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Exploring Curriculum Implementation Needs Based on Self-Determination Theory: A Case Study in Indonesia Primary School Teachers

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Abstract

Student disengagement and low intrinsic motivation remain persistent issues in educational contexts, often due to rigid curriculum structures that overlook learners' psychological needs. This study aims to analyze the operational curriculum needs of primary school teachers in fostering student autonomy, motivation, and engagement, using Self-Determination Theory (SDT) as the theoretical foundation. Employing a qualitative phenomenological approach, the study involved 12 private primary school teachers in Makassar, Indonesia. Data were collected through semi-structured, in-depth interviews and analyzed thematically to explore strategies and perceptions related to SDT-based curriculum implementation. The results revealed three key themes: recognizing individual student characteristics, offering meaningful choices in learning activities to support autonomy, and maintaining strong communication with parents to create a collaborative and emotionally supportive learning environment. These strategies were reported to significantly enhance student participation, classroom inclusivity, and a sense of belonging. The study concludes that integrating SDT principles into operational curriculum planning not only increases student engagement but also contributes to the development of a more holistic and humanistic learning atmosphere. This research contributes to the field of motivation-oriented curriculum design and offers practical implications for educators and school leaders in developing student-centered instructional practices. Further studies using quantitative or mixed methods are recommended to validate and expand these findings across broader educational contexts and grade levels.

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Introduction

Early Childhood Education (ECE) is widely regarded as a critical stage for laying the foundations of children's cognitive, physical, and social development (Li et al., 2024; Shonkoff et al., 2012; Stork & Sanders, 2008). During these formative years, children begin to establish mindsets that significantly influence how they learn and interact with the world. As a result, early education must be deliberately structured to ensure that it nurtures optimal growth. Scholars have emphasized that meaningful early learning should prioritize direct experiences and holistic development (Musi et al., 2022; Yafie et al., 2024). Such approaches allow children to construct knowledge actively while fostering balanced growth across multiple domains.

In the Indonesian context, however, the integration of Pancasila values into the ECE curriculum remains limited and often ineffective despite numerous national policies and reforms. This shortcoming presents a persistent challenge because ECE institutions must also adapt to evolving educational policies while addressing the diverse developmental needs of children. Moreover, the global educational landscape increasingly highlights the importance of *self-determination* as a driver of effective learning (Lin et al., 2024; Oosthuizen, 2016). Self-determination emphasizes the role of autonomy, competence, and relatedness in shaping

children's engagement and motivation, making it highly relevant for curriculum design. Yet, the systematic application of these principles in early childhood settings is still underexplored.

Self-Determination Theory (SDT), as formulated by Ryan and Deci, asserts that children's motivation and learning engagement increase when three basic psychological needs are met: autonomy, competence, and relatedness (Ryan & Deci, 2020; Cooke et al., 2016). This framework is highly relevant for designing the School Operational Curriculum (Kurikulum Operasional Satuan Pendidikan, KOSP) in ways that align with children's characteristics. However, discussions in the literature regarding the practical application of SDT principles in curriculum design remain limited. Integrating autonomy, competence, and relatedness into ECE curricula has significant potential to strengthen children's intrinsic motivation, particularly in Indonesia, where curricula often remain narrowly focused on cognitive outcomes (Bayly et al., 2022; Ebersole, 2019; Klein, 2019).

Previous studies have indeed demonstrated the positive influence of self-determination on learning motivation (Reeve et al., 2002; Reeve, Ryan & Deci, 2018). Yet, there is still no comprehensive framework that outlines concrete steps for developing a self-determination based curriculum. This gap is critical, as educators require practical guidance to apply SDT in ways that meet the diverse needs of learners. In Indonesia, ECE curricula continue to emphasize the mastery of basic academic knowledge rather than fostering character formation and socio-emotional growth, resulting in imbalanced learning outcomes (Abdullah et al., 2019; Syarnubi et al., 2023).

Contemporary scholarship often presents self-determination primarily as a theoretical lens without offering actionable strategies that educators can employ. This lack of practical frameworks leaves teachers without sufficient resources to create curricula that both promote children's independence and adapt to their unique characteristics (Ferreira et al., 2020; Woolner et al., 2018). Furthermore, most existing research has focused on primary and secondary education, with very limited attention to ECE curricula, particularly within Indonesia's dual system of formal and non-formal institutions. This underscores the novelty and urgency of investigating SDT based curriculum development in the Indonesian ECE context.

