

A QUALITATIVE ANALYSIS OF TEACHER FEEDBACK AND STUDENT MOTIVATION IN STATISTICS DIDACTIC DESIGN

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ABSTRACT Teacher feedback plays an important role in supporting students' learning motivation, particularly when it is integrated into the learning process through a well-structured didactic design. However, feedback in statistics learning is often still predominantly evaluative and has not been systematically used to guide students' learning processes. This study aims to identify the types of teacher feedback provided to students in Class VII-A of SMP Negeri 26 Bandar Lampung and to describe students' learning motivation after receiving feedback within a statistics didactic design. This research employed a qualitative case study design involving 31 seventh-grade students in the even semester of the 2023/2024 academic year. Data were collected through field notes, Likert-scale questionnaires on teacher feedback and student learning motivation, and interviews. The data were analyzed descriptively to identify patterns of teacher feedback and students' motivational responses. The findings indicate that verbal feedback was the dominant form of feedback provided by the teacher. The most frequently observed feedback indicators were timely, specific, and process-focused feedback. In addition, students with high and moderate mathematical ability tended to show higher learning motivation than students with low mathematical ability. These findings suggest that process-oriented teacher feedback can support students' motivation in learning statistics, especially when it is embedded in a structured didactic design.

Keywords: teacher feedback, student motivation, statistics learning, didactic design, qualitative case study

ABSTRAK Umpan balik guru memiliki peran penting dalam mendukung motivasi belajar siswa, terutama ketika diintegrasikan dalam proses pembelajaran melalui desain didaktis yang terstruktur. Namun, dalam pembelajaran statistika, umpan balik yang diberikan guru masih sering bersifat evaluatif dan belum dimanfaatkan secara sistematis untuk membimbing proses belajar siswa. Penelitian ini bertujuan untuk mengidentifikasi jenis umpan balik yang diberikan guru kepada siswa kelas VII-A SMP Negeri 26 Bandar Lampung serta mendeskripsikan motivasi belajar siswa setelah menerima umpan balik dalam desain didaktis statistika. Penelitian ini menggunakan desain studi kasus kualitatif dengan melibatkan 31 siswa kelas VII pada semester genap tahun ajaran 2023/2024. Data dikumpulkan melalui catatan lapangan, angket skala Likert tentang umpan balik guru dan

motivasi belajar siswa, serta wawancara. Data dianalisis secara deskriptif untuk mengidentifikasi pola umpan balik guru dan respons motivasional siswa. Hasil penelitian menunjukkan bahwa umpan balik verbal merupakan bentuk umpan balik yang dominan diberikan oleh guru. Indikator umpan balik yang paling sering muncul adalah umpan balik yang tepat waktu, spesifik, dan berfokus pada proses. Selain itu, siswa dengan kemampuan matematika tinggi dan sedang cenderung menunjukkan motivasi belajar yang lebih tinggi dibandingkan siswa dengan kemampuan matematika rendah. Temuan ini menunjukkan bahwa umpan balik guru yang berorientasi pada proses dapat mendukung motivasi siswa dalam pembelajaran statistika, terutama ketika diintegrasikan dalam desain didaktis yang terstruktur.

Kata-kata kunci: umpan balik guru, motivasi belajar siswa, pembelajaran statistika, desain didaktis, studi kasus kualitatif

INTRODUCTION

In recent years, statistics learning at the secondary school level has faced various challenges that affect the effectiveness of the teaching and learning process (Assey & Babyegeya, 2022). One of the main challenges is students' low motivation to learn Statistics, which is often perceived as abstract and irrelevant to everyday life (Sutter et al., 2024). This condition is further influenced by teaching approaches that tend to emphasize mathematical constructs without sufficiently connecting these constructs to real-world contexts, making it difficult for students to understand statistical concepts and their applications (Ben-zvi et al., 2019).

In addition to the abstract nature of Statistics, inadequate teacher feedback may also contribute to students' low interest and motivation in learning. Unspecific, delayed, or negative feedback can reduce students' self-confidence and negatively affect their participation in the learning process (Wang, 2025). In contrast, positive and supportive feedback can enhance both students' intrinsic and extrinsic motivation and encourage them to engage in higher levels of thinking (Zahid, 2025). Therefore, teacher feedback is not merely an evaluative response to students' answers, but also an instructional support that can influence how students understand their learning progress.

Didactic design has emerged as an approach that can help address this problem. By designing learning activities that take into account the interaction between teachers, students, and learning materials, didactic design enables more effective and contextual feedback (Fitriani & Widjajanti, 2024). Through systematically designed activities, students can more easily understand statistical concepts and see their relevance in real life, thereby increasing their motivation to learn (Ben-zvi et al., 2019). In this context, teacher feedback becomes an important component of didactic design because it can guide students during the learning process and help them overcome difficulties in understanding statistical concepts.

