Tracer Study of Faculty of Economics and Business Alumni : To What Extent Are Graduates Categorized as Qualified?

[1*]**Nadia Asandimitra Haryono**, [2]**Febrika Yogie Hermanto**, [3]**Septyan Budy Cahya**, [4]**Ladi Wajuba Perdini Fisabilillah**, [5]**Khusnul Fikriyah**, [6]**Vivi Pratiwi**, [7]**Insyirah Putikadea**, [8]**Amirusholihin**, [9]**Veni Rafida**, [10]**Rasyidi Faiz Akbar**, [11]**Fresha Kharisma**
[01-11]Faculty of Economics and Business, Universitas Negeri Surabaya, Indonesia
nadiaharyono@unesa.ac.id [1*], *septyancahya@unesa.ac.id* [2]

Address: Jl. Ketintang, Ketintang, Kec. Gayungan, Surabaya, Jawa Timur 60231
Author correspondence: nadiaharyono@unesa.ac.id

Abstract. *Tracer study of Surabaya State University has been conducted in each study program in order to fulfill accreditation needs. Instrument development is still carried out independently at the study program and faculty levels so that the disparity of instruments in each faculty is very high. This study will later aim to create an effective alumni tracing model in achieving a response rate. Because in several universities throughout Indonesia, a superior model has not been found and detailed properly. The type of research used is descriptive qualitative. The population in this study were graduates of the Faculty of Economics and Business, Universitas Negeri Surabaya who had obtained diplomas throughout 2022. The sample used was a saturated sample considering that this study aims to explore graduate data related to careers. The results showed that the response rate reached 100%, with more than 67.8% of graduates getting jobs in less than six months with an income of at least 1.2 times the UMP, exceeding the institution's target. This tracer study plays an important role in evaluating the quality of graduates and the relevance of education to the world of work. These findings provide a basis for improving the curriculum and quality of education at Universitas Negeri Surabaya.*

Keywords *Tracer Study, Alumni, Response rate.*

1. INTRODUCTION

Tracer Study is a study of graduates that is conducted on graduates two years after graduation. Tracer Study aims to determine educational achievements in the form of transitions from college to the world of work, scientific outputs, namely self-assessment of mastery and acquisition of competencies, educational processes in the form of evaluation of the learning process, and the contribution of higher education to the acquisition of competencies and educational input in the form of further information gathering (Laguador and Dotong, 2013), (Sadi and Khannan, 20017), (Dotong, et al. 2016), (Renny et al. 2013).

Tracer Study is a study that collects feedback from graduates of an educational institution to monitor their achievement and career progress and provide important information to policy-making bodies on the issue (Mubuuke et al. 2014). More concrete goals include improving the content and learning of education and training conditions, improving the transition of graduates from education to the labor market, and towards better matching the supply of skills with their demand. Information about job search, job conditions and employment are considered as signals of job market opportunities for graduates of different study programs. What is interesting is the horizontal relationship between education and employment (Schomburg, 2016). Several studies conducted in the

past stated that the results of Tracer Study could not be considered conclusive because it was assumed that only the majority of successful or qualified people participated in this survey. However, research conducted by Heidemann (2011), proved that Tracer Study actually contains important information about acceptance into the workplace and the labor market including reflective assessment of study programs.

Tracer study Universitas Negeri Surabaya has been implemented in each department in order to fulfill accreditation needs. Instrument development is still carried out independently at the department and faculty levels. The problem solving in this tracer study research involves a series of strategies to overcome challenges that may arise during the implementation of the tracer study. One critical aspect of this approach is designing efficient and effective data collection methods. Strategies for utilizing technology such as online surveys or mobile applications can facilitate the data collection process, overcome obstacles related to distance and time, and provide speed in analyzing the results. Another approach is to focus on building cooperation and networks with various related parties, such as educational institutions, workplaces, and alumni.

One of innovation latest is utilization technology information , such as big data and high-level data analysis . continue , to collect , process , and analyze tracer study data with more sophisticated . This is allow study For explore relatedness between various variable , create better understanding complex about factors used in measure whether Graduates of Surabaya State University can it is said quality.

