Factors Determining High School Students' Growth Mindset in Surakarta: A Thematic Analysis from Educators' Perspectives

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ARTICLE INFO	ABSTRACT
Keywords: growth mindset; educator's perspective; high school student; narrative inquiry *Article history:* Received 2025-06-12 Revised 2025-07-01 Accepted 2025-08-21	This qualitative study explores the factors shaping high school students' growth mindset from the perspective of educators in Surakarta, Indonesia, a novel approach in the local context. Utilising Focus Group Discussions (FGD) and narrative inquiry, data were collected from 18 school counsellors and 6 Principals/Vice Principals across public and private high schools. Thematic analysis, supported by NVivo software, identified ten key themes. Findings reveal that students' internal motivation and future goals are the most dominant factors, while the role of parents and family environment emerges as the most prominent external influence. Other contributing factors include self-perception, socioeconomic conditions, school environment, teacher roles, aspirations, and educational policies. These results underscore the crucial synergy between school and family environments, highlighting the need for relevant and challenging educational policies that foster a growth mindset. Practical implications emphasise parental involvement and developing students' life goals for optimal growth mindset cultivation. *This is an open access article under the CC BY-NC-SA license.*

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1. INTRODUCTION

The concept of mindset, particularly growth mindset, has become a significant focus in educational psychology. Carol Dweck asserts that individuals can fall between two categories of mindset: fixed mindset or growth mindset (C. S. Dweck, 2016). Fixed mindset is the belief that talent is innate and unchangeable, which can hinder effort and resilience in the face of failure. Meanwhile, growth mindset is the belief that abilities and intelligence can be developed through dedication and hard work, rather than being fixed and unchangeable traits (C. S. Dweck, 2015; C. S. Dweck & Yeager, 2019). Given its transformative potential, in the context of school education, it is highly ideal for both teachers and students to adopt this developing way of thinking. Growth mindset is believed to influence students' academic achievement and personal development(Claro et al., 2016; Yeager et al., 2019).

The positive implications of a growth mindset go beyond the academic realm, reaching aspects of adaptability, self-belief, and students' holistic well-being. Growth mindset emphasizes students' adaptability and resilience in learning (Sugiarti et al., 2024); students' beliefs about their abilities regarding motivation and learning outcomes (Daud & Astuti, 2021); and the belief that intelligence can grow through effort and learning (Combette et al., 2023). Furthermore, growth mindset is also beneficial for students because it can increase academic motivation (Meyer & Stutts, 2024), self-efficacy (Mandeville et al., 2018), and academic performance (Canning et al., 2024; Hudig et al., 2023). In addition, growth mindset also has a significant impact on non-academic aspects of life. Students who have a growth mindset will be able to reduce stress (Meyer & Stutts, 2024); able to develop themselves (Glerum et al., 2020), improve psychological well-being (Ali et al., 2023), and maintain mental health (Blake, 2022; Lai et al., 2022), which is an essential foundation for quality of life and lifelong development.

The significance of a growth mindset for student success and well-being has been widely proven. However, while its benefits are clear, the most effective strategies for cultivating a growth mindset in students remain broadly understood but often lack concrete, practical guidance. It is crucial not only to recognize the need for a growth mindset but also to understand how everyday environments and interactions actively nurture it. Crucially, existing literature has not sufficiently explored the perspective of educators—teachers and school principals—who serve as the primary facilitators of learning and development within the school environment. These individuals are on the front lines, directly observing and influencing students' mindsets daily. Furthermore, research specifically from the Indonesian context is scarce, yet cultural nuances and local educational practices significantly shape how growth mindset manifests and how it can be fostered. This significant gap underscores the urgent need for research that directly focuses on educators' insights, offering a more holistic and contextually relevant understanding of the characteristics and formative factors of a growth mindset.

