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PROFILE OF MATHEMATICAL BELIEF OF HIGH-ABILITY STUDENTS AT MAN PALU CITY IN SOLVING PROBABILITY PROBLEMS

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Abstract

Mathematical belief is an important affective aspect that influences students' success in understanding concepts and solving mathematical problems. High-ability students are often assumed to possess strong confidence and stable cognitive skills. However, studies that specifically explore their mathematical belief, particularly in solving probability problems, remain limited. This study aims to provide an in-depth profile of the mathematical belief of high-ability students in the process of solving probability problems. Using a descriptive method with a qualitative approach, this research involved one eleventh-grade student in the 2025/2026 academic year who was identified as having high mathematical ability based on report card scores and teacher recommendations. Data were collected through a written test and semi-structured interviews, then analyzed using indicators of mathematical belief in mathematics learning and in solving probability problems. The results indicate that the high-ability student demonstrated positive mathematical belief, was able to clearly understand the problem, design systematic problem-solving strategies, execute the plan accurately, and review the answer to ensure correctness. These positive beliefs were reflected through strong self-confidence, learning motivation, and reflective thinking skills, all of which supported the student's success in solving probability problems.

Keywords: mathematical belief, high-ability students, problem solving, probability, mathematics learning

Abstrak

Keyakinan matematis merupakan aspek afektif penting yang memengaruhi keberhasilan siswa dalam memahami konsep dan memecahkan masalah matematika. Siswa berkemampuan tinggi sering diasumsikan memiliki kepercayaan diri yang kuat dan keterampilan kognitif yang stabil. Namun, penelitian yang secara khusus mengeksplorasi keyakinan matematis mereka, terutama dalam memecahkan masalah peluang, masih terbatas. Penelitian ini bertujuan untuk memberikan profil mendalam tentang keyakinan matematis siswa berkemampuan tinggi dalam proses memecahkan masalah probabilitas. Menggunakan metode deskriptif dengan pendekatan kualitatif, penelitian ini melibatkan satu siswa kelas sebelas tahun ajaran 2025/2026 yang diidentifikasi memiliki kemampuan matematika tinggi berdasarkan nilai rapor dan rekomendasi guru. Data dikumpulkan melalui tes tertulis dan wawancara semi-terstruktur, kemudian dianalisis menggunakan indikator keyakinan matematis dalam pembelajaran matematika dan dalam memecahkan masalah probabilitas. Hasil penelitian menunjukkan bahwa siswa berkemampuan tinggi menunjukkan keyakinan matematis yang positif, mampu memahami masalah dengan jelas, merancang strategi pemecahan masalah yang sistematis, melaksanakan rencana dengan akurat, dan meninjau jawaban untuk memastikan kebenarannya. Keyakinan positif ini tercermin melalui kepercayaan diri yang kuat, motivasi belajar, dan keterampilan berpikir reflektif, yang semuanya mendukung keberhasilan siswa dalam memecahkan masalah probabilitas.

Kata kunci: keyakinan matematis, siswa berkemampuan tinggi, pemecahan masalah, peluang, pembelajaran matematika

INTRODUCTION

Mathematics is not merely a subject that teaches students how to calculate or memorize formulas; it also plays an essential role in cultivating logical reasoning, systematic analysis, and creative problem-solving. These competencies are valuable not only for understanding mathematical ideas but also for decision-making and addressing complex

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challenges in everyday life (Safitri, 2023). For this reason, mathematics is taught across all educational levels as a foundational discipline that strengthens students' cognitive and analytical capacities (Duma et al., 2024). However, mathematical success cannot be attributed solely to cognitive ability. Non-cognitive factors, particularly students' affective characteristics, also hold a significant influence on their learning experiences and academic outcomes. Among these affective components, mathematical belief is widely recognized as one of the most crucial.

Mathematical belief refers to students' perceptions about mathematics, their learning experiences, and their confidence in their ability to engage with mathematical tasks (Komara et al., 2024; Asare et al., 2025). Students who believe that mathematics is difficult, abstract, or only for highly capable individuals tend to experience anxiety, avoidance, and low motivation when facing mathematical tasks (Sujadi et al., 2024). Conversely, students who hold positive beliefs about mathematics are more likely to engage actively, persist longer when working through challenging problems, and demonstrate greater confidence in their thinking (Tanzila & Nasution, 2022; Onoshakpokaiye, 2021). Mathematical belief thus shapes students' strategy choices, effort allocation, and persistence, making it an essential component of the problem-solving process (Hidayatullah, 2022).