2. LITERATURE REVIEW

Tracer Study

Tracer Study is one of the research methods often used by educational institutions to track graduates in the workforce and evaluate the relevance of the curriculum to market needs (Schomburg, 2003). This research functions as a tool for evaluating the quality of education and as a basis for decision-making for the development of study programs. This article aims to review the literature related to the concept, methods, and applications of Tracer Study, as well as its relevance to improving the education system. According to Schomburg (2003), Tracer Study is a study designed to track higher education outcomes in terms of graduates' careers and the contribution of education to their achievements in the labor market. Tracer Study helps educational institutions understand the relationship between the education provided and the success of graduates in the workforce.

Tracer Study research usually uses quantitative and qualitative methods (Creswell, 2014). The quantitative approach often involves surveys with structured questionnaires to obtain data such as employment rates, income, job relevance to the field of study, and waiting time to get a job. Meanwhile, the qualitative approach can be done through in-depth interviews to gain insight into graduates' experiences in the workforce. Tracer Study results have been widely used for various purposes, including: 1) identifying gaps between curriculum and industry needs. 2) providing data needed for accreditation and certification of educational institutions, 3) providing input for improving study programs to be more relevant to market needs, and 4) providing prospective students, parents, and industry partners with an overview of the quality of graduates (UNESCO, 2017).

Some of the challenges faced in implementing Tracer Studies include: 1) graduates are often difficult to contact, so the data obtained may not represent the population, 2) implementing Tracer Studies requires significant human and financial resources, 3) limitations in questionnaire design or data collection methods can affect the validity of the results (Schomburg, 2003; Teichler, 2007).

Tracer Studies are an important tool for educational institutions to evaluate graduate success and curriculum relevance. However, to achieve optimal results, a mature research design, effective data collection strategies, and collaboration with various stakeholders are needed. By utilizing Tracer Studies, educational institutions can continue to improve the quality of their educational services to be more relevant to the needs of society and industry.

Student Alumni

The study of student alumni has become an important concern in higher education. Alumni play a key role in measuring the success of educational institutions and the relevance of academic programs. They are also part of a network that can support institutional development through financial contributions, reputation, or professional collaboration (Weerts & Ronca, 2007). This article aims to review the literature related to student alumni, including their role in institutions, the relationship between education and career, and alumni relationship management strategies. Student alumni refer to individuals who have completed their studies at an educational institution and have an important role in reflecting the quality of the institution. According to Weerts and Ronca (2007), alumni are also indicators of the institution's success in preparing graduates for professional challenges and social life. Studies on alumni often focus on the relationship between education and career success, contributions to their alma mater, and their role in building academic communities.

Research has shown that the quality of education plays an important role in alumni career success. According to Yorke (2006), factors such as curriculum relevance, learning experiences, and career support from the institution have a significant impact on graduates' ability to adapt to the job market. In addition, alumni networks can also help recent graduates find employment opportunities and build their careers.

Successful alumni can enhance the reputation of their educational institutions. They often become "ambassadors" who help promote the institution to the wider community. Many institutions rely on donations from alumni to support various programs, including scholarships, research, and facility development (Laguador & Dotong, 2013). Alumni can build collaborations with institutions through mentoring programs, internships, or industry partnerships. Effective alumni relationship management requires a strategic approach that involves ongoing communication, relevant programs, and community engagement. Some strategies that are often used include: 1) Using social media, websites, and alumni-specific applications to facilitate communication and collaboration (Sadi, Lucitasari, & Khannan, 2017). 2) Building emotional connections through regular events that bring alumni together. 3) Connecting alumni with current students to share knowledge and experiences.

Student alumni are an important asset to educational institutions. Studying alumni provides insights that can be used to improve the quality of education, strengthen institutional networks, and support graduate success. With good management, alumni can make significant contributions to the development of institutions and society as a whole.

3. METHODS

Types of research used is descriptive qualitative. Research This is type research that describes or to describe about a object study based on characteristics that are owned. Research descriptive qualitative aiming explain phenomenon as deep as possible through data collection. According to Sugiyono (2019) types study including study qualitative with primary data sources,where use document observation with completed questionnaire directly by respondents.

Population in study This is graduate of Faculty Economics and Business, Surabaya State University, which has get a diploma throughout 2022. Sample used is sample fed up remember study This aiming For exploring graduate data related career. Some researcher focus on tracer study: sample fed up is technique taking sample when all over member population made into sample (Syafiq, 2016). So the total sample in study This is 528 graduates.