Based on the identified gap, this study aims to identify the characteristics and formative factors of a growth mindset in Senior High School (SMA) students from the perspective of educators. More specifically, this study seeks to: 1. Explore an in-depth understanding of how School counselors and Principals/Vice Principals in high schools conceptualize growth mindset in students; 2. Identify internal factors (such as student motivation and goals) and external factors (such as parental roles, family environment, and school environment) that, according to educators, most contribute to the development of a growth mindset; and 3. Analyze how various elements such as self-perception, parents' socioeconomic conditions, teachers' roles, students' aspirations, and education policies influence the development of a growth mindset from the educators' point of view.

This study is expected to provide a significant contribution, both theoretically and practically, to the understanding and cultivation of a growth mindset within the unique context of Indonesian high school education. Theoretically, the research explicitly addresses a critical void in the existing literature by offering in-depth, practitioner-informed insights into the formative factors of a growth mindset. By focusing on the perspectives of high school educators in Indonesia, it moves beyond general theoretical understandings. It provides a nuanced, empirically grounded view from those who directly observe and shape student development. This fills a crucial knowledge gap: how a growth mindset is not just conceptualised, but *also experienced* and *fostered* by key stakeholders at the grassroots level. Practically, the findings have broad and immediate implications for various stakeholders in the educational ecosystem. They can serve as a robust foundation for developing highly relevant and actionable practical guidance on the key factors to consider for cultivating a growth mindset in Indonesian students. This includes informing the design of more effective and culturally sensitive teaching strategies, counselling and guidance programs, and school-wide initiatives, ultimately contributing to a more resilient and adaptable generation of learners.

2. METHODS

2.1. Research Approach

This study used a qualitative approach with a narrative inquiry research design. The qualitative approach excels in exploring the depth, meaning, and context of human experience and social phenomena (Teddlie & Tashakori, 2009). Narrative inquiry began to be recognized in the field of education in the 1990s thanks to the work of Connelly and Clandinin, which centered on lived experience (Clandinin et al., 2007). Experiences and stories about oneself and others are used to shape everyday life, along with the interpretation of the past within the framework of those narratives (Pino Gavidia & Adu, 2022). This qualitative research method aimed to enhance understanding of individual experiences across time and space (Dewart et al., 2020). The narrative inquiry method emphasized that individuals' life experiences can be deeply understood through its three dimensions: by analyzing personal and social interaction, the continuity of the story from past to future, and how the experience is bound to specific places and situations (Clandinin, 2006). Therefore, this design was chosen to explore educators' experiences, perspectives, and stories in a deep and contextual manner. The narrative inquiry method was implemented through narrative interview questions during the data collection process via Focus Group Discussion.

2.2. Subject of the Study

The subjects of this study were school counselors (18 people, 75%) as well as principals (4 people, 17%) and vice principals (2 people, 8%). They were educators from nine public senior high schools and nine private senior high schools in the city of Surakarta, Central Java. Participants were selected because they had direct interaction with and deep understanding of students within the school environment.

2.3. Data Collection

Data collection was carried out using the Focus Group Discussion (FGD) method. Focus group discussions are often used as a qualitative approach to gain in-depth understanding of social issues (Akyıldız & Ahmed, 2021; O.Nyumba et al., 2018). FGD refers to a specific group formed for the purpose of discussion within a research study, consisting of a certain number of participants deemed necessary for the particular research (Shabina et al., 2024). This method was used to collect data, generally in the form of opinions, from a selected group of people regarding a predetermined topic (Basnet, 2018). FGD involved controlled discussions in small, closed groups, conducted by a trained interviewer known as the "Moderator." (Shabina et al., 2024) The implementation of narrative inquiry within the Focus Group Discussion (FGD) was done by encouraging participants to share their personal stories or narratives relevant to the discussion topic, not merely short answers or opinions. The FGD moderator played a role beyond just facilitating discussion; they served as a prompt and a listener to the narratives.

