THE INFLUENCE OF GRATITUDE ON STUDENT ENGAGEMENT WITH TEACHER FEEDBACK AS A MEDIATING VARIABLE

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ABSTRACT

During the pandemic, student involvement decreased because face-to-face or offline learning changed to online. Gratitude is a person's feeling of gratitude for the things that exist in his life, gratitude has an influence on student involvement. Previous studies have examined the relationship between gratitude and student engagement. However, previous research has not explained teacher feedback as a mediator. This study aims to determine the effect of gratitude on the involvement of junior high school students with teacher feedback as a mediating variable. The type of research used is correlational quantitative research. The participants in this study were teenagers aged 12-14 years. Researchers used a technique of distributing questionnaires containing questions that had been prepared previously for the sampling technique. The type of questionnaire used was a closed questionnaire, in which participants answered with the answer choices provided. The measuring instruments used in this study were the Gratitude Questionnaire to measure gratitude, the Student Engagement Instrument to measure student engagement, and the Teacher Feedback Questionnaire to measure feedback given by teachers to students. Based on the results of the analysis using the SEM (Structural Equation Modeling) Model from Lisrel 8.8, it was found that the feedback given by the teacher as a mediator to students affected students' gratitude. In this study it was not proven that gratitude affected student involvement, nor was it proven that teacher feedback as a mediator had an effect on student involvement.

Keywords: Gratitude, student engagement, influence of teacher feedback

1. PREFACE

In early 2020, the world was struck by the COVID-19 virus pandemic. All daily activities had to be halted, and the community was expected to implement strict measures to prevent the spread of the virus. One example of these measures was staying at home. People who stayed at home utilized available information technology to stay connected with the outside world. Many jobs were carried out online, helping to maintain the flow of activities and community engagement (Dunford et al., 2020).

Online activities also took place in Indonesia during the pandemic, with 6,462 schools transitioning from in-person to remote learning, covering all levels of education from early childhood to higher education. This transition affected 68.8 million students learning from home and 4.2 million teachers and lecturers teaching from home (Ali, 2020). According to a survey conducted by the Ministry of Education and Culture, 97.6% of schools implemented remote learning activities, while 2.4% of schools conducted in-person learning (Ministry of Education and Culture, 2020).

In-person learning at schools was a government-mandated measure to break the chain of COVID-19 transmission. This decision was made after observations by the Ministry of Education and Culture of Indonesia in collaboration with other ministries, institutions, and local governments. Online learning became the primary strategy for education during the COVID-19 pandemic. It

required the availability of learning resources and supportive facilities such as networks, digital materials, and more. It also required mental preparedness for students, teachers, parents, and school principals to ensure that students could continue learning comfortably in the current situation (Ministry of Education and Culture, 2020).

Students had to use gadgets for learning, which sometimes distracted them from studying as they could play games during online classes, especially if not supervised by parents. The use of gadgets led to laziness among some students who chose to play with gadgets rather than participate in online learning ("Sekolah Daring," 2020).

Many students who were previously involved in in-person learning had to suddenly transition to remote learning. Previous research on the challenges and benefits of online learning (Martin, Ahlgrim-Delzell, & Budhrani, 2017; Olt, 2018) suggested that students enjoyed and appreciated online classes (Seiver & Troja, 2014). However, effective online learning required careful planning, introduction, gradual implementation, and a variety of teaching methods. This became challenging due to the pandemic.

Student engagement involves positive emotions related to starting and conditioning activities related to learning, including motivation, dedication, and absorption (Ouweneel, Blanc, & Schaufeli, 2011). Motivation can be defined as extraordinary energy and resilience in learning, a willingness to work hard without fatigue, and a display of perseverance. Dedication means having a strong understanding, pride, and enthusiasm for learning and showing high devotion to learning with courage to face challenges. Absorption means a state where students become highly involved, focused on learning, and enjoy learning moments (Siang & Santoso, 2016).

McCullough, Emmons, and Tsang (2002) defined gratitude as an individual's tendency to recognize, identify, and respond with gratitude to positive experiences in one's life. Gratitude also involves two aspects. First, gratitude needs to be experienced and felt in the goodness of one's life. Second, gratitude requires the knowledge or understanding that the goodness comes from others. This is why gratitude exists in a person, as gratitude can occur due to humility in depending on others (Emmons, 2010).