Collection techniques in research This use questionnaire. The questionnaire used is questionnaire a mixture consisting of from question open and questions closed. The questionnaire used developed by the team compiler Unesa Tracer Study Questionnaire through a number of activity among others (1) identification objective survey referring to the Ministry of Education and Culture 's Tracer Study guidelines. Tracer Instrument studies conducted University covers all over core questions of the online tracer study that have been created and determined by the Directorate General Belmawa ; (2) Development instrument based on need Faculties and Study Programs in the Faculty Economics and Business Unesa.

Analysis of the data used is method descriptive analytical , namely describe the data collected in the form of words, pictures, and not numbers . Data derived from from script, interview, notes field, documents, and so on, then described so that can give clarity to fact or reality (Usman and Akbar, 2009).

Data analysis version of Miles and Huberman, that There is three channel activities, namely data reduction, data presentation, and withdrawal conclusion or verification (Sudarto, 1997).

a. Data reduction means as a process of selection , centralization attention to the simplification , abstraction , and transformation of the " rough " data that emerges from notes field . Reduction done since data collection, started with make summary, coding, tracing themes, writing memos, and so on, with Meaning set aside data or information that is not relevant, then the data is verified.

b. Data presentation is description a bunch information composed which gives possibility existence withdrawal conclusions and conclusions action. Presentation of qualitative data served in form text narrative, with objective designed use merge organized information in compact and easy form understood.

c. Withdrawal conclusion or verification is activity end study qualitative. Researchers must come to a conclusion and do it verification, ok from aspect meaning and the truth of the conclusions agreed upon by the place where the research was conducted. The meaning formulated by the researcher from the data must be tested for its truth, suitability, and robustness.

4. RESULTS

Alumni Tracing/Tracer Study is an effective medium used to track the absorption of college alumni. In addition, Tracer Study can be used to track the existence and condition of alumni at 1 (one) year after graduation. Tracer studies must be carried out periodically as an effort to overcome the gap between graduates and the needs of graduate users. Based on the objectives of the general and specific objectives of the implementation of the Tracer Study, the following is a description of the research results.
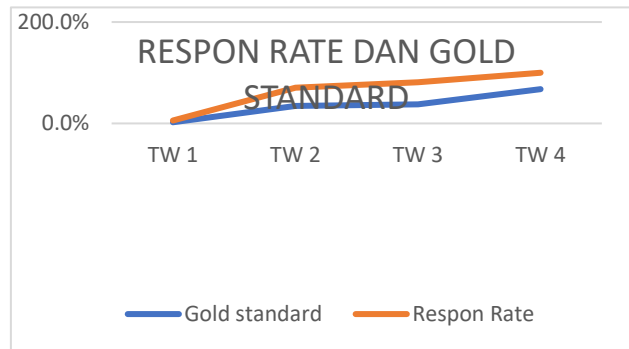

Figure 1. Progress of filling in the 2022 Faculty of Economics and Business Alumni Tracer

The alumni tracer per quarter which shows progress in a positive direction from the previous year, where at the end of March (Quarter 1) the data entered for 2022 alumni who filled in a total of 5.8%, then increased at the end of June (Quarter 2) a total of 10% of alumni who filled in, then at the end of September (Quarter 3) a total of 20% had successfully filled in. Furthermore, it increased rapidly in November around 97.5% and finally the December data (Quarter 4) showed data on alumni who had filled in the alumni tracer as much as 100% complete. This positive progress is inseparable from the support and cooperation of each study program at the Faculty of Economics and Business. In detail, the status of alumni tracer filling per study program is as follows.

Table 1. Tracer Completion Status by Study Program

No	Study Programs	Target	Achievements	Persentage
1	S1 Akuntansi	62	62	100,00%
2	D3 Akuntansi	1	1	100,00%
3	S1 Ekonomi Islam	72	72	100,00%
4	S1 Manajemen	114	114	100,00%

5	S1 Ekonomi	36	36	100,00%
6	S1 Pendidikan Administrasi Perkantoran	53	53	100,00%
7	S1 Pendidikan Akuntansi	59	59	100,00%
8	S1 Pendidikan Ekonomi	63	63	100,00%
9	S1 Pendidikan Tata Niaga	59	59	100,00%
Total		519	519	100,00%

For FEB Unesa alumni, the achievement of filling the tracer by 2022 alumni is perfect with all alumni from all study programs having filled in the tracer, namely from the target of 519 alumni, the achievement of alumni who filled in 519 alumni. With 9 study programs with 100% achievement.