2.4. The Research Procedure

The Focus Group Discussion was carried out in six main stages: Planning focus group research, Developing the discussion guide, Structure of the discussion guide, Translating the discussion guide, Conducting Focus Group Discussion, Analyzing focus group data (Hennink, 2014).
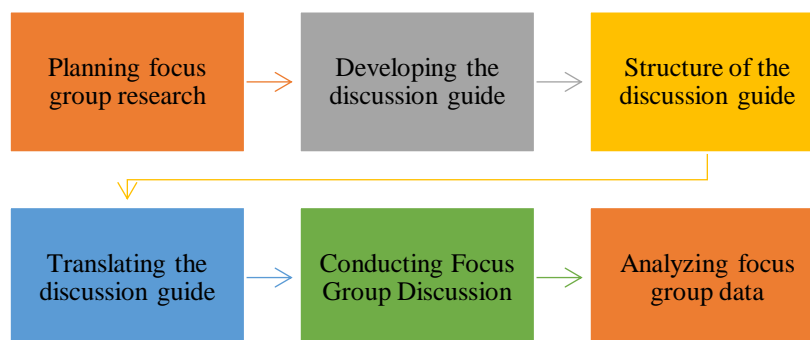
Figure 1. The Research Procedure

2.4.1. Planning focus group research

The initial stage was carried out by forming a research team consisting of: a Principal Investigator, Research Assistants, and an FGD Moderator. The research assistants were guidance and counseling department students who were recruited to assist with administrative tasks and note-taking during the FGDs; the research assistants were also responsible for transcribing the interview results from the process and audio recordings of the sessions. The FGD moderator was a lecturer in guidance and counseling who was involved in directing the discussion on the research topic within the small groups.

2.4.2. Developing the discussion guide

The development of the FGD guide was conducted to align perceptions among the research team members. The guide was developed to include: introduction, objectives, discussion topics, participants, roles and responsibilities of each research team member, implementation schedule, activity agenda, and interview guidelines. The FGD guide was also supplemented with a summary of key growth mindset concepts that needed to be understood by the research team.

2.4.3. Structure of the discussion guide

The guide began with an Introduction to welcome participants, explain the purpose of the FGD, and build comfort. This was followed by Participant Introductions to help participants get to know one another. After that, warm-up questions were asked to open the discussion with light and relevant topics, such as general experiences at school. The core part of the discussion consisted of main questions divided into in-depth subtopics, namely: the characteristics of students with a growth mindset and the factors that influence its development, with specific questions designed to explore personal perceptions and experiences. The discussion was then closed with closing questions to summarize key points or ask for suggestions, followed by a formal closing by the facilitator, who expressed gratitude.

2.4.4. Translating the discussion guide

This process was not carried out because the FGD guide was written in Indonesian and all participants were Indonesian speakers. The researchers did not use any externally developed guide.

2.4.5. Conducting Focus Group Discussion

The FGDs were conducted over one full day, with each of the four small groups participating in a dedicated session lasting approximately three hours. All invited participants were divided into these four groups, with each group consisting of 6 participants, one moderator, and one research assistant. The activity for each group commenced with an opening and an introductory briefing delivered by the researcher. The main activity involved in-depth group discussions facilitated by the moderator. At the end of the day, a classical consensus session was conducted with all participants present to collectively review and validate the preliminary research findings.

2.4.6. Analyzing focus group data

The entire interview process was recorded using a smartphone after obtaining informed consent from all participants, and these recordings were subsequently transcribed verbatim to ensure data accuracy. Field notes were also meticulously taken by the research assistants to capture non-verbal cues, group dynamics, and contextual observations during each session.

Data Validation and Credibility

To ensure the trustworthiness and credibility of the findings, data triangulation and member checking were systematically employed. Triangulation of data involved comparing and cross-referencing themes and insights across all four FGD groups to identify consistent patterns and divergent perspectives. Additionally, the field notes were used to corroborate the transcribed verbal data. Member checking was conducted by presenting the preliminary thematic findings (including key quotations) back to a representative subset of participants during the final consensus session mentioned in Table 1. This allowed participants to verify the accuracy and resonance of the interpretations with their lived experiences, thereby enhancing the confirmability of the research.