The significance of mathematical belief in shaping students' mathematical behavior is further highlighted by Liviananda & Ekawati (2019). Their study explains that students' beliefs about mathematics influence how they view the nature of mathematics, how they approach the learning process, and how they respond to mathematical problems. Students with strong positive beliefs tend to approach mathematics with greater enthusiasm, confidence, and willingness to persevere, whereas negative beliefs contribute to hesitation, avoidance, and a tendency to give up easily. These findings reinforce the idea that belief is deeply tied to students' mathematical competence and affects the quality of their engagement in the classroom (Pracilia et al., 2023). In other words, mathematical belief serves as a lens through which students interpret mathematical tasks and regulate their responses toward learning challenges.

Problem-solving itself is considered a central component of mathematics learning (NCTM, 2000; Zulkarnain et al., 2020; Son et al., 2020). Effective problem-solving requires conceptual understanding, strategic thinking, and the ability to reflect on one's process

(Firmansyah & Syarifah, 2023). It also demands perseverance and confidence traits closely associated with students' mathematical beliefs. However, students' abilities to solve mathematical problems vary widely, even among those in the same class. These differences are often categorized into high-, moderate-, and low-ability groups, reflecting the diversity of students' mathematical proficiency (Isro'il & Supriyanto, 2020). Such variations underscore the need to consider not only cognitive ability but also belief systems when examining students' learning processes.

Initial observations at MAN Palu City show that students possess diverse levels of proficiency in solving probability word problems. Many students struggle to interpret contextual information or complete multi-step reasoning without guidance. These differences are not solely rooted in cognitive ability rather, they appear to be influenced by students' beliefs about their own capacity to solve mathematical problems. Students who lack confidence tend to hesitate, simplify problems incorrectly, or abandon tasks prematurely, while those with stronger beliefs are more likely to persist and apply appropriate strategies.

Although numerous studies have explored mathematical beliefs in general student populations, research specifically focusing on high-ability students remains limited, especially in the Indonesian context. High-ability students are often assumed to automatically possess strong confidence, effective reasoning, and mature problem-solving strategies. Yet previous research suggests that strong cognitive ability does not necessarily guarantee strong belief. Some high-achieving students still struggle with doubt, anxiety, or fear of making mistakes, which may hinder their performance (Alabbasi et al., 2025). Liviananda & Ekawati (2019) also emphasize that students' beliefs are shaped not only by ability but by prior experiences, classroom environment, and interactions during learning, meaning that even high-ability students can develop varied belief profiles.

Understanding mathematical belief in high-ability students is particularly important because this group possesses stable conceptual understanding and more advanced reasoning, allowing researchers to investigate how belief influences complex cognitive processes. High-ability students also tend to employ more reflective thinking, making them a meaningful population for examining belief-driven differences in strategy use and problem-solving behavior (Divrik, 2023). Moreover, their belief profiles can serve as a reference point for designing instructional approaches that cultivate both mathematical ability and productive dispositions among broader student populations.

Probability, as the mathematical domain examined in this study, presents its own challenges. Students frequently perceive probability as abstract, counterintuitive, and difficult to reason through because it involves uncertainty and non-deterministic thinking (Sari et al., 2024). Even high-ability students may find probability problems demanding due to the need for logical structuring, contextual interpretation, and combinatorial reasoning. These characteristics make probability an appropriate context for examining how mathematical beliefs shape students' problem-solving processes.

Given this background, the present study aims to explore the profile of high-ability students' mathematical belief in solving probability problems at MAN Palu City. Focusing on high-ability students allows for a deeper understanding of how belief functions in a population with strong cognitive potential. This aligns with previous findings showing that students with strong mathematical beliefs tend to perform better in problem-solving tasks because they exhibit greater persistence, confidence, and engagement (Mukarromah et al., 2024). At the same time, not all high-ability students possess beliefs consistent with their academic capabilities; some experience hesitation, perfectionism, or anxiety, which may inhibit their potential. Investigating their belief profiles can help teachers understand the psychological dynamics that influence students' learning and design instructional strategies that foster positive mathematical beliefs and higher-order thinking.

METHODS

This study employed a descriptive method with a qualitative approach. Qualitative descriptive research is a type of study that produces descriptive data in the form of written or spoken words, providing a clear picture of the subject being studied. The aim is to understand the mathematical beliefs of high-achieving students in solving probability problems.