In light of these issues, the present study seeks to address the central research question: What are the essential requirements for developing and designing an effective self-determination based School Operational Curriculum that reflects children's characteristics? This inquiry not only provides a conceptual response but also proposes a structured methodology that educators can adopt to enhance children's agency and engagement in the learning process.

The study's contribution lies in presenting a collaborative framework that actively involves teachers, children, and parents in curriculum formulation (Rubin, 2009; McCaleb, 2013). Such a participatory approach ensures that the curriculum reflects children's needs and preferences while cultivating a sense of ownership over their learning (Bergmark & Westman, 2018; Mpuangnan & Ntombela, 2024). Integrating SDT principles into KOSP not only enhances academic performance but also supports the socio-emotional and character development of young learners (Darling-Hammond & Cook-Harvey, 2018; Franklin & Harrington, 2019). Thus, this research offers both theoretical contributions to the advancement of SDT in ECE and practical implications for designing more inclusive, responsive, and contextually relevant curricula for early childhood institutions in Indonesia.

Methods

Research Design

This study employed a qualitative methodology using a case study research design (Yin, 2014) to examine how Self-Determination Theory (SDT) is applied in the development of School Operational Curricula (Kurikulum Operasional Satuan Pendidikan – KOSP) in Early Childhood

Education (ECE). The case study approach enabled an in-depth investigation within a natural educational context.

Research Setting and Participants

The research was conducted at a private kindergarten in Makassar City, Indonesia, established in 2010, which has been implementing the Independent Curriculum (Kurikulum Merdeka) for the past three years. Participants were selected through purposive sampling, consisting of early childhood teachers working with children aged 4–6 years who were actively involved in curriculum development. A total of six teachers with varied teaching experiences participated in this study.

Research Instruments and Data Collection

Data collection involved structured and unstructured interviews, direct classroom observations, and curriculum document analysis. The interviews were guided by constructs from SDT, namely autonomy, competence, and relatedness, to examine how these psychological needs were embedded in curriculum practices. Structured interviews ensured consistency across participants, while unstructured interviews allowed exploration of deeper personal insights and professional judgments. Observations focused on classroom dynamics, teacher–student interactions, and the learning environment. Document analysis examined the alignment of the school’s operational curriculum with SDT principles.

Data Analysis

Thematic analysis was conducted using the six-phase framework (Ciesielska et al., 2018), guided by the theoretical constructs of SDT. NVivo software was used to support the coding and organization of qualitative data, enhancing consistency and traceability during analysis. Codes were generated both deductively (based on SDT: autonomy, competence, relatedness) and inductively (from participants’ narratives). Key themes identified included: (1) providing structured choices in activities, (2) recognizing individual learning capacities, and (3) fostering strong teacher-parent-student relationships. This approach ensured the analysis was both theoretically grounded and systematically executed.

Trustworthiness and Ethical Considerations

To ensure research credibility and trustworthiness, data triangulation was employed through interviews, observations, and document analysis. Member checking was carried out by sharing interview summaries and findings with participants for validation. Ethical approval was obtained from the affiliated institution. All participants gave informed consent, were assured of confidentiality, and had the right to withdraw from the study at any time without consequences.

Result

The development of a self-determination based School Operational Curriculum requires a holistic and integrated approach that begins with identifying the needs and characteristics of students. By recognizing their diverse interests and potentials, educators can design learning objectives that provide autonomy, positioning teachers as facilitators who allow students to make meaningful choices in selecting relevant topics. According to Self-Determination Theory, intrinsic motivation increases when three core psychological needs are fulfilled: autonomy, competence, and social connectedness (Deci & Ryan, 2000). In this study, these constructs form the basis for analyzing how a self-determination based curriculum can be implemented in schools. The design of learning activities that foster competence is equally essential, enabling students to engage in group projects that challenge them while providing access to tools and materials that enhance creativity.