The verbatim transcripts, along with field notes, were then meticulously processed for thematic coding using NVivo software. The identified themes and their corresponding key codes, derived from a rigorous thematic analysis process, are presented in Table 1.

Table 1. Thematic Coding of Growth Mindset

Theme	Number of Quotation	Key Codes
Internal Motivation	15	Learning Spirit, Desire to Improve
Future Goals	13	Future Vision, College Target
Self-Perception	12	"I can/I can't", self-confidence
External Factors	10	Zoning, School Culture, peer influence
Parental Role	10	Parental blessing, control, support or restriction
Socio-Economic Status	9	Limited finances, working while studying
School environment	11	Motivation seminars, class rules, learning agreements
Role of Teachers	10	Motivation from teachers, role modeling, individual guidance
Aspirations and Hopes	8	Competition participation, career vision, strong drive
Education Policy	7	Removal of national exam, lenient graduation policy, zoning perception

2.5. Instrument

The instruments for data collection included a narrative interview guide that generated narrative data for thematic analysis, and a questionnaire measuring the level of need/importance of student growth mindset. The interview guide covered four main topics: the meaning of student growth mindset, characteristics of students with a growth mindset, factors influencing the growth mindset of students, and efforts made by schools to cultivate a growth mindset in students. These four main topics were developed through narrative-style questions such as: "Sir/Madam, when the concept of growth mindset comes to your mind, what is the initial image that appears? *What experience or thought first comes up regarding this concept and its impact on the school?"* (This question aims to encourage teachers/principals to narrate their interpretation of student growth mindset.) *"In your experience, are there certain 'signals' or indicators from students' behavior that make you suspect that the student has a growth mindset? Can you tell a story or incident that made you realize this?"* (This question focuses on the moments or stories that serve as the basis for educators' identification.)

The questionnaire consisted of eight question items. Examples of the questions posed include: "The development of a growth mindset compared to other development priorities at school today," and "The role of school counselors in providing service strategies on the topic of growth mindset." Each item was reviewed based on two levels: the level of need and the level of importance of growth mindset in the school environment. Each level was rated using four choice categories: For need: much needed, needed, moderately needed, not needed, and very not needed; for importance: very important, important, moderately important, not important, and very not important.

2.6. *Analysis Techniques*

The analysis technique used was Thematic Analysis. Thematic analysis is a qualitative data analysis approach, especially for focus group data, that is inductive in nature. This process involves breaking down verbal data (from verbatim transcripts) into smaller segments based on issues raised by participants, with the aim of identifying, deeply analyzing, and understanding patterns or themes that emerge from the participants' perspectives (Hennink, 2014). Thematic analysis focuses on discovering and explaining ideas, both implicit and explicitly stated in the data. These ideas are referred to as "themes." Once these themes are identified, the researcher assigns codes (short labels) to represent each theme (Greg Guest; et al., 2014). It is important to note that thematic analysis requires verbatim (word-for-word) transcripts of the group discussions. This is crucial to ensure that participant expressions and perspectives are accurately identified, and to enable the use of direct quotations to illustrate specific issues in their own words (Hennink, 2014).

The transcribed qualitative data was analyzed using NVivo software. NVivo is a computer software specifically designed for Qualitative Data Analysis (QDA). NVivo was chosen due to its capabilities in organizing, managing, classifying, sorting, identifying patterns, relationships, and themes as well as sentiments from non-numeric data. The analysis process included coding the data to mark important parts based on themes, ideas, or categories.

3. FINDINGS AND DISCUSSION

The research presents key findings from the Focus Group Discussion (FGD) conducted with high school teachers regarding the identification of characteristics and formative factors of students' growth mindset, as well as the efforts made by schools to foster it. Data were analyzed using Thematic Analysis and supported by NVivo software.