Feedback given by teachers or peers is an aspect of classroom learning dynamics and is found in research as an important concept when discussing ways to improve student performance in school (Hattie, 2012; Van der Kleij et al., 2015). Feedback can be provided orally, visually, in writing, or kinesthetically, but formal feedback is more often found in written form (Gardner, 1993). In the learning process, students carry out daily tasks and activities, and feedback emerges as a fundamental factor in the teacher-student relationship (Black & William, 1998; Black, Harrison, Lee, Marshall, & Wiliam, 2002).

Previous research (Wang & Jin, 2019; Yuksel, 2020; Zhen et al., 2019) found that gratitude had a direct and positive impact and predicted student engagement. However, unlike the results of the aforementioned studies, Ouweneel (2011) found that gratitude did not lead to increased student engagement. This study aims to further examine the relationship between these two variables and introduce teacher feedback as a mediator.

Social support plays a mediating role in the relationship between gratitude and student engagement (Zhou et al., 2019). Teacher feedback is one form of social support provided by teachers to students. Mediation is needed for the relationship between gratitude and student engagement, specifically social support in the form of teacher feedback, to support the relationship between the two variables. This study explores whether gratitude still influences student engagement during a pandemic, with the changing conditions from in-person to online schooling.

Previous research was conducted during in-person learning, where students could meet their teachers face-to-face. It is still a question whether the same applies to online learning. Previous studies have found that teacher feedback improves and influences student engagement (Carvalho et al., 2020; Hyland, 2005; Iraj et al., 2019; Scott et al., 2011).

Chu (2020) found that students responded positively to feedback given by teachers, feeling that teachers were always present, provided feedback promptly, appreciated their efforts, and expressed gratitude for the students' work. Another study (Zhou et al., 2019) also found that students felt gratitude when given feedback by classmates and perceived their work as being taken seriously and appreciated. However, research on gratitude and teacher feedback has not been conducted extensively.

Previous research shows that social support and gratitude play a positive and significant role in a teacher's subjective well-being. The higher the social support and gratitude, the higher a teacher's subjective well-being. Conversely, lower social support and gratitude are associated with lower teacher well-being (Qishy et al., 2023).

Research on online learning has been conducted for students aged 11-18 years (Biber, 2020; Bryson & Hand, 2007; Czech, 2020; Wang & Jin, 2019; Wu; Huebner; Tian, 2020). However, previous research did not explain the availability of learning resources and supportive facilities that could help students engage in online learning. While previous research mentioned gratitude among students, it did not provide a detailed explanation of how it could affect student engagement in learning. Previous research also explored the relationship between gratitude and feedback given by classmates and the relationship between feedback and student engagement. However, no research has connected all three variables: gratitude, student engagement, and teacher feedback, which is the focus of this study.

The theoretical benefits of this research are expected to help answer previous research questions about the impact of gratitude on student engagement, with teacher feedback as a moderator, for younger children. This research is also expected to enrich and complement previous research. The research is expected to contribute to the development of psychology, particularly in online learning during the COVID-19 pandemic. It is also hoped that this research can serve as a reference for schools, as well as for teachers and parents involved in the educational development of students during the COVID-19 pandemic and online learning. The researcher hopes that this research will be beneficial for everyone's well-being.

2. RESEARCH METHOD

Participant

The characteristics of the participants in this research are students aged 12-14 years at XYZ School in Jakarta. The study does not restrict gender, and it includes students who use English as their first language. The researcher conducted the study with a total of 100 junior high school students who were engaged in online learning. The inclusion of 100 or more participants is necessary for data processing using Structural Equation Modeling (SEM).

Measurement

Given the research objective, which is to examine the relationship between gratitude and student engagement with teacher feedback as a mediator, the research design employed is quantitative correlational. In quantitative correlational research, two or more variables are measured to obtain scores (typically two score values). After measurement, testing is conducted to determine the existing patterns of relationships between variables and to measure the strength of those relationships (Gravetter & Forzanno, 2010). The researcher used a questionnaire deployment technique containing pre-structured questions. The type of questionnaire used was a closed-ended questionnaire, where participants respond with predefined answer choices.

Gratitude can be measured using the Gratitude Questionnaire by McCullough et al. (2002). The questionnaire consists of 6 questions measured on a Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree). Sample questions from the Gratitude Questionnaire include "I have many things to be thankful for in life." The reliability of the Gratitude Questionnaire is Cronbach's alpha 0.82 to 0.87.