Equally important is the cultivation of emotional attachment between teachers and students, which creates a positive and supportive learning environment. The strengthening of

parental collaboration is also recognized as an essential factor in supporting children's development (Christenson, 2003). Studies in diverse educational settings confirm that self-determination based approaches can significantly enhance academic engagement and learning motivation (Ghbari et al., 2024). However, the Indonesian education system remains dominated by traditional methods that are rigid and heavily focused on exam results (Ghaleb, 2024). Regular evaluation and reflection are therefore necessary to ensure that the curriculum continues to adapt to students' evolving needs and remains both relevant and effective. To illustrate the results, here is a picture of the research results:

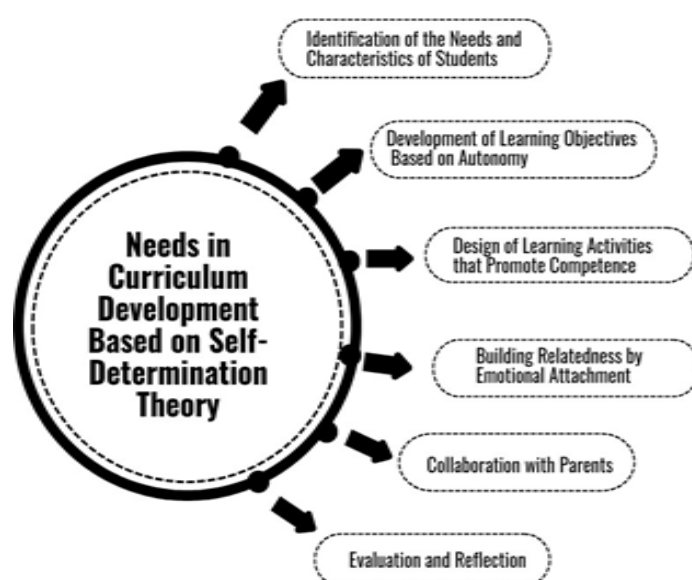


Figure 1. Needs in curriculum development based on self-determination theory

Identification of the Needs and Characteristics of Students

Identifying the needs and characteristics of students is very important for educators to create an effective and enjoyable learning environment. By understanding the individual needs of each child, educators can design appropriate teaching methods, so that the learning process becomes more relevant and interesting for them. Previous studies have shown that when students have the opportunity to express their interests and needs, they are more emotionally and academically engaged in learning (Amerstorfer & Frein von Münster-Kistner, 2021; Frey et al., 2019) that educators adopt a highly responsive approach to the needs and characteristics of their students. UF stated that:

"I always try to pay attention to what the children like and need. For example, if they prefer playing outside, I will adjust the activities so they can learn while playing." (UF, Interview, 2025)

This statement is in line with Ryan & Deci's (2020) research which emphasizes that a learning environment that gives students the freedom to explore their interests will increase their intrinsic motivation. This is also confirmed by the AS:

"Every child is unique, so it is very important for us as teachers to know their character. I often talk to them to understand their interests and talents." (AS, Interview, 2025)

This approach highlights that open communication between teachers and students is crucial for understanding children's interests and talents, which in turn can help educators design more personalized and effective learning experiences and teachers can build a "sense of belonging" which is a major factor in increasing students' self-confidence and their involvement in learning (Ibrahim & El Zaatari, 2020). In addition AN said that:

"I like to observe the children while they play. From there, I can see what they need and how best to support them." (AN, Interview, 2025)

Through observation, AN can directly identify children's needs, allowing the teacher to provide more appropriate and tailored support. Overall, these three quotes demonstrate that an approach based on a deep understanding of students can create a more inclusive learning environment that supports their holistic development.

Development of Learning Objectives Based on Autonomy

Effective education often involves giving students the freedom to choose, which can increase their motivation and creativity in learning. In the context of learning, it is important for educators to create an environment where students feel they have control over their learning process. Providing autonomy in learning plays a significant role in increasing student engagement. A study by Reeve et al. (2014) found that autonomy-supportive teaching can increase students' creativity and self-confidence, because they feel they have control over their learning process. The teachers' statement below:

"I believe that if children are given choices, they become more enthusiastic about learning. For example, I let them choose activities that they like."(AA, Interview, 2025)

This is also supported by the AS which explains that:

"In my class, children can help determine the theme of the project they want to work on. So, they feel like they have a role in learning."(AS, Interview, 2025)

In addition,

"I always try to give freedom to children. They can choose activities that interest them, and that makes them more creative."(AS, Interview, 2025)

