

The Effects of Online Learning on Pre-Service Teachers' Social Facilitation during Covid-19 Pandemic

Ishmatun Naila¹, Qaulan Sadida²

¹Muhammadiyah University of Surabaya, Sutorejo 59, Surabaya, 60113, Indonesia

²Airlangga University, Airlangga 4 - 6, Surabaya, 60115, Indonesia

nailaishma@gmail.com

Abstract. Social facilitation is known as the tendency of people to perform tasks better when it is simple and worse when it is complex, with presence of others. This paper aims to find out whether there is any effect of online learning with pre-service teacher's social facilitation during pandemic period or not. Online learning or E-Learning is one of distance learning methods, which nowadays massively used in almost all stages of education, especially during the worldwide-issued 'work from home'. The subjects are pre-service elementary teachers in Muhammadiyah University of Surabaya class of 2018. The method used in this research was qualitative description. The data collected from online survey with 45 respondents. Based on the data it was found that 97.7% of respondents conducted online learning, and 58.1% were having trouble understanding the material from online lectures. Material information obtained through online learning was less acceptable to respondents. 96.5% of them experiencing stark difference which more than half (66.3%) are having less enthusiasm to follow the online lectures. 97.7% respondent chose face to face meeting better than online learning. The results showed that they were inclined to do a better job or performance when they had not been alone or felt like they are being monitored and having other friend to share some thought, which could facilitate their behaviours.

1. Introduction

Since the Corona Virus Disease (Covid-19) pandemic struck almost every countries in the world [1], it has given its own challenges for educational institutions, especially higher education. Anticipating the transmission of the virus the government has issued various policies, such as isolation, social and physical distancing for large-scale social restrictions [2]. This condition requires citizens to stay at home, work, worship, and study at home. Such conditions require educational institutions to innovate the learning process. One form of innovation is to do online learning. Online learning is defined as a form of flexible and easy learning experiences delivered through the use of information and computer technologies to be accessible anytime, anywhere, by anyone [3][4]. However, online learning also can't be separated from problems that become obstacles in its implementation, including online learning to pre-service teachers in educational institutions. Therefore, various creative ideas are needed as a solution and also steps taken in the future as projections [5]. Obstacles, solutions and projections of online learning for pre-service teachers are important to know, considering that this learning system is used by lecturers and institution that graduates pre-service teachers and education personnel, as a result of the Covid-19 pandemic.

As pre-service teachers are not only required to be experts in delivering materials / teaching materials offline (face to face in class), but are also required to be able to use an online learning system [6], [7]. Some obstacles will certainly be found in the online learning process, so students in general must find their own solutions to the obstacles they face. According to the preliminary research, it was found that many in the COVID-19 cohort of students will worry about suffering long-term disadvantages, compared to those who studied "normally", when they move to another level of study or enter the labour market. Statements from

tertiary institutions that they will apply admission criteria “compassionately” may not always reassure [8] beside that uncertainties about when life will return to “normal” compound the anxiety. Even as institutions make the changes required to teach in different ways, all should give the highest priority to reassuring the students (in this case are pre-service teachers) and their parents— with targeted communication [9]. Various obstacles found during the online learning process can affect the psychological condition of students, so it is necessary to have a solution to these obstacles, for example the ability to manage stress faced. According to the research by Jamaluddin et.al., three big things that become obstacles are accumulated tasks, wasteful internet quota, and lack of internet network [5], [10]. And that obstacles surely affect to their psychological conditions [8], [10]. This condition is interesting to study considering that this online learning system was first carried out by all students simultaneously.

At this time pre-service teachers are required to study online, because it is not possible to do offline classes or face to face lectures. Meanwhile, they need several practices and discussions with friends and lecturers so that they are able to develop competencies as teachers such as managing classes, creating an atmosphere of active learning, and having good relationships with their students [11]. From these problems, it is necessary to examine how social facilitation of pre-service teachers with online learning where they are not susceptible to peer review or having audiences. the purpose of this study was to find out whether e-learning has an impact on pre-service teachers' social facilitation, as we know social facilitation refers to an increased drive that lead to enhanced desires for good performances [12] But there are two conditions that make up an social facilitation according to Zajonc; firstly, the presence of others can induce a dominant response which tends to be correct on simple tasks and develops facilitated performances; secondly, co-workers or peers' appearance on complex tasks will incite incorrect dominant response resulting in debilitated performances [13]. This study conducted to determine whether pre-service teachers' performances will increase or decrease with online learning.