The data source for this research was a Grade XI student at MAN Kota Palu, conducted during the odd semester of the 2025/2026 academic year. The subject was one student identified as having high mathematical ability. The selection of the subject was based on the mathematics report card scores and recommendations from the mathematics teacher to ensure that the participant truly met the criteria as a high-achieving student.

The classification of mathematical ability followed Arikunto's (2012) standard, using the mean ($\bar{x}$) and standard deviation (SD) of students' mathematics scores:

- Score $> \bar{x} + SD$: High ability
- $\bar{x} - SD \leq$ Score $\leq \bar{x} + SD$: Moderate ability
- Score $< \bar{x} - SD$: Low ability

The instruments used in this study consisted of a primary instrument and supporting instruments.

1. Primary Instrument
   The primary instrument in this study was the researcher, who played a direct role in determining the research focus, selecting the location and time of the study, choosing the research subject, collecting data, preparing research instruments, analyzing the data, and drawing conclusions.
2. Supporting Instruments
   The supporting instruments in this study were a written test and an interview guide. The written test consisted of mathematical problems related to probability, designed to assess the subject's problem-solving skills. The interview guide comprised a set of key questions prepared by the researcher to explore the subject's responses to the written tasks. The interviews were conducted to investigate the subject's mathematical beliefs in solving probability problems.

The data collection techniques used in this study were written test sheets and semi-structured interviews. The written test used in this research was in the form of essay questions. Before being administered, the test was validated by selected validators. The test was then given to the research subject to identify the student's mathematical beliefs in solving probability problems. From the results, a written depiction of the student's mathematical beliefs in solving probability problems could be obtained. A semi-structured interview is a type of interview that offers more flexibility than a structured interview. Its purpose is to explore issues more openly, allowing the interviewee to express their opinions and ideas. This interview was conducted directly between the researcher and the subject to obtain or supplement data previously gathered from the written task. To allow the researcher to review the data repeatedly, the interview was audio-recorded throughout the process.

To ensure the validity of the findings, the study applied the criteria of credibility and dependability (Miles et al., 2014). Credibility was enhanced through prolonged engagement with the subject, in-depth and repeated observation, peer debriefing, and member checking (Sugiyono, 2013). Dependability was ensured through an audit of the entire research process by an independent auditor or expert team, from the initial stages to the final reporting. The expert referred to in this study was the research supervisor, who audited all activities carried out by the researcher throughout the study. The data analysis process in this study followed a qualitative approach. Qualitative data analysis was conducted interactively and continuously until the data reached saturation. The analysis referred to the model proposed by Matthew B. Miles (2014), which includes three main activities: data condensation, data display, and conclusion drawing/verification.

The indicators used in this research were adapted from Kloosterman & Stage (1992) and adjusted to the problem-solving stages developed by Polya, as explained in Table 1.

Table 1. Indicators of Mathematical Belief Based on Polya's Steps

No	Polya's Steps	Subvariable of mathematical belief	Indicator
1	Undersanding the problem	Difficult Problems	Students' belief that they are capable of understanding problems that are considered difficult.
		Steps	Students' belief that understanding the problem is an important step in solving mathematical problems.
		Understanding	Confidence in one's ability to interpret information and requirements in questions.
		Word Problems	The belief that stories can be analyzed and understood if they are carefully observed.
		Effort	The belief that effort and perseverance can help to understand problems better.
2	Devising plan	Difficult Problems	The belief that strategic planning can help tackle difficult issues.
		Steps	The belief that every step in designing a plan is important for success.
		Understanding	The belief that understanding mathematical concepts supports the design of solution strategies.
		Word Problems	The belief that story problems can be solved systematically.
		Effort	The belief that success in planning comes from effort and thoroughness.
3	Carriying out the plan	Difficult Problems	The belief that the strategy that has been designed can be implemented even though the issue seems difficult.

		Steps	The belief that following the steps of systematic resolution will yield the correct result.
		Understanding	The belief that understanding the steps will facilitate the implementation of the strategy.
		Word Problems	The belief that solving story problems can be done gradually and logically.
		Effort	The belief that hard work and consistency are essential when executing a plan that has been made.
4	Looking back	Difficult Problems	The belief that reviewing solutions can help identify errors and improve solutions to difficult problems.
		Steps	The belief that final verification is an important part of problem solving.
		Understanding	The belief that by re-examining the resolution process, students can improve their reflective thinking skills.
		Word Problems	The belief that reviewing the solution to a story problem can strengthen understanding of the context of the problem.
		Effort	The belief that evaluating work results is part of the effort to improve in mathematics.