The results of the Interview with UF, AS, and AN showed the importance of providing freedom and choice in learning to increase children's motivation. UF emphasized that the choice of activities made children more enthusiastic, while AS allowed children to determine the theme of the project, so they felt involved. AN added that the freedom to choose activities encouraged children's creativity. The essence of the Interview results is that giving children autonomy in the learning process can increase their involvement, motivation, and creativity, creating a more meaningful learning experience. granting autonomy not only increases motivation, but also helps students develop decision-making skills and independence (Jang et al., 2016). However, in the context of schools in Indonesia, the implementation of this approach still faces challenges due to the curriculum which tends to be rigid and oriented towards strict evaluation standards. Therefore, there needs to be training for teachers so that they are better prepared in implementing autonomy-based learning strategies.

Design of Learning Activities that Promote Competence

Innovative education is increasingly being applied in the teaching and learning process, with various methods that attract students' attention. The use of games as a teaching tool, project methods that involve active participation, and the creation of flexible learning environments all contribute to the development of children's social skills and self-confidence. With this creative approach, students not only learn, but also feel more involved and motivated in their educational process. It is important for teachers to design activities that allow students to feel competent in learning. According to SDT, competence is one of the main factors that increase students' intrinsic motivation (Deci & Ryan, 2000). A study by Reeve et al., (2018) showed that project-based learning and game-based approaches can increase students' engagement and social skills.

"I often use games to teach social skills. Kids learn through play, and it's very effective."(AS, Interview, 2025)

Emphasizing the effectiveness of play as a learning tool. This approach not only engages children but also facilitates the development of essential interpersonal skills in a fun and interactive manner. In line with the findings of (Ibrahim & El Zaatari, 2020) which stated that game-based learning can improve students' social interactions and problem-solving skills. AS adds,

"The project method is fun! Kids can learn a lot, and they feel more confident when they can contribute." (AS, Interview, 2025)

Indicating that project-based learning not only enhances knowledge acquisition but also empowers children by allowing them to take an active role in their education. This confirms that providing challenges that are appropriate to students' abilities will increase their self-confidence and motivation (Kane et al., 2016). This sense of contribution is crucial for building self-esteem and a sense of belonging in the classroom. Furthermore, AN note,

"A flexible learning environment is important. I create a classroom that allows kids to move around freely and be creative." (AN, Interview, 2025)

which underscores the necessity of a dynamic and adaptable learning space. Such environments encourage exploration and creativity, enabling children to express themselves and engage more fully with the learning process. Collectively, these insights reveal a holistic approach to education that prioritizes engagement, confidence, and creativity, ultimately preparing children for social interactions and collaborative efforts in their future endeavors.

Building Relatedness by Emotional Attachment

Creating a close relationship between teachers and students is very important. Social connectedness between teachers and students plays a significant role in creating a positive learning environment. A study by Ryan & Deci (2020) showed that when students feel supported by their teachers, they are more motivated to learn. When children feel comfortable and accepted in the classroom environment, they are more likely to open up and actively participate in the learning process. Through warm interactions and listening to their stories, teachers can build a supportive atmosphere, so that students feel valued and at home. This contributes to their emotional and social development.

"I always try to be close to the kids. They have to feel comfortable and accepted in the classroom." (AS, Interview, 2025)

This statement demonstrates UF's commitment to creating an inclusive environment where students feel safe and valued. This emotional connection is the foundation for effective learning, as students who feel accepted are more likely to be motivated to participate. AS goes on to emphasize that

"Connection is important. I often talk to the kids and listen to their stories, so they feel valued so they feel at home in the classroom." (AS, Interview, 2025)

Here, AS highlights the concrete methods used to build these connections, namely through communication and listening. By creating a warm and welcoming atmosphere, AS seeks to make students feel comfortable, which in turn encourages them to be more open. This finding supports (Kane et al., 2016). study which emphasized that positive interactions between teachers and students can strengthen social connectedness, which is a key element in SDT.

Overall, this conversation reflects a deep understanding of the role of emotions in education. Connectivity built through positive interactions not only increases students' comfort, but also contributes to their social and emotional development. This suggests that a relationship-focused approach can lead to a more productive and enjoyable learning environment.