According to Carter et al. (2012), student engagement can be measured using the Student Engagement Instrument, which has been simplified for junior high school students. The questionnaire consists of 31 questions measured on a Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree). Sample questions from the Student Engagement Instrument include "I will only study if my teacher gives me rewards." The reliability is Cronbach's alpha 0.88 for emotional and behavioral engagement and 0.83 for cognitive engagement.

Teacher feedback will be measured using the Effective Feedback Questionnaire (Carvalho et al., 2015). The questionnaire consists of 8 questions measured on a Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree). Sample questions from the Effective Feedback Questionnaire include "The teacher provides specific comments to help students complete tasks." The reliability of the Effective Feedback Questionnaire is Cronbach's alpha 0.77 to 0.89.

Procedure

The researcher will distribute the questionnaires or measurement tools to students aged 12-14 at XYZ School. The questionnaires will be reviewed by an ethics review team before being given to the participants. A total of 100 participants will participate in filling out these questionnaires. The questionnaires will be administered electronically to students using the Google Forms platform. Before distributing the questionnaires to students, the researcher will first ask the parents or guardians of the students to fill out a research consent form. Students in Google Meet classes will complete the questionnaires online at the same time. The researcher will join the Google Meet

class to provide explanations and assist students if they have any questions. The data collected from the questionnaires will be further analyzed by the researcher.

Data Analysis
First, the researcher will use Confirmatory Factor Analysis (CFA) to test the measurement model before using Structural Equation Modeling (SEM) to test the structural relationship between the variables of interest. Successful testing of the measurement model indicates that the latent variables represented are sound, and the structural model can be applied. In this study, gratitude is a single-dimension variable used to control the measurement error caused by several latent variable items. This study uses component analysis principles to test the gratitude items. The measurement model in this study employs two latent constructs (gratitude, teacher feedback) and one observed variable. Lisrel software version 8.8 will be used to test the measurement model with the collected data.

3. RESULT AND DISCUSSION
Based on the data collected, a total of 100 students filled out the Google Forms. In terms of demographics, 51% of participants were female, and 49% were male. In terms of age, 28% were 12 years old, 51% were 13 years old, and 21% were 14 years old. Table 1 explains the characteristics of the participants in the study.

Table 1
Participant Demographic Data (N=100)

Demographic Data	N	%
Age		
12	28	28.0
13	51	51.0
14	21	21.0
Gender		
Female	51	51.0
Male	49	49.0

Based on statistical calculations, the categorization of participants in this study resulted in students who received teacher feedback categorized as low at 0 (0.0%), moderate at 47 (47.0%), and high at 53 (53.0%). Furthermore, participants with low levels of gratitude were 0 students (0.0%), moderate at 38 (38.0%), and high at 62 (62.0%). Then, participants with low student engagement were 17 students (17.0%), moderate at 13 (13.0%), and high at 70 (70.0%). Details of the categorization norms for the Student Engagement Instrument, Gratitude Questionnaire, and the Effective Feedback Questionnaire can be seen in Table 2.

Table 2

Measurement Instrument Categorization

Description	N	%
Teacher Feedback		
Low	0	0.0
Moderate	47	47.0
High	53	53.0
Gratitude		
Low	0	0.0
Moderate	38	38.0
High	62	62.0
Student Engagement		
Low	17	17.0
Moderate	13	13.0
High	70	70.0

Data Analysis Test
Correlation Test

Based on the Pearson Product Moment test to examine the relationship and direction of the variables in this study, the significance between gratitude and student engagement was found to be 0.004 ($p < 0.05$) with a correlation coefficient (Pearson Correlation) of 0.287, indicating a positive correlation between gratitude and student engagement. The correlation coefficient between gratitude and student engagement shows a weak relationship between the two variables. Furthermore, for the variable of teacher feedback on gratitude and student engagement, the significance was 0.14 ($p > 0.05$) with a correlation coefficient of 0.245. This suggests that there is a relationship between teacher feedback as a mediator on gratitude and student engagement. The correlation coefficient for the relationship between teacher feedback, gratitude, and student engagement shows a weak relationship.

Table 3.