3.1. Data on the Level of Need and Importance of Student Growth Mindset

The data showed that most statement items were rated as having high levels of need and importance, with the majority of teachers and principals responding with "Much Needed" and "Very Important". This indicates a strong awareness and commitment toward the development of growth mindset in the school environment. The levels of need and importance regarding growth mindset are presented in Table 2.

Table 2. The level of needs and importance of Growth Mindset among students

Level of Needs			Statement	Level of Importance		
Much Needed	Needed	Fairly Needed		Very Important	Important	Fairly Important
%	%	%		%	%	%
75	25	0	Development of growth mindset compared to other developmentaal priorities in school	80	15	5
70	30	0	Formation of a growth mindset culture in the school environment	65	30	5
90	5	5	Teacher-parent collaboration to enhance student growth mindset	90	10	0
75	25	0	Teacher's role in facilitating growth mindset development in the classroom	80	20	0

Level of Needs			Statement	Level of Importance		
90	5	5	Role of school counselors in providing service strategies on the topic of growth mindset	90	10	0
90	10	0	Parental role in instilling a growth mindset in students	90	10	0
55	45	0	The role of cultural values in enhancing student growth mindset	45	55	0
85	15	0	Development of a guidance and counseling service model that specifically helps students improve their growth mindset	85	15	0

The data show that the level of need and importance reaches 90%. This very high number indicates that teachers and school principals are highly aware of the importance of the parents' role in shaping students' growth mindset. They view close collaboration between school and family as the key to success in this effort. Parental involvement is considered crucial in creating a consistent and supportive environment both at home and at school. The role of School counselors in providing service strategies on the topic of Growth Mindset also shows that 90% consider it very important and much needed. This indicates that teachers and school principals highly expect the active role of School counselors in providing specific strategies and services related to growth mindset. Regarding the importance of the parental role, the data also show that the "Parental Role in Instilling Growth Mindset in Students" is regarded as both important and highly needed. Similar to the first point, this figure once again affirms the crucial role of parents in the eyes of teachers and school principals. It shows that they believe growth mindset is not only taught at school but must also be instilled and reinforced within the home environment. The role of parents as role models and primary supporters in the growth mindset journey of children is highly appreciated. Overall, these data underline that achieving effective growth mindset development requires a holistic approach involving strong collaboration between teachers, parents, and support specialists such as school counselors.

3.2. Understanding of Growth Mindset in the School Environment

High school educators understand growth mindset as the students' ability to continue developing through learning and effort, rather than relying solely on innate talent. Teachers observed a tendency among students to keep thinking and to want to grow, as well as to have future goals. As one teacher stated: *"From what I see at SMA Batik 1, the students tend to keep thinking and want to grow. Most of them have goals they want to achieve."* Teachers also associated growth mindset with an open mindset, resilience in facing failure, and the presence of internal motivation. However, on the other hand, there are still students with a fixed mindset, indicated by apathy, studying only due to parental pressure, or having low self-confidence. This is illustrated by another teacher's remark *"Many students say, 'I can't do math,' because the environment also doesn't support them. That's an example of fixed mindset."*

3.3. Characteristics of Students with a Growth Mindset

The characteristics of students with a growth mindset were identified through several observable indicators. These students show a strong desire to participate in competitions, are proactive in seeking information, and actively ask questions. As a teacher explained *"I noticed that students who regularly join competitions in various fields show high curiosity and a strong desire to grow."* Involvement in various extracurricular activities and having clear life goals were also seen as significant markers of a growth

mindset. This is in line with the following statement: *"If a student already has dreams, college targets, and joins various extracurriculars, that could be an indicator that they have a growth mindset."* Conversely, students with a fixed mindset tend to be lazy, easily give up, and remain passive, especially in group activities such as the Pancasila Student Profile Strengthening Project (P5).