Collaboration with Parents

Collaboration between teachers and parents plays a vital role in supporting a child's development. Through open communication and regular meetings, both parties can work together to understand the student's needs and create a supportive environment. The following conversation illustrates educators' views on the importance of parental involvement in the learning process, and how this collaboration can enhance children's progress in school. UF stated,

"I often invite parents to come to school. We can discuss the child's development and the best way to support them, usually parenting activities." (UF, Interview, 2025)

This statement shows UF's initiative to create a constructive dialogue space between the school and parents, which aligns with (Afriansyah, 2020) framework on parental involvement, emphasizing the importance of school-home partnerships in student success. AS added,

"Collaboration with parents is key. I routinely discuss the children's progress, especially when picking up children from school."(AS, Interview, 2025)

Here, AS emphasized the importance of ongoing collaboration, which is not only limited to formal meetings, but also in daily interactions, such as when picking up children. This shows that consistent communication can help monitor and support children's progress more effectively. This illustrates the necessity of consistent communication, which research by (Lei et al., 2018) has linked to higher academic achievement and better student engagement. AN complemented this view by stating,

"I believe that parents are our partners. We must support each other and discuss for the sake of children's development, especially if there are outdoor activities or require parental participation."(AN, Interview, 2025)

AN's statement emphasized that parents are not just observers, but are active partners in children's education. Parent involvement in outdoor activities or events that require their participation can strengthen the relationship between school and family, and provide a richer learning experience for children. This perspective aligns with Christian et al., (2020) Hoover-Dempsey and Sandler's (1997) model, which suggests that parental involvement enhances students' motivation and self-regulation, essential components in Self-Determination Theory (Ryan & Deci, 2020). This study contributes to the literature by demonstrating how direct interactions between parents and teachers can foster a child-centered learning environment, which is particularly relevant in contexts where traditional teacher-led instruction is dominant.

Overall, these conversations reflect educators' awareness and commitment to building solid partnerships with parents, which in turn can have a positive impact on children's development. This study extends prior research by emphasizing not only formal parental involvement but also informal, everyday interactions that shape students' learning experiences, reinforcing the idea that effective collaboration is an ongoing process rather than a singular event.

Evaluation and Reflection

Educators frequently assess their practice to understand successes and areas for improvement. Through feedback from students and parents, and reflection on teaching experiences, they can continually improve the quality of education they provide, ensuring that every child is optimally supported in their learning. This aligns Schön's (1983) theory of reflective practice, which emphasizes the role of continuous self-evaluation in professional development. UF Stated,

"At the end of every month, I like to evaluate what has been done. From there, I can know what worked and what needs to be improved."(UF, Interview, 2025)

This highlights the importance of structured reflection, a key element in Kolb's (2006) experiential learning cycle. AS added,

"I always ask for feedback from children and parents. It helps me to continuously improve my teaching methods and reflection is important. I often reflect on what I have taught and how the children responded to it."(AS, Interview, 2025)

The Interview results show the importance of evaluation and reflection in the teaching process. UF emphasizes monthly evaluations to identify successes and areas for improvement. AS relies on feedback from students and parents to improve teaching methods. AN also highlights the importance of personal reflection on teaching and student responses. The gist of the Interview is that evaluation, feedback, and reflection are key to professional development and improving the quality of teaching, helping educators understand the effectiveness of their methods and adapt them to students' needs. This practice aligns with (Morris et al., 2021) research on feedback, which suggests that timely, specific feedback can significantly enhance learning outcomes. See the table 1 below :

Table 1. Mapping of Research Findings: Components, Implementation Focus, and Theoretical Foundations of a Self-Determination-Based Curriculum

Key Component	Focus of Implementation	Supporting Evidence	Relevant Theory
Identifying Needs and Characteristics	Understanding students' interests, talents, and individual characteristics through observation and dialogue.	UF, AS, and AN emphasized the need to observe and communicate with students to personalize learning.	SDT – Need for autonomy, competence, and relatedness (Deci & Ryan, 2000); Ryan & Deci (2020)
Autonomy-Based Learning Objectives	Providing students with choices in learning activities and allowing them to co-determine project themes.	Interview data (AA, AS, AN): Students more engaged and creative when given freedom to choose learning activities.	Reeve et al., (2018); Jang et al. (2016)
Learning Activities that Promote Competence	Using project-based and game-based learning; designing flexible and creative classroom environments.	AS and AN used games and flexible spaces to enhance confidence, creativity, and social interaction.	Reeve et al., (2018); Kane et al. (2016)
Building Relatedness	Establishing emotional connections and supportive teacher-student interactions.	AS and UF emphasized closeness and active listening to build a sense of belonging.	(Deci & Ryan, 2004) Ibrahim & El Zaatari (2020)
Collaboration with Parents	Encouraging consistent communication, parent participation in learning activities and reflection.	UF, AS, AN conducted meetings and daily communication; emphasized mutual support for child development.	Hoover-Dempsey & Sandler (1997); Christian et al. (2020)
Evaluation and Reflection	Regular self-evaluation, gathering feedback, and improving teaching strategies.	UF performed monthly evaluations; AS reflected on teaching and collected feedback from students and parents.	Schön (1983); Kolb (2006); Morris et al. (2021)