2. Method

The method used in this study was qualitative description [14]. The subjects were 45 pre-service teachers from class of 2018. The subjects were chosen because they were pre-service teachers in a population of Counselling Guidance course which required a lot of face-to-face, sharing, peer reviews, and practices activity. The data collection was done by online questionnaire, observation, and interview.

The data obtained through filling in questions shared with all respondents in the form of google form. Then the data collection was analysed using Microsoft Excel and interpreted to an explanation. The components contained in the questionnaire consisted of several questions, namely: a. participation in all online lectures during this pandemic; b. the knowledge absorbed from online lectures; c. percentage of knowledge from online lectures; d. the difference from online lectures and face-to-face in learning performance; e. performance during online lectures; f. In online learning, did they get more excited or unwilling to follow it; g. whether learning individually (not sitting in class with friends) can increase their understanding of learning; h. the preference of study in class face to face or study online.

3. Result and Discussion

a. Respondent Profile

Respondents in this study were students of the 2018 class at Primary School Teacher Education Study Program in Guidance and Counselling classes. The number of respondents was 45 people, consisting of 10 male students and 35 female students.

b. Participation in Online Learning

Participation in online learning discussed are whether students attend all online lectures in full, whether students could understand the material from online lectures, and the percentage of understanding of online lectures attendance.

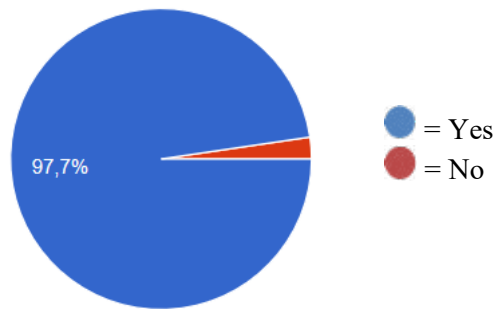


Figure 1. Pre-service Teachers' Participation in Online Learning

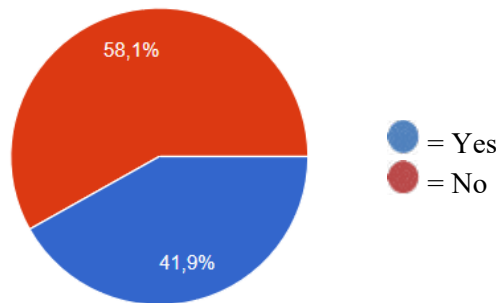


Figure 2. Pre-service Teachers' Understanding in Online Learning

The figures showed that pre-service teachers followed almost all online classes (97.7%) and had less understanding in online classes (58.1% did not understand the lectures given in online learning). There were several reasons why they did not understand better on online learning, firstly because they learn on their own, second, they learn without lecturer's explanation, and third, they can't have peer discussions. The percentage of understanding is as follows; 100% (4 teachers), 80% (20 teachers), 60% (2 teachers), 40% (19 teachers).

The platform used for the learning process provided by the university. It has many facilitations included file sharing, forum discussion, evaluation, etc. Although there are many advantages can be used in the platform, neither the lecturer nor the pre-service teachers can maximize the facilities provided. The downside is the pre-service teachers unable to do practices in real situations and they aren't used to the online method to further their education. This habit is certainly a determining factor for the success of online learning. If the respondent was familiar with online system learning, then the basic capital in the online system learning process could be fulfilled. Remembering basic techniques were such as operating applications is important to support the success of learning with this online system [5].

c. Performance in Online Learning

The presence of another person and its relationship with performance is the question at the heart of social facilitation research [15]. It was explainate in three questions i.e. 1) whether there was any difference from online lectures and face-to-face in learning performance; 2) how was their performance during online lectures; 3) In online learning, whether they were getting more excited or lazy to follow it; 4) whether learn individually (not sitting in class with friends) could increase your understanding of learning; 5) Their study preference in class face to face or study online.