Correlation Test on Research Variables

| Variabel	1	2	3
1. Gratitude	.004		
2. Student Engagement	.004	-	
3. Teacher Feedback	0.14	0.14	-

Note: N = 295. Significant correlation at the significance level $p < .001$ (2-tailed).

Hypothesis Testing

Figure 1 shows that there is no significant mediation effect between teacher feedback and student engagement at 0.03, $p < 0.05$, and there is also no effect on gratitude on student engagement at 0.22, $p < 0.05$. Teacher feedback has a mediation effect on gratitude at 0.60, $p > 0.05$.

Figure 1
SEM Model of Teacher Feedback as a Mediator of Gratitude and Student Engagement
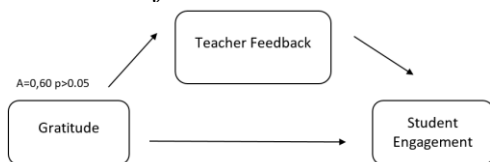
Previous research conducted by (Wang & Jin, 2019; Yuksel, 2020; Zhen et al., 2019) found that gratitude has a direct and positive impact and predicts student engagement. However, contrary to the results of the study above, Ouweneel (2011) found that gratitude does not lead to increased student engagement. The researcher wanted to further investigate the relationship between these two variables and added the mediator variable of teacher feedback.

The hypothesis of this study is that teacher feedback plays a mediating role in the relationship between gratitude and student engagement. Based on the results obtained from the study, teacher feedback as a mediator to students does influence students' gratitude. In this study, gratitude influences student engagement, and teacher feedback as a mediator also influences student engagement.

It should be noted that previous studies on gratitude, student engagement, and teacher feedback collected data outside of the online classroom, while this study was conducted in an online classroom. For future research, the researcher suggests a larger sample size than the one used in this study. Future research can also use a mixed-method approach to enrich the data.

4. CONCLUSION AND RECOMMENDATIONS

Based on the results of this study, it is known that teacher feedback as a mediator influences students' gratitude. This indicates that feedback from teachers plays an important role in students' gratitude and student engagement. Communication between teachers and students needs to be improved so that students can learn gratitude from teachers and enhance student engagement in learning. The implications of this study can enrich and complement previous research. The research conducted is also expected to be useful as a contribution to the development of psychology, especially in online learning during the COVID-19 pandemic.

The research still has some limitations and shortcomings. These limitations are: 1) due to pandemic situation the data collection process could not be carried on face to face and taken using online platforms, 2) The participants for the research is relatively small and 3) The data is taken during the pandemic and there were no comparison to the data before pandemic. Based on the limitations it could be suggested that; 1) The data should be collected face to face not online with the participant, 2) There should be more participants to the research, and 3) It is better to have data before and after pandemic for comparison. Hopefully his research could give benefits to educators, researchers and students.

REFERENCES

Ali, M. (2020, Mei 20).*Ribuan Sekolah Ditutup Akibat Pandemi Corona Covid 19*. Liputan 6. https://www.liputan6.com/news/read/4259413/6-ribuan-sekolah-ditutup-akibat-pandemi-corona-covid-19

Biber,D.D., Melton, B., & Czech, R.D. (2020): The impact of COVID-19 on college anxiety, optimism, gratitude, and course satisfaction, *Journal of American College Health*, DOI: 10.1080/07448481.2020.1842424

Black, P., Harrison, C., Lee, C., Marshall, B., & Wiliam, D. (2002). *Working inside the black box: Assessment for learning in the classroom*. London: GL Assessment.

Black, P., & Wiliam, D. (1998). *Inside the black box: Raising standards through classroom assessment*. London: School of Education, King's College.

Bryson, C., and L. Hand. 2007. The role of engagement in inspiring teaching and learning. *Innovations in Teaching and Education International 44*, no. 4: 349–62.

Carvalho dkk., (2020). *Supporting students' engagement with teachers' feedback: the role of students' school identification,* Educational Psychology.

Chu T. L (A.) (2020). *Applying Positive Psychology to Foster Student Engagement and Classroom Community Amid the COVID-19 Pandemic and Beyond. Scholarship of Teaching and Learning in Psychology*.

