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Profile of Student Learning Motivation in Limited Offline Learning Natural Science Subject

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abstract

Learning motivation is one of the most important things students must have in supporting learning success. This study aims to describe male and female students' learning motivation profiles in limited offline learning of science subjects. This research uses qualitative methods of a phenomenological approach. The subjects of this study were one male student and one female student in grade IX of SMP Muhammadiyah 4 Porong. Data collection techniques use observation, questionnaires, and interviews. The results of this study show that the learning motivation profile of male students in limited offline learning in science subjects is relatively good by achieving five indicators of learning motivation in limited offline learning. The learning motivation profile of female students in limited offline learning of science subjects is classified as very good by achieving all indicators of learning motivation in limited offline learning. This study concludes that students' learning motivation in offline learning is limited to science subjects is relatively good. Female students have better motivation to learn in offline learning than male students, which may be due to intrinsic motivational factors; female students are better than male students, while other factors are due to student behavior.

1. Introduction

In March 2020, Indonesia was shocked by the outbreak of Coronavirus Disease 2019 (Covid-19). The virus first appeared in Wuhan in December 2019 (Miyah et al., 2022). It is a contagious disease and attacks the human respiratory system. It spreads fastly to all over the world, such as in Indonesia. In addition, on March 11, 2020, the World Health Organization (WHO) made this outbreak a global pandemic. Since the Covid-19 pandemic hit the world, the impacts are in all sectors of life, not least in Education (Asmuni, 2020).

The world of education is currently one of the sectors affected by the Covid-19 outbreak conveyed by the United Nations (Armoed, 2021). Moreover, some countries temporarily closed schools and colleges until conditions improved. Meanwhile, WHO suggests limiting community activities that can cause crowds in anticipation of preventing the spread of Covid-19. In this case, the Ministry of Education and Culture Directorate of Higher Education No. 1 of 2020 issued a circular regarding preventing the spread of Covid-19 in the world of education. This letter infoms

that the implementation of learning in schools is temporarily carried out online (Azzahra et al., 2022).

Online learning is an educational activity carried out remotely by using technology connected via the internet as the mediator of the learning process (Heng & Sol, 2021; Efendi et al., 2020). So, students do not need to be present in class to carry out learning activities but can already connect with teachers and their friends through technology that can connect to the internet. Online learning has received various responses from various parties, such as teachers, students, and parents (Megawanti et al., 2020; Limiansi et al., 2020). Most academic units have never implemented online learning, providing challenges for all parties and levels of education to create active learning during teaching and learning activities (Herliandry et al., 2020; Nilawati & Cahyani, 2021).

Teaching and learning activities for approximately 1.5 years were carried out online. This reaps many problems experienced by parents of students. This problem arises because parents do not understand the materials, and it is challenging to cultivate motivation and enthusiasm for the child to learn (Adawiyah et al., 2021). Then, learning from home also raises fear of Covid-19 infection, frustration, boredom, inadequate information, and lack of contact with teachers and friends (Ozhan & Kocadere, 2020). It means that it has an impact on reducing the quality of education. Therefore, the government has finally re-imposed offline learning in schools. The government took this action because the Covid-19 vaccination program has been implemented in various regions. Schools in the green zone could conduct offline learning in schools (Husaini, 2021). Most students said that learning offline is more effective and motivating than learning online. It showed that a poor internet network might constrain the delivery of material, and the interaction between teachers, students, and their friends is reduced. Thus, it impacts decreasing student learning motivation (Mese & Sevilen, 2021; Ghasani et al., 2021).

Learning motivation is a driving force or encouragement that exists in students so that there is a willingness to carry out learning activities (Schukajlow et al., 2017). Students with high motivation will indirectly be encouraged to carry out learning activities to achieve the desired goals. The greater the learning motivation that students have, the greater the student desire to continue learning, not be easily discouraged, and continue to strive to increase their potential in the learning process (Dewi et al., 2019).