3.4. Factors Shaping Growth Mindset

The formation of a growth mindset is influenced by a combination of internal and external factors. The most prominent internal factor is having a clear life goal or aspiration, which serves as the main driver of motivation, curiosity, self-awareness, perseverance, and passion. As emphasized: *"Life goals are apparently important, because if someone doesn't have a goal, then even when given advice, it won't have any impact."* Students with strong goals tend to be more persistent, consistent, and selective in engaging with supportive activities.

Externally, parental influence and the family environment serve as a critical foundation. Supportive parents who allow their children to make choices (with accountability) are seen as highly encouraging. As one participant shared: "Supportive parents usually let their children make their own choices, as long as they take responsibility. *That strongly supports the development of the child's mindset."* However, pressure or authoritarian parenting styles can become obstacles. Additionally, traditional cultural values also act as barriers, for example, the view that: *"Cultural values like 'don't pursue education too far' or 'as long as you have a job, that's enough' still influence students' mindsets significantly."*

In-depth analysis of the FGD data highlights two dominant factors in shaping students' growth mindsets: parental/family influence (external) and life goals/aspirations (internal). Parental and Family Influence (Dominant External Factor) Teachers emphasized that support from the home environment, especially from parents, is a critical foundation for developing a growth mindset. School efforts may be hindered without synergy from the home, particularly when parents themselves have a fixed mindset or exert misaligned pressures. As illustrated by Ms. IN: *"When students are asked about their goals, some respond with, 'What do you think I'm suited for? What major should I take in college?', there are still responses like that"*, highlighting how some students remain dependent on external direction Ms. FI added: *"Supportive parents usually allow their children to make their own choices, as long as they're responsible. That really supports the growth of a child's mindset."* This underscores the importance of parenting that supports student autonomy Furthermore, Mr. WA pointed out: *"The school and family must support each other,"* *meaning that without alignment between these two environments, school efforts may face significant limitations".*

Life Goals or Aspirations (Dominant Internal Factor)

Having a clear life goal or aspiration is the most significant internal driver for students to adopt a growth mindset. Teachers observed that students with a clear vision tend to be more motivated to learn, seek information, and pursue self-development. Mr. AM explained: *"Students usually have a forward orientation, 'I want to learn, I want to know, I want to be successful in the future.' This means they're already driven by a desire to grow and develop. That's something that naturally happens in students who already have a concept of themselves in the future."* Mr. WA added: *"Life goals turn out to be important, because if a student doesn't have a goal, then even when you give them advice, it won't have any effect,"* emphasizing that external motivation becomes ineffective in the absence of internal direction. It is this clarity of purpose that directly shapes students' willingness to keep growing regardless of the conditions they face.

Discussions with high school teachers also highlighted the significant role of cultural context in shaping students' growth mindsets. Certain traditional values and beliefs were found to act as constraints, for example, views such as: *"Girls don't need to pursue high education,"* or *"Children must always obey their parents without question,"* These notions can limit students' aspirations and suppress their willingness to grow. Social stigma toward specific study tracks or disciplines was also identified as a barrier. For example, the perceptions that: *"Science is better than social studies,"* or *"Arts have no future,"* influence student choices and discourage them from pursuing their genuine interests and passions. Authoritarian or overprotective parenting, where parents tend to "hand over" full

responsibility to the school and offer little support at home, was also highlighted as a hindering factor. Teachers noted a generational shift in values and mindset, pointing out the need for parents to understand that effective educational approaches today are different from those they experienced in the past. Overall, these findings show that cultural context plays a critical role in shaping students' mindsets. Teachers recognize the need to confront counterproductive cultural values and to build strong communication with parents in order to create an environment that supports the development of a growth mindset in students.

3.5. School Efforts to Cultivate a Growth Mindset Culture

Schools have undertaken a range of initiatives aimed at fostering a growth mindset among students. These include motivational seminars and guidance sessions by school counselors. One teacher shared:"*We hold motivational seminars every semester, sometimes with alumni as speakers. The goal is to inspire students to have direction and grow.*" In addition, the school also enforce classroom agreements, which are co-developed with students to instill a sense of collective responsibility: In learning processes, we emphasize class agreements, including rules and shared responsibilities. It becomes a habit so that students become active and develop a sense of commitment. Furthermore, during orientation programs like Masa Pengenalan Lingkungan Sekolah (MPLS), schools introduce the idea that abilities can be developed.