In the learning process, especially in schools, teachers are one of the essential components of education whose position cannot be separated from the

implementation of learning (Muhammadiyah et al., 2022). Teachers are also among the factors that influence students' learning motivation (Al-said, 2023). In this case, teachers are required to use appropriate approaches for their students by applying interesting teaching techniques and making the material easier to understand (Erlia, 2021). As educators, teachers have a responsibility to stimulate students' interest in learning and motivate them to learn, which can lead to improved learning achievement (Tambunan, 2021).

One effective way to motivate students is by providing feedback (Arthur et al., 2022). According to Hattie and Timperley (2007), feedback is information provided by an agent, such as a teacher, classmate, book, parent, oneself, or experience, that evaluates aspects of a person's performance or understanding. A student can assess the correctness of an answer by looking at it; a teacher or parent can provide corrective information; peers can offer alternative solutions; books can provide information to clarify ideas; and parents can encourage. The purpose of providing feedback is to help students correct mistakes and remove obstacles that may arise in learning activities, with the expectation of achieving maximum learning outcomes (Mahara & Hartono, 2024). With feedback, students can correct their own work and use it as a tool to monitor the learning progress they have achieved (Zahid, 2025). For teachers, feedback also allows them to determine how well students have understood the material that has been taught (Kutasi, 2023).

The importance of feedback for students' learning motivation has been empirically reported in several studies (Aslam et al., 2021; Gan et al., 2021). These studies explain that one effort teachers can make to increase students' enthusiasm for learning is to provide feedback, for example by praising students who answer correctly. Similarly, teachers can promote students' motivation by giving praise, appreciation, and positive feedback for students' success (Anwar et al., 2025). However, these studies have not fully explained how teacher feedback appears in classroom interaction and how students with different mathematical abilities respond to such feedback, particularly in Statistics learning through didactic design.

Although feedback is recognized as an important factor in learning, there is still a need for empirical investigation into how teacher feedback supports students' learning motivation in a specific classroom context. Existing literature tends to focus on broader factors such as teaching strategies, curriculum, and learning environment. In contrast, studies that specifically examine teacher feedback in relation to students' motivation, especially through a qualitative approach, remain limited. Most available studies adopt quantitative methods that emphasize measurable outcomes, while fewer studies explore students' experiences and responses to feedback in the learning process.

Preliminary findings at SMP Negeri 26 Bandar Lampung indicate that teacher-student interaction during teaching and learning activities is generally dominated by one-way communication. In classroom activities, feedback has not been optimally

used as a dialogic process to help students reflect on their understanding, express their difficulties, or recognize their learning progress. As a result, students may have limited opportunities to understand the meaning of feedback and use it to improve their motivation and learning engagement. Moreover, no study has specifically investigated teacher feedback and students' learning motivation in Statistics learning at SMP Negeri 26 Bandar Lampung. Therefore, examining this issue is relevant because feedback is an important factor in the learning process, and the way students receive and interpret feedback can influence their attitudes toward learning and their motivation.

The purpose of this study is to describe the forms of teacher feedback given to students and students' learning motivation in Class VII-A of SMP Negeri 26 Bandar Lampung within a Statistics didactic design.

METHODS

Research Design and Approach

This research employed a qualitative case study design to gain a deeper understanding of teacher feedback practices and students' learning motivation in Statistics learning (Creswell & Poth, 2016). A qualitative approach was chosen because it allows researchers to explore meanings, processes, and interactions within the natural context of learning. The case study design was used because this research focused on a single bounded system, namely one classroom within a specific learning context (Yin, 2018).

Researcher Presence

In qualitative research, the researcher acts as the primary instrument and is directly involved in data collection and analysis (Creswell & Poth, 2016). In this study, the researcher's presence in the classroom was open and non-interventional. The researcher did not act as a teacher but conducted systematic observations of teacher-student interactions, particularly the feedback provided by the teacher during the learning process. To minimize subjective bias, the researcher used reflective notes as part of the reflexivity process, as recommended in naturalistic qualitative research (Lincoln & Guba, 1985).

Research Participants and Setting

This research was conducted in Class VII-A of SMP Negeri 26 Bandar Lampung. The participants consisted of 31 students, with 9 students purposively selected as interview informants based on variations in mathematical ability, namely high, moderate, and low ability. Purposive selection was used to obtain information-rich cases, which is a key principle in qualitative research (Patton, 2015).