RESULTS AND DISCUSSION

In this study, the researcher used two types of instruments: a written test and an interview guide. The material used in the written test focused on probability. The researcher referred to aspects of beliefs in mathematics education, with particular emphasis on the sub-aspects of beliefs about learning mathematics and problem-solving. Furthermore, this study integrated the sub-variable of mathematical belief with Polya's problem-solving stages as an analytical framework to identify and describe the mathematical belief profiles of high-achieving students.

The study began with the selection of a high-achieving student from Class XI D at MAN Kota Palu. This class was chosen by the researcher based on approval and recommendations from the mathematics teacher. One student with high mathematical ability was then selected, identified through the mathematics report card scores from the even semester of the 2025/2026 academic year. These scores were categorized according to the students' mathematical ability levels, as shown in Table 2 below.

Table 2. Classification of Students Based on Mathematical Ability

Score	Mathematical Ability	Number of Students
Score $> \bar{x} + SD$	High	7
$\bar{x} - SD \leq$ Score $\leq \bar{x} + SD$	Moderate	24
Score $< \bar{x} - SD$	Low	3

Based on the data presented in Table 2, seven students were identified as belonging to the high-ability group. From these students, one individual was selected as the primary research subject. The selection was based on mathematics report card scores and recommendations from the mathematics teacher to ensure that the chosen student accurately represented the characteristics of high-ability learners.

The findings of this study reveal the mathematical belief profile of the high-achieving student when solving probability problems. This profile was analyzed by integrating indicators of mathematical belief in learning mathematics with indicators of mathematical belief in probability problem-solving. The analysis provides a comprehensive description of how the student's beliefs shape their cognitive processes and strategies while working through probability tasks.

Mathematical Belief in Mathematics Learning

The interview results of the high-ability student regarding mathematical belief in learning mathematics can be seen in Table 3 below.

Tablel 3. Interview with a high-ability student in mathematics learning.

Dialogue		
PF-003	:	Do you think mathematics is important in everyday life? Could you explain some examples?
ST-004	:	Yes, because my teacher explains using practice problems that are similar to everyday life, so I can understand quickly. For example, in daily life, like measuring land area, since that also uses mathematical formulas.
PF-005	:	How do you feel when learning mathematics in class (happy, difficult, challenging, or something else)?
ST-006	:	I feel happy because I can think logically and find new ways to solve problems. I also feel challenged when there are difficult questions, which motivates me to keep working on them until I get the correct answer.
PF-007	:	How does your teacher usually explain mathematics material in class, and do you think that way helps you understand the lesson better?
ST-008		The teacher usually explains the concept first and writes the material on the board, then explains it. After that, the teacher gives example problems, starting from the easy ones to the more difficult ones. Yes, it really helps, because the explanation is structured and the teacher also provides examples from everyday life, so I can better understand the material being taught.
PF-009	:	How confident are you in your ability when solving mathematics problems, and when do you feel doubtful while working on them?
ST-010	:	I am 100% confident. I feel very sure, especially when I already understand the steps. Before the mathematics lesson begins, I study and practice solving problems, so when I am asked to work on them in class, I can do it and feel confident that my answers are correct.
PF-011	:	In your opinion, is the topic of probability easy or difficult, and what do you think about the benefits of probability in everyday life? Could you give an example?
ST-012	:	In my opinion, probability is quite easy if you know the combination formulas and understand the concept of events well. It is very useful, for example, we can know how many combinations of different colored balls there are, because the more combinations, the more possible ways can be used. Another example is estimating the likelihood of today's weather.
PF-013	:	What do you usually do to better understand mathematics lessons? Why do you do that?

ST-014	:	I practice a lot of problems and watch learning videos. In my opinion, the more problems I solve, the faster I understand. I also usually watch videos on YouTube to find different ways of solving problems.

Based on the interview conducted with the high-achieving student, it was evident that the student's mathematical belief in learning mathematics not only reflected strong confidence in his ability to understand and solve problems, but also demonstrated a positive disposition that supports deeper cognitive engagement. The student described mathematics as a challenging yet enjoyable subject because it develops logical and systematic thinking, indicating that he views difficulties as motivating rather than discouraging. This is consistent with the findings of Liviananda & Ekawati (2019), who stated that students with positive mathematical beliefs tend to learn with enthusiasm and sustained effort.