3.6. Challenges in Developing Growth Mndset.

Main challenges faced by the school in developing growth mindset were the lack of intrinsic motivation among students and insufficient support from families. Teachers report significant difficulty in addressing mindset issues when the core problem originates from the home environment: *"The biggest challenge is when students themselves don't want to grow. If a child has no drive, it's very hard for the school to push them forward."* External structural issues also undermine motivation. Teachers noted that policy changes, such as the removal of the national exam (Ujian Nasional), have contributed to a perception among students that effort is optional: *"Kids don't feel challenged because everyone is guaranteed to pass."* Moreover, entrenched traditional cultural values and authoritarian parenting styles persist as significant barriers.

Discussion

The overwhelming consensus from educators regarding the high need and importance of growth mindset (Table 2) unequivocally demonstrates their profound commitment and awareness of its crucial role in education. This strong endorsement, reflected in the high percentages of 'Much Needed' and 'Very Important' responses, signals that educators not only grasp the concept but actively prioritize its implementation. This finding extends Dweck's (2017) emphasis on growth mindset beyond mere individual belief to encompass the necessity of a supportive ecosystem (C. Dweck, 2017). The explicit prioritization of collaboration and parental involvement further reinforces notion of growth mindset as a shared responsibility between school and family (Haimovitz & Dweck, 2017). Furthermore, the identification of students' internal motivation and future orientation as primary indicators directly aligns with and empirically supports Carol Dweck's self-theories (C. S. Dweck, 2000; C. S. Dweck & Leggett, 1988)., which posit that intrinsic drive and aspirational goals are fundamental catalysts for developing a persistent and proactive growth mindset. Conversely, the observed characteristics of a fixed mindset—such as laziness, quick surrender, and passivity—underscore the critical need for targeted interventions aimed at transforming students' underlying beliefs about their capabilities (Nurani, 2022)(Padır & Vangölü, 2023).

The thematic analysis compellingly reaffirms that students' life goals/aspirations (internal factor) and the parental/family environment (external factor) are the most dominant influences on growth mindset. This finding resonates strongly with Albert Bandura's Social Cognitive Theory (1977), which highlights the reciprocal interplay between personal, behavioral, and environmental factors in shaping

an individual's beliefs about their capabilities. Our results specifically illuminate how this interplay manifests: parental support that fosters autonomy and responsibility is crucial, whereas authoritarian parenting and certain traditional cultural values act as significant impediments (Hill & Tyson, 2009). This aligns with findings in the Indonesian context, where studies have consistently demonstrated the profound impact of parental involvement and specific parenting styles on student motivation and academic outcomes, indirectly supporting their role in fostering a growth mindset (Doni, 2019; Mutaharrikah et al., 2023). This empirically deepens the understanding of the family ecosystem's profound role, extending Hofstede's (Hofstede & McCrae, 2004) cultural dimensions to specifically illustrate their influence on growth mindset development within the Indonesian context. Furthermore, the emergence of socioeconomic conditions necessitating student work introduces a critical layer of complexity. This goes beyond purely psychological perspectives by demonstrating that growth mindset formation is intrinsically intertwined with broader sociocultural and economic realities (Hofstede, 1984; Hofstede & McCrae, 2004). This condition is often a unique challenge for students in Indonesia, where family economic support can directly affect students' focus and capacity to invest in long-term learning, an aspect that may be less dominant in Western literature focused on societies with more stable economic support. While school-based interventions are vital for shaping mindsets, as advocated by Dweck & Yeager (2019), our findings suggest that their effectiveness is significantly mediated by, and must proactively account for, these powerful external and contextual challenges. Thus, school efforts, such as those in the context of project-based interventions in Indonesia, are optimal when bolstered by holistic environmental support from both family and broader socioeconomic structures (Sugara et al., 2022).