Data Collection Techniques and Procedures

Data were collected through non-participant observation, semi-structured interviews, a learning motivation questionnaire, and documentation. Observations

were used to identify the forms, timing, and quality of teacher feedback during Statistics lessons. Semi-structured interviews were conducted to explore students' experiences and perceptions of teacher feedback in greater depth while remaining focused on the research objectives (Creswell & Poth, 2016). The learning motivation questionnaire was used as supporting descriptive data to identify students' motivational tendencies after receiving teacher feedback in the Statistics didactic design. Documentation was used to complement and strengthen the observation and interview data.

Data Analysis

Data analysis was conducted simultaneously and continuously using the interactive model of Miles, Huberman, and Saldaña, which includes data condensation, data display, and conclusion drawing (Miles et al., 2014). The analysis process was assisted by NVivo software to facilitate systematic coding and management of qualitative data. The coding stages included open coding, axial coding, and selective coding (Saldaña, 2016). The feedback loop principles proposed by Kulhavy and Stock (1989) were used as a deductive conceptual framework in developing the analysis categories. The operationalization of Kulhavy and Stock's principles in the NVivo analysis is presented in Table 1.

Table 1. Operationalization of Kulhavy and Stock's Principles in NVivo Analysis

Feedback Principle	Analysis Focus	NVivo Node	Indicator/Subnode	Data Source
Timely feedback	Time of feedback	Time of feedback	Immediate; delayed; inconsistent	Observation, interview
Specific feedback	Clarity of information	Clarity of feedback	Specific; general; evaluative	Observation, interview, document
Appropriate to students' developmental level	Student confidence	Student response	Confident; doubtful; confused; motivated	Interview, questionnaire
Reward	Rewards given	Reward from teacher	Praise; gifts; awards	Observation, interview
Process-focused feedback	Feedback orientation	Feedback focus	Process; result; strategy	Observation
Motivation to learn	Student motivational response	Student learning motivation	Interest; perseverance; self-confidence; involvement	Interview, questionnaire

Trustworthiness of Data

Data trustworthiness was maintained through credibility, dependability, confirmability, and transferability (Lincoln & Guba, 1985). Credibility was strengthened through adequate researcher involvement in the field and cross-checking across data sources. Dependability was maintained by documenting the research procedures in detail so that the research process could be traced. Confirmability was achieved through systematic recording of the analysis process and researcher reflections. Transferability was supported by providing a detailed description of the research context so that readers can assess the applicability of the findings to other contexts (Creswell & Poth, 2016).

Triangulation and Procedural Clarity

Triangulation was conducted through technique triangulation, including observation, interviews, questionnaires, and documentation, and source triangulation involving students with different mathematical ability levels. This process was used to strengthen the credibility of the qualitative findings (Patton, 2015). Although this study did not aim for statistical replication, the clarity of the data collection and analysis procedures allows the research process to be traced and potentially applied in other learning contexts for comparative purposes or further theoretical development (Yin, 2018).

FINDING AND DISCUSSION

The survey on student learning motivation and teacher feedback was administered to the students by the researchers. To gain a more comprehensive perspective on students' perceptions of teachers' feedback and its impact on their motivation to learn, these questionnaires were administered to students. The interviewer then interviewed some students. These interviews had two main purposes: the first was to investigate more in depth how students perceive teacher feedback, and the second was to better understand those factors that motivate their learning.

There are five types of feedback indicators: (1) on time, (2) specific, (3) according to the child's developmental level, (4) reward, and (5) focus on the process. Feedback should be of a positive nature and should prompt an action that either builds on or grows an individual's performance or behaviour. Feedback must not be personal and should concern data, facts, or observable information.

Table 2. Results of Student Interviews Regarding Feedback

Indicator	Response		
	High Category	Medium Category	Low Category
On Time	12	13	15
Specific	19	21	22

Indicator	Response		
	High Category	Medium Category	Low Category
According to the Child's Developmental Level	13	8	16
Rewards	15	17	18
Focus on the Process	10	12	16

Those with high mathematical ability showed 12 responses to the on-time indicator, correct or not; those with moderate mathematical ability reported 13 responses, and subjects who had low performance in mathematics revealed 15. For students with codes A26, A8, and A1, their teachers always provided correction results within a week and were willing to explain again if they did not understand. This was supported by student A9, who stated that their teacher always shared correction results within 5 days. Meanwhile, students with codes A15 and A11 stated that their teachers had once distributed assignments more than a week ago, but the teachers were quick to help them learn the material so that they could quickly correct their mistakes. Hattie & Timperley (2007) explain that quick and high-quality feedback plays an important role in improving students' understanding and motivation to learn.