In the learning process, learning motivation is very important in supporting student learning success because motivation can lead students to make decisions to achieve their desired goals (Schunk & Dibenedetto, 2020). Problems often arise among students with low achievement levels, not caused by their lack of abilities, but the learning motivation that the student has is so low that it cannot give rise to the student's desire to learn. As a result, the lazy student strives to improve the abilities that exist in himself in order to achieve learning success (Emda, 2017).

Learning success is primarily determined by motivation. The facts regarding student motivation in offline learning are limited: 1) students seem to be more diligent and active in learning in class. This is because students feel helped by the presence of a teacher in class during learning. After all, students can ask directly with the teacher if there are difficulties during learning. In addition, students can also discuss directly with their peers in class, students are seen actively learning in the classroom with varied learning models so that students do not get bored quickly, and students are very diligent in doing the questions given by the teacher because if there are difficulties they can ask directly with the teacher, students are more focused when paying attention to explanations from the teacher in class (Pratiwi, 2021). The facts regarding teaching and learning activities in offline learning are limited, namely: 1) curriculum determination, 2) restrictions on learning hours, 3) implementing the health protocol, 4) students bring their food from home, (5) before entering school, body temperature checks are carried out, 6) students and teachers must be in a healthy state while in the school environment (Adawiyah et al., 2021).

The researchers observed in SMP Muhammadiyah 4 Porong. Based on preliminary data, it was obtained that this school implemented limited offline learning from Monday to Friday with lesson hours at 08.00-12.00 (Western Indonesia Time). Students should also familiarize themselves during this limited offline learning process because it is still in the Covid-19 pandemic period, where all students who attend the school are required to implement health protocols. However, all these limitations do not lower students' enthusiasm to return to offline learning at school. It can be seen during the science learning process. Students seem to enjoy discussing with their respective groups. In addition, students looked actively answered the questions given by the teacher. However, female students were more active in answering than male students. Female students were more focused when receiving material delivered by the teacher than male students, who paid less attention to the material presented. Relevant research results support this study include: 1) Haw (2021) discovered that the motivation of female students was found to be higher than male students, 2) Chumbley et al. (2015) discovered that females generally had higher motivation than males, 3) Akmalia and Ulfah (2021) discovered those female students have a higher level of learning motivation than male students. Based on the explanation above, researchers are interested in researching student motivation in limited offline learning of science subjects. Therefore, this study will reveal the learning motivation profile of male students and female students in the limited offline learning of science subjects at SMP Muhammadiyah 4 Porong.

2. Method

This research uses a qualitative approach with a phenomenological approach. Qualitative research aims to describe and analyze a phenomenon, perception, event, or thought of people individually and in groups (Pietkiewicz & Smith, 2014). Phenomenological approaches are a way to explore or uncover a phenomenon that occurs in some individuals naturally (Santoso et al., 2017). This research was conducted at SMP Muhammadiyah 4 Porong. The subjects in the study were two class IX students, consisting of one male student and one female student with similar cognitive grades. The data collection technique in this study uses three research instruments: observation, questionnaire, and interview. The instruments use observation guidelines, motivation questionnaires, and interview guidelines that have been validated by two experts and declared valid and suitable for use. The observation data collection is done utilizing direct observation during the natural science learning process in the classroom. The questionnaire data collection is done by distributing student learning motivation questionnaires in limited offline learning to research subjects outside learning hours. The collection of interview data is done by asking directly one-by-one interview questions to research subjects outside of learning hours.

This study uses Miles and Huberman's (1994) data analysis techniques, namely data reduction, data presentation, and conclusion (Creswell & Creswell, 2017). Data analysis is done by analyzing the data of observations, questionnaires, and interviews. After that, the next stage is the examination of the validity of the data with triangulation techniques. This technique is done by comparing the results of observations, questionnaires, and interviews at the same source to get an overview of student learning motivation in limited offline learning in terms of internal and external dimensions in natural science subjects. Student learning motivation is determined in terms of internal and external dimensions (Pramesti et al., 2021). An overview of the dimensions and indicators of student learning motivation in limited offline learning can be seen in Table 1.