Mathematical Belief in Solving Probability Problems

1. High-Ability Subject on the Indicator of Mathematical Belief in Understanding the Problem

The written test results of the high-ability student on the indicator of mathematical belief in understanding the problem are shown in Figure 1 below.

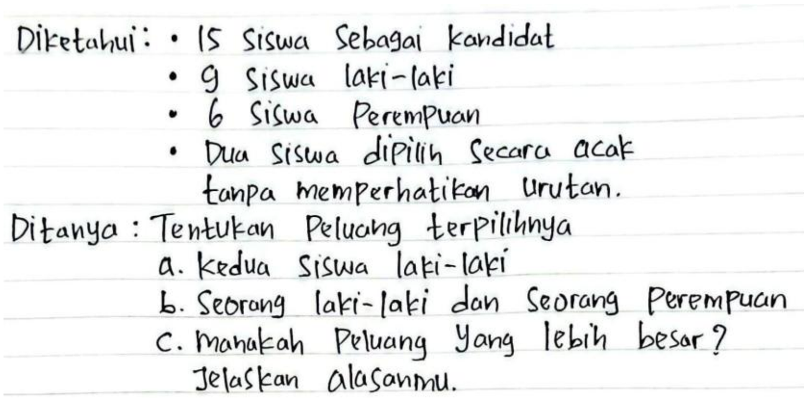

Figure 1. Written Response of a High-Ability Student in Understanding the Problem

At the interview stage, the high-ability student also provided statements that reflect his mathematical belief in understanding the problem. The statements illustrating this can be seen in Table 4 below.

Tablel 4. Interview with the High-Ability Student in Understanding the Problem

Dialogue		
PF-037	:	Do you think this question is difficult?
ST-038	:	It's not difficult. I think this question is easy to understand and to work on.
PF-039	:	Why do you think this word problem is easy?
ST-040	:	Because I already understand the question, and I've learned this material before, so I think it's easy.
PF-041	:	How do you understand this question?

ST-042		First, I carefully read the question, then I identify the given information, such as there are 15 students as candidates consisting of 9 male students and 6 female students, and 2 students will be selected as school representatives. The question asks for the probability that both selected students are male, one male and one female, and which probability is greater. It is also stated that the selection is done randomly without regard to order. After identifying all the given data, I can understand the meaning of the problem.
PF-043	:	Do you think it is important to understand the problem before solving it?
ST-044	:	It's very important, so that we know how to solve it. Because if we don't understand the problem, it will be difficult for us to know how to work on it.
PF-045	:	What do you do to make sure that you really understand the problem?
ST-046	:	When I understand the problem, what I do is start solving it, because if I already understand it, I can immediately work on it.
PF-047	:	What information do you know from this question?
ST-048	:	The first information given is that there are 15 students as candidates participating in the competition, consisting of 9 male students and 6 female students. The school will select 2 students to represent the school, and the selection is done randomly without considering the order. From this, I already know which method is easiest to use, which is the combination method.
PF-049	:	Is there any other information?
ST-050	:	Yes, there is. The question asks to determine the probability of selecting two male students, one male and one female student, and which of these probabilities is the greatest. So that is what the problem is asking for.

Based on the answers in Figure 1 and the results of the mathematical belief interview on the indicator of understanding the problem of writing, consisting of 15 students, including 9 male students and 6 female students, two students were selected at random without regard to order (ST-048). Determine the probability of selecting two male students, one male and one female, and which probability is greater? Explain your reasoning (ST-050). Based on the written test and interview results, high-ability students demonstrated strong mathematical belief in understanding probability problems. They were able to clearly identify and express the known and required information, both verbally and in written form, indicating solid conceptual understanding. This ability reflects deeper cognitive engagement supported by positive self-belief. These findings align with previous research showing that positive mathematical belief helps students interpret problem contexts more accurately and confidently (Komara et al., 2024)

2. High-Ability Subject on the Indicator of Mathematical Belief in Planning a Strategy

The interview findings of a high-achieving student regarding the mathematical belief indicator in designing a plan, as presented in Table 5 below.

Table 5. Interview with High-Ability Student on Planning Strategy

Dialogue		
PF-061	:	After understanding the problem, what is your plan for solving it?