The second indicator, specific, was observed with 19 answers from high-level students, 21 answers from medium-level students, and 22 answers from low-level students. Students with the codes A26 and A11 mentioned that the teacher has given clear instructions and LKPD so that students will understand each explanation better. A similar statement was made by A9, A24, A28, and A15, who explained that the teacher always gave advice and repeated the instructions given. In addition, the teacher always asked students to record Statistics material in their notebooks. Wong et al. (2021) found that clear, systematic instructions increased student engagement and understanding, especially in specific subjects such as Statistics.

The third index, suitable for the child's developmental level, contained 13 responses from high-ability children; 8 from medium-ability types, and 16 from low-ability types. A9, A8, A11, A1, and A22 mentioned that teachers provided advice in simple language, regardless of their group, and had a friendly attitude. A15 and A28 stated that the teacher always encouraged them, so they were more confident in doing Statistics questions. In the indicator of the child's developmental level, it can be seen that students in the low category received the most responses than students in the medium and high groups. Schwab et al. (2024) further stated that the teacher's feedback was adapted to the cognitive, emotional, and social developmental levels of students in their responses, which were appropriate to their level of ability and the learning stage.

The fourth criterion, recognition, has 15 hits for high-ability students, 17 hits for medium-ability students, but only 18 hits for low-ability students. Boys with codes A26, A11, A24, and girls with codes A1, A22, and A28 felt that teachers always valued their work. A9 and A15 also confirmed this, stating that teachers praised students whenever they worked through statistics questions properly. In the fourth indicator, namely appreciation, it can be seen that the feedback given by teachers to students in the low category was more than that given to students in the moderate and low categories. In an effort to stimulate excitement about learning Statistics. Such positive feedback from teachers or NVA would boost students' confidence and encourage them to learn more (Winstone & Carless, 2021). This was to create in the students an enjoyment for studying Statistics.

The fifth index examines the process, and it is represented by 10 high-ability students' responses, 12 medium-ability students' responses, and 16 low-ability students' responses. A26 and A8 describe that teachers constantly walk around the university to supervise students working on statistics problems, and the teacher will assist students verbally or by group work as well. Participants with codes A9 and A22 confirm the above, as it is clearly evidenced that teachers always repeat themselves in order to make sure their students will not forget. There is certainly a difference in the feedback given by teachers, where students in the low category receive more responses than students in the medium and high categories. Such feedback highlights the hard work, strategies, and steps made toward that score or grade from students' learning process, instead of only highlighting a final score or result in a task (Kutasi, 2023)

Researchers divided students into three groups: low, medium, and high ability students. High-ability students received feedback that met almost every indicator. Students with medium and low abilities only met some of the indicators.

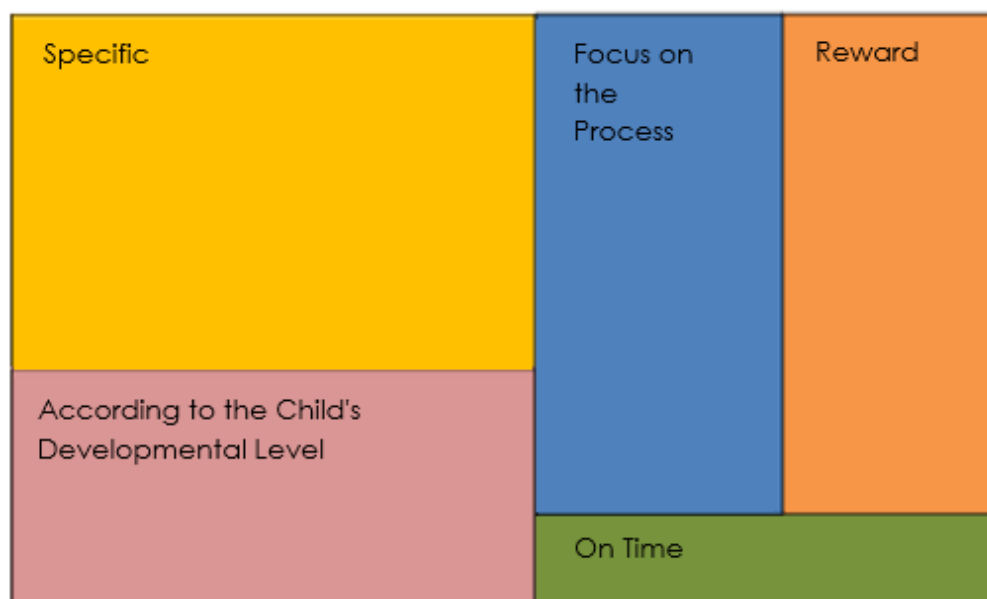


Figure 1. Teacher Feedback Data Analysis for the High Ability Group Student

Figure 1 shows that the specific indicators marked in yellow received the most responses compared to the other indicators. Meanwhile, the indicators marked in green received the lowest responses.