The mapping in Table 1 illustrates that developing a self-determination based curriculum requires coherent alignment between students' needs, pedagogical practices, and theoretical foundations. Each component, from identifying learners' characteristics to evaluation and reflection, reflects the principles of Self-Determination Theory (Deci & Ryan, 2000; Ryan & Deci, 2020). Recognizing students' interests and talents supports autonomy and relevance, while autonomy based objectives and competence oriented activities create opportunities for children to exercise choice, creativity, and mastery. These findings suggest that curriculum planning should not be separated from the realities of learners' experiences but must remain flexible, adaptive, and grounded in psychological principles that nurture intrinsic motivation.

The table also emphasizes the relational and contextual dimensions of curriculum implementation. Building relatedness through teacher and student emotional attachment, as well as collaboration with parents, shows that learning is most effective in a supportive community. Reflection and feedback are also identified as central elements in ensuring the curriculum remains dynamic and relevant (Schön, 1983; Kolb, 2006; Morris et al., 2021). Together, the six components form a holistic model where SDT functions as both a theoretical framework and a practical guide for creating inclusive, motivating, and sustainable learning environments.

This synthesis demonstrates that an SDT based curriculum can bridge the gap between cognitive achievement and socio-emotional development, offering a solid foundation for early childhood education that adapts to the diverse needs of learners.

Building on these insights, the following discussion critically examines how the identified components correspond with broader theoretical perspectives and existing literature. The analysis also considers both the strengths and the limitations of implementing a self-determination based curriculum in Indonesian early childhood education, highlighting its potential to address persistent challenges such as rigid teaching practices, exam oriented learning, and the underdevelopment of socio-emotional learning.

Discussion

The research findings indicate that a self-determination based School Operational Curriculum, which prioritizes understanding children's needs, autonomy in learning, collaboration with parents, and continuous evaluation, significantly enhances children's engagement, motivation, and overall development. This approach highlights the creation of a supportive and interactive learning environment where children feel valued and empowered (Dörnyei & Muir, 2019). Similar perspectives argue that elaborative learning can foster interpersonal intelligence and uncover children's potential (Rusmayadi, 2019; Ellison, 2001). These alignments reinforce the evidence that child-centered practices are essential, yet they also show the lack of systematic application of Self-Determination Theory (SDT) in curriculum design for early childhood education in Indonesia.

The significance of these findings lies in showing how tailored practices improve learning outcomes. Actively involving children in their learning process and fostering strong relationships between educators and parents not only meet children's individual needs but also cultivate belonging and community (Osterman, 2023; Pendergast et al., 2018). This confirms claims that engagement is strongly tied to academic achievement and emotional well-being (Kahu & Nelson, 2018; Kaya & Erdem, 2021; Schnitzler et al., 2021). Teachers' recognition of children's freedom to manage learning is critical in this process, as autonomy develops responsibility and intrinsic motivation (Hasanuddin et al., 2022). These contributions strengthen prior work but also highlight a contextual gap, since most evidence comes from Western or primary-level settings rather than early childhood education in Indonesia.

Comparisons with earlier studies reveal both consistencies and contrasts. Research has long demonstrated that autonomy and parental involvement improve outcomes (Ryan & Deci, 2020; De Vega, 2023). The present study affirms these links in the ECE context, but it also exposes differences. While earlier studies often emphasize cognitive gains, the current findings underscore the simultaneous development of socio-emotional skills through autonomy and collaboration. This contrast is important, as it suggests that the Indonesian case can broaden SDT's application by showing how intrinsic motivation operates in dual systems of formal and non-formal education, where socio-emotional development is often overshadowed by cognitive priorities.