ST-062	:	My plan is to first write down the known and asked information. Once I have the data, I proceed by applying the initial formula $P(A) = \frac{n(A)}{n(S)}$ The problem states that two students are selected randomly and without regard to order, so I use the combination method. The combination formula is $C_r^n = \frac{n!}{(n-r)!}$ After that, I calculate the probability.
PF-063	:	Does this plan help you better understand the problem?
ST-064	:	Yes, it really helps. Because everything becomes more organized, and I use the combination formula $C_r^n = \frac{n!}{(n-r)!}$ since the problem states that order is not considered. I understand the steps involved and I'm confident that I can solve it accurately.
PF-065	:	What steps will you take to solve the problem?
ST-066	:	The steps are as I mentioned earlier. First, I will write down the known and the asked information. Once I have the data, I will proceed to solve the problem. Since the question involves selecting two students randomly and without considering the order, I will use the combination method. I will determine the sample space or n(S) by calculating the total number of combinations there are 15 candidates and 2 students will be selected. I will find that first, then calculate the number of favorable outcomes or n(A) for each part (a, b, and c), solving them one by one.

Based on the interview results, mathematical confidence in the plan design indicators showed positive results. This can be seen from ST's ability to determine and express the steps to solve problems verbally before working on them. ST is able to explain the sequence of steps to solve problems systematically (ST-062) and demonstrates a good understanding of the concepts used in planning problem solving (ST-064). He is able to choose the right formula and organize the steps systematically, demonstrating a solid conceptual understanding supported by positive self-confidence. This reflects a deeper strategic competence and is in line with previous research showing that positive mathematical confidence helps students develop coherent and effective problem-solving plans.

3. High-Ability Subject on the Indicator of Mathematical Belief in Carrying Out the Plan

The written test results of a high-ability student on the mathematical belief indicator in implementing a problem-solving plan, as shown in Figure 2 below.

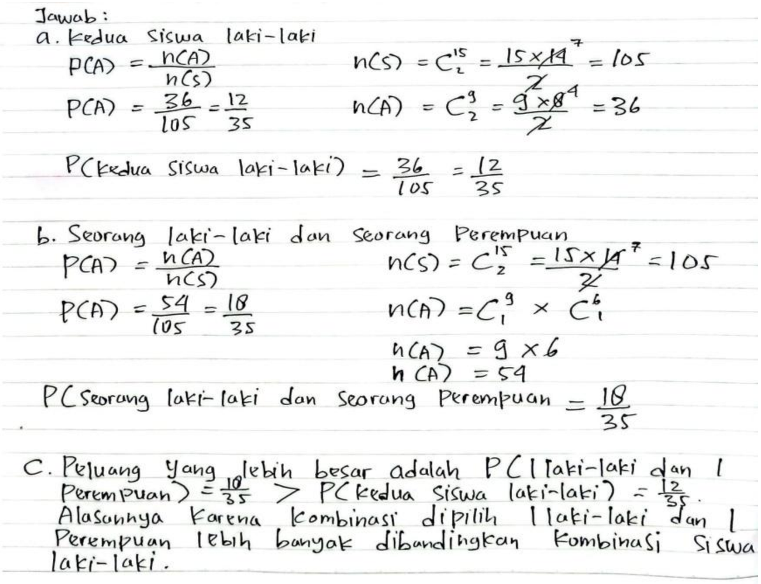

Figure 2. Written Response of a High-Ability Student in Executing the Plan.

At the interview stage, the high-achieving student expressed views that illustrate their mathematical belief in executing the problem-solving strategy. These statements are presented in Table 6 below.

Table 6. Interview with High-Ability Student on Implementing a Problem-Solving Plan