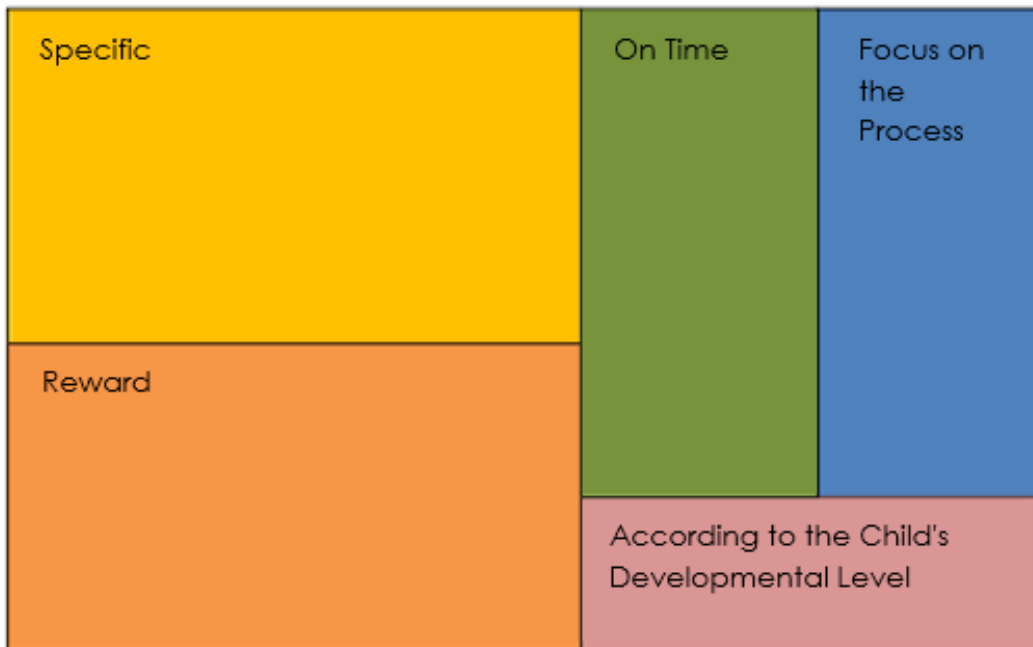


Figure 2. Teacher Feedback Data Analysis for the Medium Ability Group Student

Based on Figure 2, it can be seen that the specific indicators marked in yellow received the most responses compared to other indicators. Meanwhile, indicators corresponding to the child's developmental level marked in pink received the lowest responses.

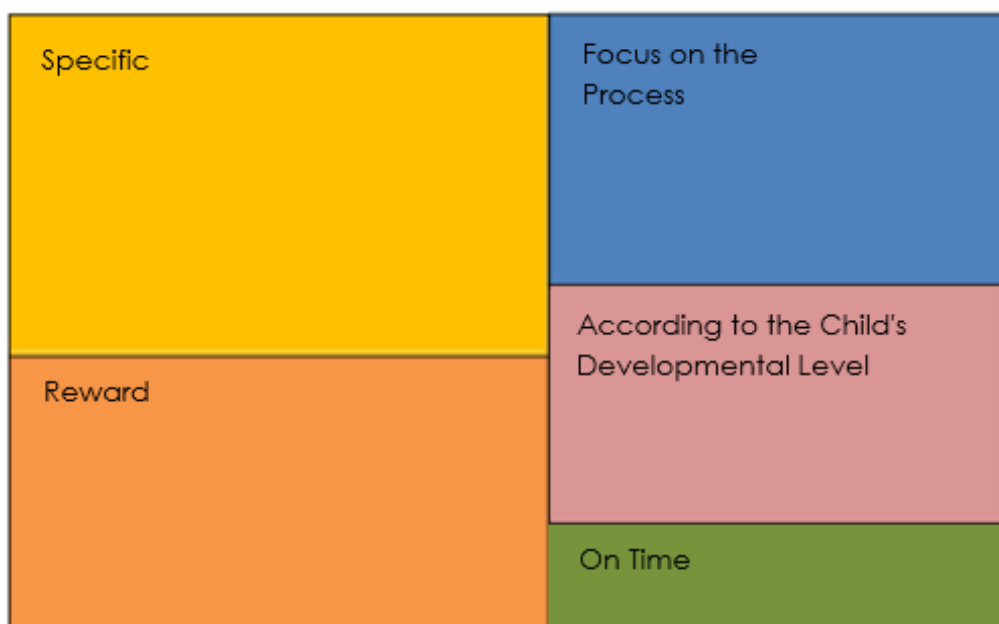


Figure 3. Teacher Feedback Data Analysis for the Low-Ability Group Student

Based on Figure 3, the specific indicators marked in yellow received the most responses among the other indicators. Meanwhile, the timely indicators marked in green received the lowest responses.