The findings of this study offer significant theoretical and practical implications. Theoretically, this research advances the understanding of growth mindset as a profoundly multidimensional construct. It does not merely confirm, but provides empirical depth to the complex interplay between internal factors (e.g., life goals, motivation)) (C. S. Dweck & Yeager, 2021) and a range of external factors (e.g., parenting style, social environment, and educational policies) – (Kismiantini et al., 2021). Specifically, this study's unique contribution lies in elucidating *how* these factors intricately interrelate and mutually influence each other within the distinct context of Indonesian high schools in Surakarta. This granular insight extends existing theoretical models by demonstrating the contextual specificities of growth mindset formation, providing a more robust framework for future research. Practically, the urgency for a seamless synergy between school and family becomes acutely evident (Lee et al., 2024), particularly underscoring the potential of targeted parenting education programs on growth mindset. The pivotal role of schools and teachers in actively facilitating students' identification and development of life goals and aspirations through career guidance or mentoring is also clearly highlighted (Burnette et al., 2020). Furthermore, the findings emphasize the critical need to empower school counselors to strategically facilitate and motivate students (Kapasi & Pei, 2022; McMahon et al., 2009).Ultimately, the study advocates for the design of growth mindset interventions in schools to be highly contextualized, student-centric, and sensitive to their diverse cultural and socio-economic backgrounds.

4. CONCLUSION

This study identifies ten interrelated main themes in the formation of growth mindset among high school students, based on Focus Group Discussions (FGDs) with educators. The findings show that students' internal motivation, marked by the enthusiasm to learn and curiosity to grow, is closely related to having clear future goals and high aspirations/hopes, encouraging students to be more proactive. The role of parents proves to be very significant; positive support triggers growth mindset, while prohibitions or pressure can hinder it, especially when combined with socio-economic conditions that force students to work. On the institutional side, the school environment and the role of teachers are essential in instilling growth mindset through motivation and guidance programs. However, educational policies such as the abolition of the national exam (UN) may reduce the urgency of learning. Overall, the formation of growth mindset requires harmonious collaboration between students'

internal motivation, crucial support from parents and family environment, as well as proactive efforts from schools and supportive educational policies. Parental influence and students' life goals emerge as the most prominent external and internal factors in this growth mindset formation process.

This study has limitations in generalizing the findings, as it only involved school counselors from senior high schools in Surakarta. Although the FGDs provided in-depth qualitative data, students' perspectives have not been fully explored directly. In addition, group dynamics in the FGDs could influence participants' responses, although the facilitator attempted to minimize bias.

The findings of this study yield several critical practical implications for fostering students' growth mindset within the Indonesian education system. First, given that parental and family support forms a crucial foundation, schools must proactively initiate and sustain collaborative programs with parents, such as structured 'Growth Mindset Parenting Classes' that equip them with strategies for nurturing resilience and valuing effort over innate talent at home, complemented by routine communication channels. Second, recognising the pivotal role of clear life goals in intrinsic motivation, schools and teachers should integrate comprehensive career and life planning into the curriculum through 'Future Pathways Mentoring Programs' where students can explore options and set aspirations, with Guidance and Counselling (BK) departments leading workshops on goal-setting and self-reflection. Third, the strategic role of School Counsellors (Guru BK) necessitates investment in their continuous professional development, focusing on advanced growth mindset intervention techniques and culturally sensitive counselling approaches, coupled with adequate resource allocation and greater autonomy for designing tailored programs. Lastly, this study strongly affirms that any growth mindset intervention must be highly contextualised, culturally sensitive, and actively involve students in its design, incorporating local wisdom and relatable Indonesian role models. Furthermore, the utility of technology, such as NVivo in qualitative analysis, is underscored as a powerful tool for extracting the deep insights necessary to inform these specific and effective interventions.

Conflicts of Interest: The authors declare no conflict of interest.

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