Theoretically, the study extends Self-Determination Theory by situating it within early childhood curriculum development. While SDT is widely applied in higher and secondary education, its integration into ECE curricula remains limited. Evidence from this study demonstrates that autonomy, competence, and relatedness can be operationalized in curriculum planning to meet developmental goals. This represents not only a replication of existing knowledge but also a refinement, since it shows how SDT principles interact with cultural and policy frameworks unique to Indonesia. Thus, the research provides theoretical enrichment by contextualizing SDT beyond Western-centric applications.

In terms of context, the Indonesian education system still tends to rely on traditional methods that are rigid and exam oriented (Ghaleb, 2024). This rigidity presents challenges for

implementing autonomy based strategies. Moreover, national curricula often focus on cognitive mastery rather than holistic growth (Abdullah et al., 2019; Syarnubi et al., 2023). The findings suggest that embedding SDT principles could counterbalance these tendencies, yet systemic barriers remain. Integrating Pancasila values, managing bureaucratic structures, and accommodating diverse socio-economic conditions are contextual realities that demand adaptive strategies if SDT is to be fully realized in Indonesian ECE.

The practical implications are substantial. Educators can adopt autonomy supportive strategies, flexible classroom designs, and parent partnerships to enhance engagement. Policy makers, meanwhile, should provide frameworks that allow curricular flexibility and professional development for teachers, enabling them to apply reflective and autonomy based methods. The collaborative involvement of educators and parents, as highlighted in the findings, represents a model that strengthens school-home connections and reinforces consistent support (Etemadi, 2025; Haslip & Gullo, 2018; Moreno et al., 2019). This shows that the value of SDT lies not only in guiding pedagogy but also in informing systemic reforms for more inclusive education.

Nonetheless, external factors such as socio-economic status and home environment also influence children's learning outcomes (Kahu & Nelson, 2018; Munir et al., 2023). While the curriculum's focus on autonomy and collaboration is vital, some children may respond better to structured approaches or require differentiated support not fully captured by SDT (Mynard & Shelton-Strong, 2022). Other frameworks suggest that effective curricula should also promote environmental awareness and future-oriented competencies (R et al., 2019). The present findings therefore point to the need for hybrid approaches, where SDT principles are integrated with broader educational aims such as sustainability and social responsibility.

The limitations of this study must be acknowledged. The findings are derived from interviews with a small number of educators, which may not fully represent the diversity of educational contexts. The reliance on qualitative methods also introduces subjectivity, as interpretations can vary with personal experience. Future research should therefore expand to larger samples and employ mixed-method or longitudinal designs to examine the long-term effects of SDT based curricula. There is also scope for cross-cultural comparison, which would reveal how self-determination interacts with different cultural norms and policy environments. Addressing these directions will help validate and strengthen the claims made in this study.

Conclusion

This research concludes that a School Operational Curriculum grounded in Self-Determination Theory (SDT), which emphasizes a comprehensive understanding of learners' individual characteristics, promotes autonomy, competence, and relatedness, and fosters collaboration with parents, can substantially improve student engagement, intrinsic motivation, and holistic development in early childhood education. The implementation of such a curriculum enables educators to tailor learning environments that respond meaningfully to students' emotional and developmental needs, thereby supporting both academic achievement and socio-emotional growth. The contribution of this study lies in providing a conceptual and empirical foundation for integrating SDT principles into curriculum planning within the context of Indonesia's early childhood education framework. Unlike conventional approaches that prioritize cognitive outcomes, this study affirms the importance of fostering student agency through participatory and flexible learning experiences.

Based on these findings, it is recommended that education practitioners, policymakers, and curriculum developers adopt inclusive and student-centered practices that reflect SDT constructs. Effective implementation should involve instructional adjustments, structural support for parental involvement, and continuous feedback mechanisms. For future research, longitudinal and mixed-method studies are encouraged to explore the long-term impact of SDT based curricula across diverse educational contexts and student populations.

Comparative studies between formal and non-formal early childhood institutions could also provide deeper insights into contextual challenges and policy implications, ensuring that curriculum development remains responsive and sustainable.

Declarations

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All authors contributed equally and approved the final manuscript.

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