The results of the study indicate that there are differences in each type of feedback provided. Indicators of timeliness, specificity, appropriateness to the child's developmental level, appreciation, and focus on the process in students in the low category received more responses than those in the high and medium categories. This is supported by Aprilia (2024), explaining that teachers need to provide feedback that helps students with low abilities understand what needs to be improved, while providing additional challenges to students with high abilities to encourage them to think more critically. When sorted from highest to lowest response on the feedback indicators, the categories are low, medium, and high. In the NVivo results related to the feedback conducted by the researcher, the specific indicator became the highest indicator receiving the most responses across all categories. Meanwhile, the indicator focusing on the process received the lowest response across all categories.

Next, the researcher will analyze student motivation, which is divided into eight indicators taken from Sardiman (2016), namely (1) perseverance in facing tasks, (2) resilience in facing difficulties, (3) showing interest in various statistics questions, (4) preferring to work alone, (5) being able to defend one's opinion, (6) not easily giving up on what they believe in, (7) quickly becoming bored with routine tasks, and (8) enjoying searching for and solving problems.

Table 3. Results of Student Interviews Related to Learning Motivation

Indicator	Response		
	High Group	Medium Group	Low Group
Perseverance in facing tasks	12	5	0
Resilience in facing difficulties	8	12	6
Showing interest in various statistics questions	13	2	0
Preferring to work alone	5	3	0
Being able to defend one's opinion	12	5	3
Not easily giving up on what they believe in	10	3	1
Quickly becoming bored with routine tasks	8	4	4
Enjoying searching for and solving problems	12	9	2

Table 3 demonstrates the former in that there were 12 high students who responded to the indicator of perseverance in carrying a task through; for medium students, this number was five and zero for low students. The high, medium, and low categories of students indicated that they could concentrate well and were not easily distracted during class. If they struggled to understand the problem-solving items in statistics, they would get help or utilize additional resources to understand them, be it with teachers, peers, textbooks or the Internet. This is in accordance with the previous statement of Sadirman (2016), which states that students can struggle for a long time without getting bored easily if they have the motivation to learn.

On the scale of resilience measure in challenging situations, 8 high, + 12 medium, and 6 low categorized responses were received from students. High-category students described that if they encountered a difficulty, they would struggle to understand and would feel challenged when there was something to be solved. They also indicated that they viewed challenges as a chance to enhance performance in their ability in statistics problem-solving. The low category, on the other hand, easily gave up when encountering problems. According to Avcı (2022), students with high academic resilience tend to be more persistent in facing academic challenges and see difficulties as learning opportunities. This is in line with the findings that high category students feel challenged and try to understand the material.

The third indicator measuring interest in several statistics questions was answered by 13 high-category students being satisfied, 2 medium-category students being satisfied, and 0 low-category students feeling satisfied. Participants with codes A26 and A11 reported that they could focus on learning statistics and practice to make sense of the concepts. This was supported by students with codes A9 and A15, who explained that they were able to study longer if given challenging problems. Meanwhile, students in the low category, namely students with codes A1 and A22, explained that they did not like Statistics lessons. This is in line with Roche et al. (2021), who stated that students who have an interest in learning are happy to pay attention and interact with activities, people, or situations that become the focus of that interest.

The fourth sign—preference for completing the task alone—attracted 5, 3, and 0 responses from high, medium- and low-ability learners, respectively. The high students like to study alone to concentrate better and feel like they don't rely on teachers or classmates. Moderate and high range students will inquire their friends when they encounter some problems, while the low ability ones are usually careless of the work undertaken. According to Triwiratman et al. (2023), students with high academic abilities are more likely to have strong independence, which encourages them to be more confident in doing tasks independently.

The fifth indicator, namely students being able to defend their opinions, received 12 responses from high-ability students, 5 responses from medium-ability students, and 3 responses from low-ability students. High-ability students were more active in class discussions and did not mind if there were differences in answers. But low-ability students were happier to try to understand deeply and hunt down information that could back up their beliefs. Low-ability students were more dependent on their teachers and peers than high- and middle-ability students for solutions. A learning outcome was classified as good when students can defend the reason for their thinking, and both significant (Sachdeva, 2021).