Carter, C. P., Reschly, A. L., Lovelace, M. D., Appleton, J. J., & Thompson, D. (2012). Measuring student engagement among elementary students: Pilot of the student engagement instrument—elementary version. *School Psychology Quarterly, 27*(2), 61–73. doi:http://dx.doi.org.pearl.stkate.edu/10.1037/a0029229

Dunford, D., Dale, B., Stylianou, N., Lowther, E., Ahmed, M & Arenas. (2020, April 7). *I.Coronavirus: The world in lockdown in maps and charts*. BBC News

Emmons, R. A. (2010, November 16). *Why gratitude is good*. Greater Good Magazine. Retrieved from https://greatergood.berkeley.edu/article/item/why_gratitude_ is_good

Gardner, H. 1993. *Frames of mind: The theory of multiple intelligences.* New York: Basic Books.

Gravetter, F. J & Forzano, B.L. (2012). *Research Methods for Behavioral Sciences* (4th ed.). Belmont, CA :Wadsworth

Hattie, J. (2012). *Visible learning for teachers: Maximizing impact on learning*. Routledge. https://www.bbc.com/news/world-52103747

Hyland, F. (2005*). Focusing on form: student engagement with teacher feedback*. Elsevier Science Ltd.

Iraj dkk., (2019). *Understanding Students' Engagement with Personalised Feedback Messages*. 10.35542/osf.io/8gdjf.

Jin, G. & Wang, Y. (2019). The Influence of Gratitude on Learning Engagement Among Adolescent : The Multiple Mediating Effects of Teachers' Support and Student's Basic Psychological Needs. *Journal of Adolescence*. https://doi.org/10.1016/j.adolescence.2019.09.006

Kementerian Pendidikan dan Kebudayaan.(2020, Maret 15). *Kemendikbud Gandeng Swasta Siapkan Sistem Belajar Daring*. https://www.kemdikbud.go.id/main/blog/2020/03/kemendikbud-gandeng-swasta-siapkan-sistem-belajar-daring

M. E. McCullough, R. A. Emmons, and J. A. Tsang. (2002). The grateful disposition: A conceptual and empirical topography. *Journal of Personality and Social Psychology, 82*(1). 127.

Martin, F., Ahlgrim-Delzell, L., & Budhrani, K. (2017). Systematic review of two decades (1995 to 2014) of research on synchronous online learning. *American Journal of Distance Education, 31*, 3–19. http://dx.doi.org/10.1080/08923647.2017 .1264807

Ouweneel, E., Blanc, P. M. L., & Schaufeli, W. B. (2011). Flourishing students: A longitudinal study on positive emotions, personal resources, and study engagement. *The Journal of Positive Psychology, 6*(2), 142–153.

Qisthy, L., Sahrani, R., & Dewi, F. I. (2023). Rasa syukur, dukungan sosial Dan kesejahteraan guru Di masa pandemi. *Jurnal Psikologi*, *16*(1), 54 62. https://doi.org/10.35760/psi.2023.v16i1.7543

Scott dkk., (2011). *Student Engagement with Feedback*. Bioscience Education.

Seiver, J. G., & Troja, A. (2014). Satisfaction and success in online learning as a function of the needs for affiliation, autonomy, and mastery. *Distance Education, 35*, 90–105. http://dx.doi.org/10 .1080/01587919.2014.891427

Siang, J. J., & Santoso, H. B. (2016). Learning motivation and study engagement: Do they correlate with GPA? An evidence from Indonesian university. *Researchers World, 7*(1), 111–118.

Van der Kleij, F. M., Feskens, R. C., & Eggen, T. J. (2015). Effects of feedback in a computer-based learning environment on students learning outcomes: A meta-analyses. *Review of Education Research, 85*(4), 475–511. https:// /doi.org/10.3102/003465431456488

Wu, R., Huebner, S. E., & Tian, L. (2020). Chinese Children's Heterogenous Gratitude Trajectories: Relations With Psychosocial Adjustment and Academic Adjustment. *School Psychology, 35*(3), 201–214 http://dx.doi.org/10.1037/spq0000358

Yüksel, A. T. (2020). *The Role of Perceived Social Support and Gratitude in Prediction of Student Engagement among High School Student.*

Zhen et al., (2019). *Gratitude and academic engagement among primary students: Examining a multiple mediating model.*

Zhou,J., Zheng,Y., & Tai, H.J. (2019). *Grudges and gratitude: the social-affective impacts of peer assessment, Assessment & Evaluation in Higher Education*. 10.1080/02602938.2019.1643449