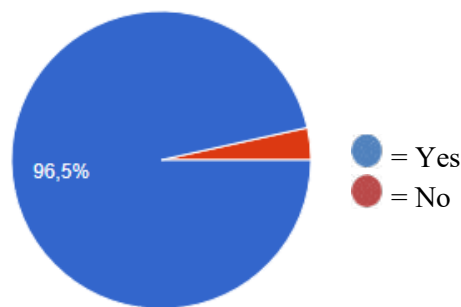


Figure 3. Pre-service Teachers' Answer about Having Difference in Online or Offline Learning to Their Performances

Many researchers (following Triplett, 1898) had found that the presence of others could facilitate task performance [15], [16]; other investigators (following Pessin, 1933) had observed that performance could be impaired by the presence of others. Bond's article reported a quantitative review of 241 empirical studies on the social facilitation and impairment of human task performance. Theories of social facilitation provided a framework for appreciating this wealth of evidence [15]. Social facilitation was the phrase used to describe an increasing effort by a person working in a group or with the presence of others [17]. Common explanations increased arousal from the mere presence of others [13] and evaluation apprehension [18]. Figures 3 showed that pre-service teachers experienced a decreasing learning performance. It was related to the question number 5) preference of study in offline class or online class and the result showed in Figure 4.

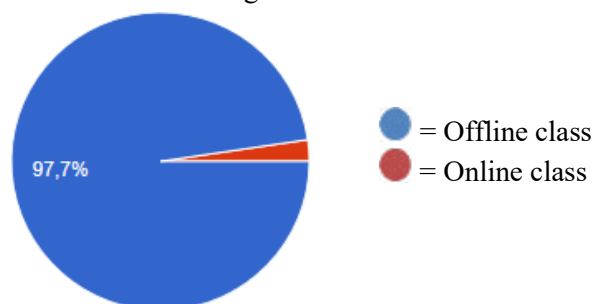


Figure 4. Pre-service Teachers' Preference of Study

97.7 % of 45 pre-service teachers chose offline class better than online class which showed their performance could be better by learning with others, not online, and alone. Further question about how their performance during online lectures could be seen in Figure 5 which showed 23 teachers' had 50% performance by learning online. It could be strengthen the earlier question about their preference of study and whether they were doing better in online or offline class. More than half of them (23 pre-service teachers) felt their performance decreased. It had also been proven from previous studies that showed that a person's performance would improve by studying/working in groups [17], [19]. It could be further explained as when someone else was present, people tended to behave in accordance with socially expected standards of performance [16]. It leads to compatibility with what they think the experimenter or others want them to do, and they usually try harder in their performance and do a good job, but only when they think that they could be monitored (i.e. when there are consequences of the experimenter). The second main effect found was an increase in alertness or attention. Thus, people are more attentive to what was going on and affected in their behavior, when someone is present versus when they are alone [20].