The sixth indicator, namely not easily abandoning one's beliefs, received 10 responses from high-ability students, 3 responses from medium-ability students, and 1 response from low-ability students. High-ability students held firm to their beliefs when their answers differed from those of their teachers or other students. Students tended not to be influenced by the majority opinion and maintained their own opinions. Meanwhile, students in the moderate and low categories are more likely to trust their teacher's answers. Sachdeva (2021) explains that students with critical thinking skills tend to be more independent in their decision-making and are not easily influenced by majority opinion. This is in line with high-ability students who maintain their opinions even when they differ from those of their teachers or peers.

The seventh indicator, namely getting bored quickly with routine tasks, received 8 responses from high-ability students, 4 responses from medium-ability students, and 4 responses from low-ability students. Students in the high category will look for questions with various models so that their learning is not monotonous. Students with the A26 category look for other questions on the internet, while students with the A9 and A15 codes look for questions in books. Meanwhile, students in the moderate and low categories tend to get bored with the routine tasks they are given. Haroon & Kausar (2025) states that academic curiosity plays a role in increasing student engagement. Students with high curiosity tend to look for additional learning resources to stay interested and not get bored with routine tasks.

Eight, which is that students like to search for problems and figure out solutions, also collected 12 high responses, nine medium response and two low responses. Students also want practice problems to continue building up their statistical muscles, and when that happens, they think super hard. Students who are enthusiastic about working on problems given by teachers have confidence in their abilities. The higher the confidence students have, the higher their motivation to learn because students who are confident in their abilities have high self-confidence, which also affects their motivation to learn (Amry & Syahputra, 2020).

Meanwhile, based on the student interviews and the student learning motivation questionnaire, the following results were obtained.

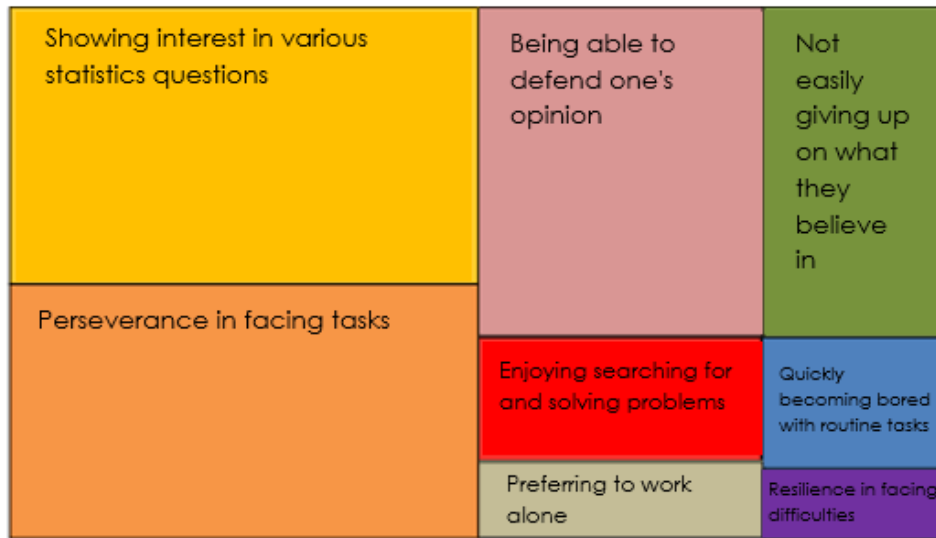


Figure 4. Results of Learning Motivation of Students in the High Group

The NVivo data analysis results for the high group, shown in Figure 4, explain that the indicator showing interest in various issues, marked in yellow, received the most responses compared to other indicators. Meanwhile, the indicator of perseverance in facing difficulties, marked in purple, received the lowest responses.

