 2, p. 127, 2017, <https://doi.org/10.21831/dinamika.v2i2.16001>.
9. A. K. Agata and B. E. Warsito, "Gambaran faktor-faktor yang mempengaruhi motivasi belajar mahasiswa program studi ilmu keperawatan universitas diponegoro semarang." Faculty of Medicine, 2016.
10. H. Ihsan and A. Zaki, "Analisis Faktor-Faktor Yang Menghambat Penyelesaian Studi Mahasiswa FMIPA UNM," *J. Sci. Pinisi*, vol. 1, no. 1, 2015.
11. K. R. Rusmawati, L. E. Tripalupi, and M. P. Made Artana, "Faktor-faktor yang mempengaruhi terhambatnya penyelesaian studi mahasiswa jurusan pendidikan ekonomi tahun 2012/2013," *J. Pendidik. Ekon. undiksha*, vol. 4, no. 1, 2014.
12. M. P. Made Artana, M. P. D. L. E. Tripalupi, and K. R. Rusmawati, "Faktor-faktor Yang Mempengaruhi Terhambatnya Penyelesaian Studi Mahasiswa Jurusan Pendidikan Ekonomi Tahun 2012/2013," *J. Jur. Pendidik. Ekon. Undiksha*, vol. 4, no. 1, p. 5241.
13. F. Kusnendar, "Analisis Penghambat Penyelesaian Studi Mahasiswa S1 Program Studi Pendidikan Teknik Mesin Jurusan Pendidikan Teknik dan Kejuruan Fakultas Keguruan dan Ilmu Pendidikan Universitas Sebelas Maret Surakarta," *J. Nosed*, vol. 1, no. 3, 2013.
14. J. Horton, "Identifying At-Risk Factors That Affect College Student Success," *Int. J. Process Educ.*, vol. 7, no. 1, pp. 83–102, 2015.
15. A. P. Alafgani, "Analisis faktor-faktor kesulitan mahasiswa jurusan pendidikan teknik arsitektur FPTK UPI dalam penyelesaian Skripsi." Universitas Pendidikan Indonesia, 2013.

16. M. Alafgani and E. Purwandari, “Self-efficacy, academic motivation, self-regulated learning and academic achievement,” *J. Psikol. Pendidik. dan Konseling J. Kaji. Psikol. Pendidik. dan Bimbing. Konseling*, vol. 5, no. 2, pp. 104–111, 2019.
17. A. Umriana, “Analisis Faktor-Faktor Penghambat Penyelesaian Skripsi Mahasiswa Jurusan Bimbingan dan Penyuluhan Islam Fakultas Dakwah dan Komunikasi UIN Walisongo Semarang,” *At-Taqaddum*, vol. 11, no. 2, pp. 186–233, 2019.

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