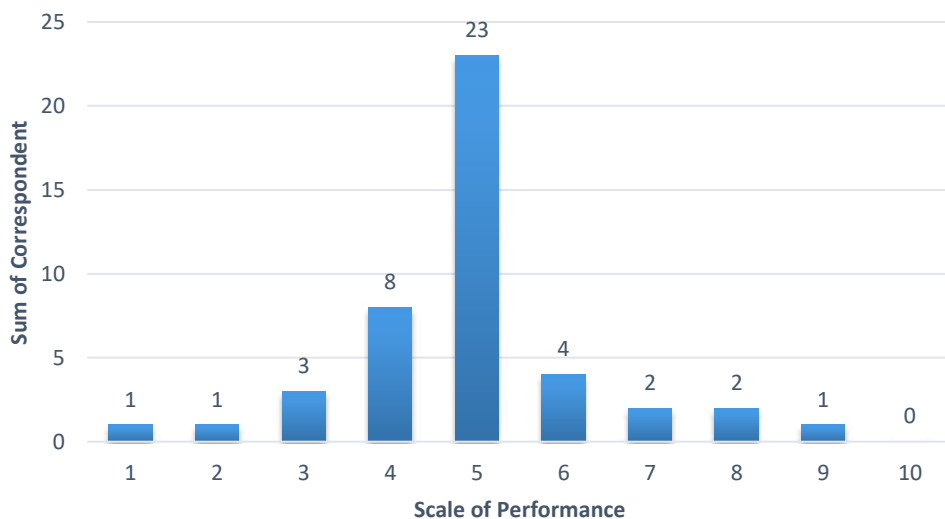


Figure 5. The Scale of Pre-service Teachers' Performance in Online Learning

Another question in this section related to previous research is 3) whether they were getting more excited or unwilling to learn in online classes, and the result shown in Figure 6.

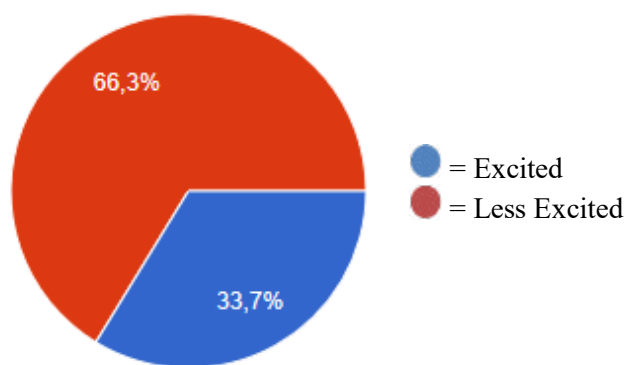


Figure 6. Pre-service Teachers' Enthusiasm in Online Learning

The factors affecting performance in the presence of another person were comprehensively delineated by Allport (1924) and Dashiell (1935), and they included competition (rivalry), modelling, encouragement or social reinforcement, arousal, monitorability, imitation, group membership, distraction, and evaluation [16][21]. They were related to this study, which showed the enthusiasm of pre-service teachers in online learning. 66.3% of them choose less excited to follow online classes than face to face classes. It could be concluded that online learning affected pre-service teachers' social facilitation whose performance decreased sharply than their performance in offline learning.

4. Conclusions

Based on the findings, it could be seen that online learning done from home, alone, and usually only in the form of lectures or presentations had a significant impact on the performance of pre-service teachers in the aspects of motivation, enthusiasm, and understanding. More than half of the respondents admitted that they had difficulty adjusting to online learning methods when they were more familiar with face-to-face learning and it hampered their ability to complete a task given by the lecturer, as they were incapable of discussing it in real time with their peers and did a hands-on approach. Furthermore, they were inclined to do a better job or performance when they were not alone or feel like they were being monitored. Online learning also had an effect on the attention of pre-service teachers as well, knowing that they were not being sized up or demanded to pay attention exclusively they tended to hold a less tight grip on the lectures or tasks given.

5. Acknowledgment

Wahju Kusumajanti, Dr, the Head of English Literature Program of Sunan Ampel State Islamic University, for giving the idea to the research. Her thought and time are the most precious thing given for this paper. Rector of Muhammadiyah University of Surabaya, Dean of Teacher Training and Education Faculty Muhammadiyah University of Surabaya, for the opportunity given to do this research, is the most important thing that this research can be held. Pre-service Teachers in Class of 2018, Study Program of Elementary Teacher Education, Muhammadiyah University of Surabaya who participated in this research, giving their time, energy, and thought so this research could be done.