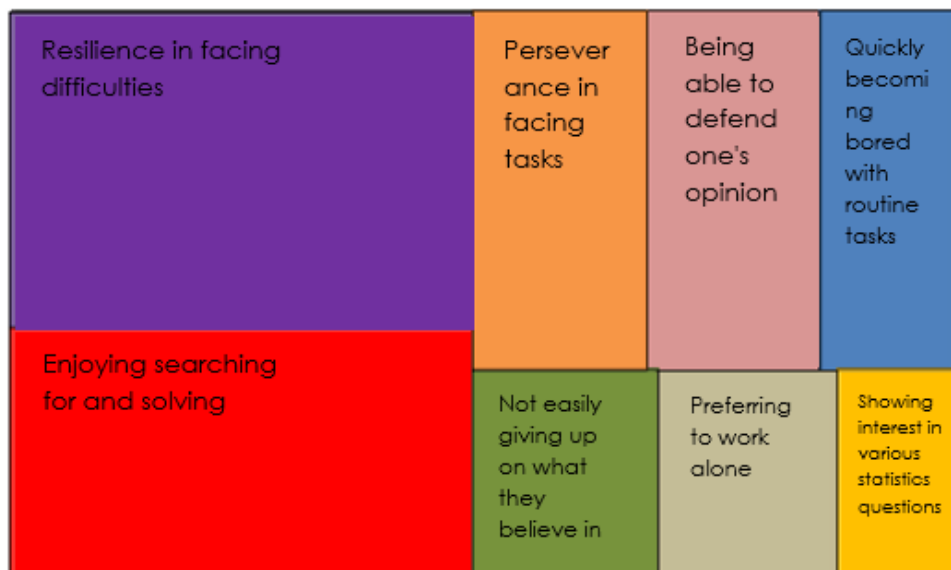


Figure 5. Results of Learning Motivation of Students in the Medium Group

The results of NVivo data analysis on the moderate group, shown in Figure 5 explain that the indicator of resilience in facing difficulties, marked in purple, received the most responses compared to other indicators. Meanwhile, the indicator showing interest in various problems, marked in yellow, received the lowest responses.



Figure 6. Results of Learning Motivation of Students in the Low Group

The results of NVivo data analysis on the low group, shown in Figure 6, explain that the indicator of resilience in facing difficulties, marked in purple, received the most responses compared to other indicators. Meanwhile, the indicator showing interest in various problems, marked in yellow, received the lowest responses.

The results of the study also show differences in the learning motivation of students. Boadu (2024) showed that students who have no study motive will lose their interest in learning, and their performance may drop. In the high category, students have higher learning motivation than students in the medium and low categories. In descending order of learning motivation, student responses to the high category were high, and interest in this subject was very high. The NVivo results related to learning motivation show differences, where the highest response among high category students is an indicator of interest in various statistical questions. Meanwhile, medium and low category students have the highest response to the indicator of persistence in facing difficulties. Furthermore, the lowest response that appears among high category students is an indicator of preferring to work alone. Meanwhile, the lowest response among medium and low category students is an indicator of interest in various statistics questions.

It can be inferred from the above discussion that there are very positive learning patterns of students with higher mathematical ability, and it effectively reflects the qualities that endorse success in Statistics, including Statistics subjects. They are not only active in learning, they also work alone and can concentrate on things without needing others' support when it's really necessary. Furthermore, these students may also be self-oriented for improvement by exposing themselves to a greater amount of challenges (in terms of solving more difficult questions and exploring further learning resources to increase their understanding). They are also capable of sticking to their own opinion even if they have a dissenting opinion from everyone

else or showing perseverance and tenacity when working on assignments or challenging things.

In the meantime, average students make a modest effort to use different signs, but they are not fully deployed in learned patterns. They require even more encouragement to make them more perseverant and self-reliant, particularly when they meet with harder tasks or problems. Reliance upon the assistance of teachers and peers remains high here, but they could become more capable with the right developmental support and inspiration.

Conversely, students with low capabilities are prone to showing passive and inappropriate learning behaviors. They are more likely to give up when they come across problems and lose interest in classes, while tending to depend on teachers or classmates without trying on their own. A lack of internal motivation and enthusiasm to learn is a significant barrier to the realisation of their potential. They demonstrate a lack of interest in dull responsibilities, which subsequently minimizes engagement in learning.

CONCLUSIONS AND RECOMMENDATIONS

Based on the research findings and discussion, it can be concluded that teacher feedback practices in Statistics learning in Grade VII-A of SMP Negeri 26 Bandar Lampung were predominantly characterized by verbal feedback provided directly during the learning process. The feedback that appeared most frequently was timely, specific, and related to students' learning processes. However, the implementation of feedback had not been fully and systematically integrated into the Statistics didactic design.

The findings also showed that students' learning motivation varied across mathematical ability levels. Students with high and medium mathematical abilities tended to demonstrate higher learning motivation than students with low mathematical abilities. This indicates that teacher feedback needs to be more carefully adapted to students' developmental levels, learning difficulties, and individual needs. In this context, feedback should not only function as correction or appreciation, but also as instructional support that helps students understand their mistakes, improve their learning strategies, and build confidence in learning Statistics.

Overall, this study shows that teacher feedback is an important component of Statistics didactic design and has a meaningful role in supporting students' learning motivation. Therefore, teachers need to plan feedback more systematically as part of the learning design, particularly by providing feedback that is meaningful, adaptive, specific, and process-oriented. Future studies may further examine the implementation of feedback-based didactic design in broader classroom contexts and at different educational levels.

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