Table 1. The grid of student learning motivation indicators

Dimensions	Indicators	Sum
Internal	There is a desire and desire to succeed	5
	There is a drive and need to learn	5
	There are hopes and future ideals	5
External	There is a study award	5
	There are exciting activities for learning	5
	There is a conducive learning environment	5

(Uno, 2016; Lin & Chen, 2017)

Based on Table 1, the following indicators of student learning motivation will be added to the limited offline meeting. There are aspects of internal dimensions and external dimensions. The internal dimension consists of three indicators of achievement: the desire and desire to succeed in limited offline, the encouragement and need to learn in limited offline, and the hopes and ideals of the future in limited offline. External dimensions consist of three indicators of achievement: the existence of learning awards in limited offline, exciting activities for learning in limited offline, and a conducive learning environment in limited offline. From each of these indicators, there are five statements. The sum of all statements from internal and external indicators there are 30 statements.

3. Result and Discussion

Based on the results of observations, questionnaires, and interviews, the data can be presented as follows:

Table 2. Data on student learning motivation in offline learning limited natural science subjects

Subjects	Indicators	Information
Male students	There is a desire and desire to succeed in limited offline	Achieved
	There is a drive and need to learn in limited offline	Achieved
	There are hopes and future ideals in limited offline	Not Achieved
	There is a study award in limited offline	Achieved
	There are interesting activities on learning in limited offline	Achieved
	There is a conducive learning environment in limited offline	Achieved
Female students	There is a desire and desire to succeed in limited offline	Achieved
	There is a drive and need to learn in limited offline	Achieved
	There are hopes and future ideals in limited offline	Achieved
	There is a study award in limited offline	Achieved
	There are interesting activities on learning in limited offline	Achieved
	There is a conducive learning environment in limited offline	Achieved

Based on Table 2. The results showed that the learning motivation of male students in limited offline learning is relatively good by being able to achieve five of the six indicators of learning motivation in limited offline learning, namely the desire and desire to succeed in limited offline learning, the encouragement and needs in learning in limited offline learning, the appreciation of learning in limited offline learning, there are interesting activities in learning in limited offline learning, and here is a learning environment that is conducive to limited offline learning. Male subjects in school are known for their friendly, active, and communicative students. In teaching and learning activities, male subjects do not hesitate to ask the teacher about material that is not yet understood. In addition, the male subject always tries to solve the questions given by the teacher

even though he still has to be helped with things he does not understand. However, male students are still often lazy to read their textbooks.

The learning motivation of female students in limited offline learning is excellent by being able to achieve all indicators of learning motivation in limited offline learning, namely the desire and desire to succeed in limited offline learning, the encouragement and needs in learning in limited offline learning, the existence of future expectations and ideals in limited offline learning, there are learning rewards in limited offline learning, there are exciting activities in learning in limited offline learning, and there is a learning environment that is conducive to limited offline learning. The learning motivation of female students in limited offline learning is excellent, indeed supported by all intrinsic and extrinsic factors of the subject when participating in the limited offline science learning process. According to Mashrur et al. (2022), female respondents were more likely to take transit in the future but more likely to take transit at a lower frequency than their pre-pandemic usage.

These results show that the learning motivation of female students in limited offline learning is better than the learning motivation of male students. The results of this study align with the research conducted by Cavas (2011) on the factors that influence the science motivation of Turkish elementary school students, which states that the science motivation of Turkish elementary school students is significantly different in terms of gender and grade level. This research is also in line with Sasmita et al. (2021) on the analysis of the motivation to learn physics of students in high school, which shows the results that the motivation to learn physics of female students is significantly different when compared to male students. The motivation to learn physics of female learners is higher than that of male learners.