Regarding the quality of FEB graduates based on the results of the questionnaire, it can be concluded as follows.

Table 2. Quality of FEB Graduates for 2022 alumni

Population tracer		519
fillers tracer	519	100%
Full time/part time	353	68,02%
not yet possible to work	12	2,31%
Entrepreneur	52	10,02%
continuing education	26	5,01%
not working but looking for a job	76	14,64%
worked less than 6 months	299	57,61%
working less than 6 months and a salary of 1.2 minimum wages	274	52,79%
number of gold standard universities	352	8,34%
number of gold standard faculty	352	67,82%
number of gold standard study programs	352	

Based on table 2, it shows that the total population of the 2022 alumni tracer is 519 and those who have filled in are 519 or 100%.

Table 3. Alumni workplace operation level

Local/region	30,3%	106
National	63,4%	222
International	6,3%	22

Regarding the operational areas where alumni work, presented in Table 6, all FEB alumni who have found jobs for alumni who graduated in 2022 are 356 alumni, divided into several levels of work, namely local / regional jobs as many as 106 alumni (30.3%), national level jobs are as many as 222 alumni (63.4%), and the rest work for companies at the international / multinational level as many as 22 alumni (6.3%). This shows that the majority of national-scale companies accept alumni from FEB to work there.

Figure 2. Types of Institutions Where Alumni Work

Based on Figure 4, the majority of FEB alumni work in private companies, which is 61.6%. Next, there are 12.5% working in their own or family businesses and there are 10.1% of FEB alumni working in government agencies. In addition, there are FEB alumni who work in BUMN/BUMD, which is 12.5% and those who work in non-profit organizations/Non-Governmental Organizations, which is 2.4%. And finally, FEB alumni who work in multilateral institutions/organizations are 1%.

5. DISCUSSION

Based on the results of the study, the quality of graduates of the Faculty of Economics and Business in terms of quantity for alumni tracking with a total of 519 was successfully tracked or in other words the response rate of the Faculty of Economics and Business Unesa tracer study was 100%.

For FEB Unesa alumni, the achievement of filling the 2022 alumni tracer has been perfect with all alumni from all study programs having filled in the tracer, namely from the target of 519 alumni, the achievement of alumni who filled it was 519 alumni.

The data results show that most national-scale companies accept alumni from FEB to work there. Most FEB graduates work as staff or administrators because they are new to the world of work. This shows that most assessments are quite close between the field of study and the field of work that alumni are currently working in, and shows that most jobs for alumni who graduated in 2022 currently require a level of education equivalent to higher education. The majority of alumni work in private companies

6. CONCLUSION

The quality of graduates of the Faculty of Economics and Business of Surabaya State University in 2022 showed positive results, with 100% of respondents completing the tracer study. The majority of alumni managed to get a job in less than six months, with income according to the standard of the university's main performance indicators. This result reflects the success of the faculty in preparing graduates who meet the needs of the labor market.

The results of this study underline the importance of tracer studies in identifying the match between educational programs and the needs of the world of work. The Faculty of Economics and Business is expected to utilize this data to improve the relevance of the curriculum and the quality of education offered.

7. LIMITATION

This study has several limitations that need to be considered. First, the study was only conducted on students of the Business Education Study Program at Surabaya State University, so the results cannot be generalized to other study programs or universities. Second, the data collection method that relies on questionnaires or interviews relies on the subjective perceptions of respondents, so it has the potential to cause bias. Third, this study did not consider other variables such as learning motivation, social environment, or family support that may also affect student achievement. In addition, the use of a cross-sectional research design only describes correlations at a certain time and cannot show cause-and-effect relationships. Another limitation is the measurement instrument which may be less able to capture the complex dimensions of the variables studied. Finally, this study did not consider contextual factors such as changes in education policy or economic conditions that could affect the results more broadly.