Dialogue		
PF-093	:	How did you solve the word problem?
ST-094	:	First, I read the problem carefully to understand it, then I gathered the relevant information. The problem states that there are 15 student candidates, consisting of 9 male and 6 female students. It is also stated that two students will be selected randomly without considering the order, so I used the combination method since the order does not matter. The first step I took was to calculate all the possible ways to choose 2 students out of 15, which is C_2^{15}. The formula is $\frac{15\times14}{2} = 105$. So, there are 105 possible outcomes. Next, to find the probability of selecting two male students, I calculated the number of ways to choose 2 out of 9 males, which is $C_2^9 = \frac{9\times8}{2} = 36$. Therefore, the probability is $\frac{36}{105} = \frac{12}{35}$. Then, for the probability of selecting one male and one female, I multiplied the number of ways to choose 1 male from 9 and 1 female from 6, which is $9 \times 6 = 54$. So the probability is $\frac{54}{105} = \frac{18}{35}$. From these results, I compared the two probabilities. Since $\frac{18}{35} > \frac{12}{35}$, the probability of selecting one male and one female is higher. Thus, the final probabilities for each event are P(two males)$= \frac{12}{35}$ and P(one male and one female) $= \frac{18}{35}$.
PF-095	:	Do you feel that the steps are logical and lead to the correct result?
ST-096	:	It is very logical, because each step I took followed the correct sequence starting from identifying the known and the unknown, selecting the appropriate formula, and calculating the final result. I arranged the steps carefully to ensure that no part was overlooked, so the outcome can be confidently considered accurate and aligned with the concept of probability.

Based on the results of written tests and interviews, mathematical confidence in the plan implementation indicator showed positive results. This can be seen from ST's ability to carry out problem-solving steps systematically in accordance with the plan that had been made previously (ST-094). In addition, ST showed confidence in the steps taken and the results obtained (ST-096), indicating that ST had self-confidence and a good understanding of probability concepts. ST carried out each step systematically and logically, demonstrating not only procedural fluency but also confidence in selecting and applying the appropriate combination formula. ST's actions show that positive self-confidence supports accurate reasoning and strengthens their ability to connect concepts with procedures. These findings are consistent with previous studies showing that students with strong mathematical confidence carry out problem-solving plans more effectively and precisely. Therefore, their performance reflects conceptual understanding and confidence that the strategies they use will produce correct solutions.

4. High-Ability Subject on the Indicator of Mathematical Belief in Looking Back

At the interview stage, the results of the high-ability student on the indicator of mathematical belief in looking back are presented in Table 7 below.

Table 7. Interview with High-Ability Students in Looking Back

		Dialogue
PF-101	:	Did you check your answer?
ST-102	:	Yes, I checked it to make sure the answer was correct or not.
PF-103	:	After reviewing your answer, were you confident that it was correct?
ST-104	:	I was very confident. I reviewed it again just to make sure the answer was correct.
PF-105	:	Was there any part that you corrected?
ST-106	:	There was nothing I needed to correct, as my solution was already accurate from the start.
PF-107	:	So, were you completely confident that your answer was correct?
ST-108	:	I was very confident because I had studied the material and frequently practiced solving word problems.
PF-109	:	Which steps did you recheck?
ST-110	:	I checked all the steps to ensure that my answer was correct, and fortunately, everything matched my initial solution so I didn't need to make any changes.
PF-111	:	So, was your purpose in rechecking the answer simply to confirm its correctness, or because you weren't confident in it?
ST-112	:	My purpose in rechecking was simply to make sure that my answer was correct, not because I was unsure. I was very confident, but sometimes we make mistakes in writing or calculations, so I double-checked just to be safe while there was still time left.
PF-113	:	After rechecking your answer, were you confident that it was correct?
ST-114	:	I was 100% confident.

Based on the interview results, mathematical confidence in the rechecking indicator showed positive results. This can be seen from ST's ability to recheck each step of the solution to ensure that there are no errors in the calculation or writing of the results (ST-102, ST-110). Although there was no part that needed to be corrected because the answers were correct from the start (ST-106), ST still performed rechecking as a form of caution and responsibility (ST-112). ST also showed high confidence in his work results (ST-108, ST-114).

This reflective habit shows that students view verification as an integral part of the problem-solving process, not just an optional step taken when doubts arise. These results are consistent with the findings (Hidayatullah, 2022), which reported that students with strong mathematical confidence tended to show higher levels of persistence, accuracy, and attention to detail during the verification stage. Overall, the review process shows that students view accuracy, careful evaluation, and systematic checking as essential components for ensuring the correctness of mathematical solutions.

CONCLUSION

Based on the research findings and data analysis, it can be concluded that high-ability students exhibit a strong and positive mathematical belief in solving probability problems. These students demonstrate high self-confidence in understanding the problems, are capable of designing appropriate strategies, executing problem-solving steps logically and systematically, and rechecking their work to ensure its accuracy. Such behavior reflects a strong sense of self-assurance, meticulousness, and responsibility in the learning process and mathematical problem-solving.

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