6. References

- [1] S. Barua, "Understanding Coronanomics: The economic implications of the coronavirus (COVID-19) pandemic," *SSRN Electron. J.* <https://doi.org/10/ggq92n>, 2020.
- [2] S. H. Thorik, "Efektivitas Pembatasan Sosial Berskala Besar di Indonesia Dalam Penanggulangan Pandemi Covid-19," *'ADALAH*, vol. 4, no. 1, 2020.
- [3] A. Kusmana, "E-learning dalam Pembelajaran," *Lentera Pendidik. J. Ilmu Tarb. dan Kegur.*, vol. 14, no. 1, pp. 35–51, 2017.
- [4] T. I. M. P. J. JAUH and P. D. A. N. P. MUTU, "PANDUAN VERIFIKASI BLENDED LEARNING."
- [5] D. Jamaluddin, T. Ratnasih, H. Gunawan, and E. Paujiah, "Pembelajaran daring masa pandemik Covid-19 pada calon guru: hambatan, solusi dan proyeksi," *LP2M*, 2020.
- [6] I. Naila and Q. Sadida, "VALIDITAS PERANGKAT PEMBELAJARAN MATEMATIKA BERBASIS SCAFFOLDING UNTUK SISWA SEKOLAH DASAR," in *PROCEEDING*, 2020.
- [7] I. Naila, B. Jatmiko, and E. Sudibyo, "Developing Entrepreneurship-oriented Project-based Learning Devices to Improve Elementary School Students' Collaboration Skills .," *Int. J. Innov. Sci. Res. Technol.*, vol. 4, no. 8, pp. 412–416, 2019.
- [8] S. J. Daniel, "Education and the COVID-19 pandemic," *Prospects*, pp. 1–6, 2020.
- [9] C. S. Marshall, S. Yamada, and M. K. Inada, "Using Problem-based Learning for Pandemic Preparedness," *Kaohsiung J. Med. Sci.*, vol. 24, pp. S39–S45, 2008.
- [10] S. Agarwal and J. S. Kaushik, "Student's perception of online learning during COVID pandemic," *Indian J. Pediatr.*, p. 1, 2020.
- [11] I. Naila, B. Jatmiko, and E. Sudibyo, "Training Elementary Students' Collaborative and Entrepreneurship Skills Using Science Student Worksheet Based on Project Learning," in *1st Borobudur International Symposium on Humanities, Economics and Social Sciences (BIS-HESS 2019)*, 2020, pp. 616–621.
- [12] S. G. Harkins, "Social loafing and social facilitation," *J. Exp. Soc. Psychol.*, vol. 23, no. 1, pp. 1–18, 1987.
- [13] R. B. Zajonc, "Social facilitation," *Science (80-.)*, vol. 149, no. 3681, pp. 269–274, 1965.
- [14] M. Sandelowski, "Whatever happened to qualitative description?," *Res. Nurs. Health*, vol. 23, no. 4, pp. 334–340, 2000.
- [15] C. F. Bond and L. J. Titus, "Social facilitation: a meta-analysis of 241 studies.,," *Psychol. Bull.*, vol. 94, no. 2, p. 265, 1983.
- [16] B. Guerin, "Social facilitation," *Corsini Encycl. Psychol.*, pp. 1–2, 2010.
- [17] M. Gagne and M. Zuckerman, "Performance and learning goal orientations as moderators of social loafing and social facilitation," *Small Gr. Res.*, vol. 30, no. 5, pp. 524–541, 1999.
- [18] N. B. Cottrell, D. L. Wack, G. J. Sekerak, and R. H. Rittle, "Social facilitation of dominant responses by the presence of an audience and the mere presence of others.,," *J. Pers. Soc. Psychol.*, vol. 9, no. 3, p. 245, 1968.
- [19] M. VanTuinen and S. P. McNeel, "A test of the social facilitation theories of Cottrell and Zajonc in a coaction situation," *Personal. Soc. Psychol. Bull.*, vol. 1, no. 4, pp. 604–607, 1975.
- [20] M. J. Rockloff and V. Dyer, "An experiment on the social facilitation of gambling behavior," *J. Gambl. Stud.*, vol. 23, no. 1, pp. 1–12, 2007.
- [21] T. Cole, D. J. K. Barrett, and M. D. Griffiths, "Social facilitation in online and offline gambling: A pilot study," *Int. J. Ment. Health Addict.*, vol. 9, no. 3, pp. 240–247, 2011.