Motivation is a basic recipe for academic success. It involves internal and external factors that stimulate desire and energy in people to be continually interested and committed to a job, role, or subject or to make an effort to attain a goal (Gbollie & Keamu, 2017). Learning motivation is power motivation, a driving force or a strong desire in a person to learn actively, creatively, and innovatively for behavioral changes in both affective, cognitive, and psychomotor aspects (Suhana, 2014). Learning motivation is essential in supporting student learning success (Sari, 2015). Students with learning motivation will always be encouraged to learn for good learning outcomes (Hariyadi & Darmuki, 2019).

The process of limited offline learning is different from the usual offline learning. In this learning, many new rules must be applied during the implementation of the teaching and learning process, such as restrictions on learning hours in the classroom and the implementation of strict health protocols. However, this does not reduce the enthusiasm of students to return to study at school. Most students say offline learning is more effective and motivating than online learning (Adnan & Anwar, 2020). So that with the implementation of limited offline learning during the Covid-19 pandemic, it is hoped that students can increase their learning motivation again.

This learning motivation consists of motivation from the student and outside the student self. One of the motivations that come from students is the enthusiasm or desire to succeed in learning all the subject matter delivered by the teacher so that the achievement of student learning outcomes is closely related to the motivation in learning that comes from the student (internal). This is evidenced in research that there is a difference between the learning motivation of female students and male students in limited offline learning, where the indicators of learning motivation in offline learning are limited to female students achieved all compared to male students. This can be due to student behavior factors (Dimyati & Mudjiono, 2013).

Girls prefer to spend time indoors. In a structured room, girls are more exposed to language through radio and television so that they are more aware of time because there are clocks, media, and other family members outside the home. On the other hand, boys like to spend time outside

the unstructured, and they are more dependent on space than time. They designed the game on their own; during the game, the boys used more visual skills than verbal skills, and the use of language was limited only to get the job done. This behavior enhances visual, unique, and temporary comfort. This difference will also affect the presence of female and male students in the school. School is a structured environment based on a schedule, rules with a specific pattern, selected facts, and delivers lessons mainly using verbal instruction. This means that girls feel more comfortable in this kind of environment. On the contrary, boys do not feel comfortable in this kind of environment (Sousa, 2012).

Other factors can also be caused due to intrinsic factors and extrinsic factors of students. They stated that motivation is a psychological process that reflects the interactions, attitudes, needs, and decisions that occur in a person and arise due to factors from within and outside in achieving the desired goal (Oksara & Nirwana, 2019). This may be because students encouraged themselves to engage in learning since their learning behaviors were not openly accessible to peers and teachers (Yu, 2022).

Students' great intrinsic motivation can make them always consistent with their tasks and diligent when participating in teaching and learning activities. In addition, students also have a high sense of self-confidence and discipline. A person will be moved to do something to the maximum because of interesting stimuli such as gifts, expectations of praise, and value as a form of appreciation. Al-Areibi et al. (2022) provide multiple opportunities for engagement through synchronous and asynchronous tools, which are crucial to promoting student motivation, learning, and course success. Wang et al. (2021) its current implementations face many practical and pedagogical challenges, and their impacts have yet to achieve transformation with the insights gained; some possible strategies for moving the adoption of microlearning to the next level are offered.

Based on the analysis, it found that the learning motivation profile of female students was better than the motivation of male students learning. It is because female students' intrinsic motivation factor is better than male students. So, female students have more desire to learn higher. Another factor is due to student behavior. According to Fong (2022), as motivational shifts are anticipated due to this unprecedented confluence of factors in the wake of the pandemic, this conceptual review examines five prominent theories of academic motivation to provide greater conceptual clarity of mechanisms impacting students' motivation during times of transition and upheaval, specifically instructional, social, future-oriented, and sociocultural shifts.

4. Conclusion

Based on the research, it can be concluded that the profile of student learning motivation in offline learning is limited to science subjects in the good category. There is a difference between male and female students learning motivation in limited offline learning. Female students achieve all indicators of learning motivation better in limited offline learning than male students. This can be caused because the intrinsic motivational factor of female students is better than male students, while other factors are due to the behavior of these students. This research is expected to be a reference for practitioners and subsequent researchers in describing the profile of student learning motivation from various factors that affect it.

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