REFERENCES

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: SAGE Publications. https://us.sagepub.com/en-us/nam/research-design/book246896

Dotong, C. I., Chavez, N. H., Camello, N. C., De Castro, E. L., Prenda, M. T. B., & Laguador, J. M. (2016). Tracer study of engineering graduates of one higher education institution in the Philippines for academic year 2009–2012. *European Journal of Engineering and Technology, 4*(4), 26–39. http://www.idpublications.org

European Training Foundation. (2017). *Tracer studies: Evaluating the impact of training programmes*. https://www.etf.europa.eu/sites/default/files/m/CEDE612F00BFF6B3C12581A600278816_Tracer%20studies.pdf

Hariyanto, A., Nudin, S. R., Nurul, S. H., Rahman, Y., & Kautsar, A. (2021). Achievement of graduates on skills that have been given by education university. *Technium Social Sciences Journal, 15*, 131–135. https://techniumscience.com/index.php/socialsciences/article/view/332/124

Heidemann, L. (2011). Only successful graduates respond to tracer studies: A myth? Results from the German cooperation project tracer studies. https://www2.almalaurea.it/universita/pubblicazioni/wp/pdf/wp13.pdf

Laguador, J. M., & Dotong, C. I. (2013). Tracer study of BS computer engineering graduates of Lyceum of the Philippines University. *International Journal of Management, IT and Engineering, 3*(8), 387–401. http://www.ijmra.us

Mubuuke, A. G., Businge, F., & Kiguli-Malwadde, E. (2014). Using graduates as key stakeholders to inform training and policy in health professions: The hidden potential of tracer studies. *African Journal of Health Professions Education, 6*(1), 52–55.

Pramedi, A. D., & Asandimitra, N. (2021). Pengaruh financial literacy, financial knowledge, financial attitude, income dan financial self-efficacy terhadap financial management behavior entrepreneur lulusan perguruan tinggi di Surabaya. *Jurnal Ilmu Manajemen, 9*(2), 572–586.

Purwanto, M. (2011). *Evaluasi program pendidikan*. Bandung: Remaja Rosdakarya. https://opac.perpusnas.go.id/DetailOpac.aspx?id=925638

Renny, R., Chandra, S., Ruhama, & Sarjono, M. W. (2013). Exploring tracer study service in career center web site of Indonesia higher education. *International Journal of Computer Science and Information Security, 11*(3), 36–39. http://arxiv.org/abs/1304.5869

Rusman. (2012). *Manajemen kurikulum*. Jakarta: Rajawali.

Sadi, D. R., Lucitasari, & Khannan, M. S. A. (2017). Designing mobile alumni tracer study system using waterfall method: An Android-based. *International Journal of Computer Networks and Communications Security, 7*(9), 196–202.

Schomburg, H. (2003). *Handbook for graduate tracer studies*. Kassel: International Centre for Higher Education Research (INCHER-Kassel). https://www.uni-kassel.de/einrichtungen/en/incher/publications/handbooks

Schomburg, H. (2016). *Carrying out tracer studies: Guide to anticipating and matching skills and job* (Vol. 6).

Sudarto. (1997). *Metodologi penelitian filsafat*. Jakarta: Raja Grafindo Persada.

Sugiyono. (2019). *Metodologi penelitian kuantitatif dan kualitatif dan R&D*. Bandung: Alfabeta.

Syafiq, A. (2016). *Metodologi dan manajemen tracer study*. Jakarta: Raja Grafindo Persada.

Teichler, U. (2007). *Careers of university graduates: Views and experiences in comparative perspectives*. Dordrecht: Springer. https://link.springer.com/book/10.1007/978-1-4020-5926-1

UNESCO. (2017). *Graduate tracer studies: A tool for institutional development*. Bangkok: UNESCO Office. https://unesdoc.unesco.org/ark:/48223/pf0000259930

Weerts, D. J., & Ronca, J. M. (2007). Characteristics of alumni donors who volunteer at their alma mater. *Research in Higher Education, 49*(3), 274–292. https://doi.org/10.1007/s11162-007-9085-4

Yorke, M. (2006). *Employability in higher education: What it is – what it is not*. Learning and Employability Series One. York: The Higher Education Academy. https://www.advance-he.ac.uk/knowledge-hub/employability-higher-education