



## **Predicting Early Childhood Social-Emotional Development through Habituation, Independence, and Self-Confidence**

**Kusmaladewi<sup>1✉</sup>**

<sup>1✉</sup>Universitas Terbuka, kusmaladewi@ecampus.ut.ac.id, Orcid ID: [0000-0002-2765-3293](https://orcid.org/0000-0002-2765-3293)

### **Article Info**

#### *History of Article*

Received:

11 October 2025

Revised:

20 April 2026

Published:

30 April 2026

### **Abstract**

Social-emotional development is a fundamental aspect of early childhood growth that shapes children's ability to interact, adapt, and build character throughout their lives. Nevertheless, social-emotional development among young children does not always progress optimally, raising questions about how far factors such as habituation, independence, and self-confidence actually contribute. This study aims to examine the influence of habituation, independence, and self-confidence on early childhood social-emotional development in the context of Angkasapura 3 Kindergarten, Maros Regency. A quantitative approach was employed, involving the entire population of 50 students, with data collected through a valid and reliable structured questionnaire and analyzed using simple and multiple regression. The results show that all three predictors (habituation  $\beta = 0.376$ ; independence  $\beta = 0.330$ ; self-confidence  $\beta = 0.334$ ) partially exert a positive and significant influence on social-emotional development (sig. = 0.000). Furthermore, habituation, independence, and self-confidence jointly exert a significant positive influence ( $R^2 = 0.839$ ,  $F = 79.704$ , sig. = 0.000), accounting for 83.9% of the variance simultaneously. These findings confirm that habituation, independence, and self-confidence are key determinants of early childhood social emotional development. Kindergarten teachers and parents are therefore recommended to consistently implement habituation practices and to actively foster children's independence and self-confidence from an early age.

### **Keywords:**

Habituation, Independence, Self-Confidence, Social-Emotional Development

### **How to cite:**

Kusmaladewi, K. (2026). Predicting early childhood social-emotional development through habituation, independence, and self-confidence. *EduBasic Journal: Jurnal Pendidikan Dasar*, 8(1), 101-112.

---

**Info Artikel**

---

*Riwayat Artikel*

Diterima:

11 Oktober 2025

Direvisi:

20 April 2026

Diterbitkan:

30 April 2026

---

**Abstrak**

Perkembangan sosial-emosional merupakan aspek mendasar dalam pertumbuhan anak usia dini yang membentuk kemampuan anak untuk berinteraksi, beradaptasi, dan membangun karakter sepanjang hidup mereka. Namun demikian, perkembangan sosial-emosional pada anak usia dini tidak selalu berjalan secara optimal, sehingga memunculkan pertanyaan seberapa besar kontribusi faktor-faktor seperti habituasi, kemandirian, dan kepercayaan diri. Penelitian ini bertujuan untuk mengkaji pengaruh habituasi, kemandirian, dan kepercayaan diri terhadap perkembangan sosial-emosional anak usia dini di Taman Kanak-kanak Angkasapura 3, Kabupaten Maros. Pendekatan kuantitatif digunakan, melibatkan seluruh populasi sebanyak 50 siswa, dengan data dikumpulkan melalui kuesioner terstruktur yang valid dan reliabel serta dianalisis menggunakan regresi sederhana dan berganda. Hasil menunjukkan bahwa ketiga prediktor tersebut (kebiasaan  $\beta = 0,376$ ; kemandirian  $\beta = 0,330$ ; rasa percaya diri  $\beta = 0,334$ ) secara parsial memberikan pengaruh positif dan signifikan terhadap perkembangan sosial-emosional (sig. = 0,000). Selain itu, habituasi, kemandirian, dan kepercayaan diri secara bersama-sama memberikan pengaruh positif yang signifikan ( $R^2 = 0,839$ ,  $F = 79,704$ , sig. = 0,000), yang menjelaskan 83,9% varians secara simultan. Temuan ini menegaskan bahwa habituasi, kemandirian, dan kepercayaan diri merupakan penentu utama perkembangan sosial-emosional pada masa kanak-kanak. Oleh karena itu, guru taman kanak-kanak dan orang tua disarankan untuk secara konsisten menerapkan praktik habituasi serta secara aktif menumbuhkan kemandirian anak-anak.

---

**Kata Kunci:**

Habituasi, Kemandirian, Rasa Percaya Diri, Perkembangan Sosial-Emosional

---

**Cara Mensitasi:**

Kusmaladewi, K. (2026). Predicting early childhood social-emotional development through habituation, independence, and self-confidence. *EduBasic Journal: Jurnal Pendidikan Dasar*, 8(1), 101-112.

## INTRODUCTION

Social-emotional development is one of the most fundamental aspects of early childhood growth, as it underlies children's capacity to build relationships, regulate emotions, and adapt to their social environment throughout life. Law No. 20 of 2003 concerning the National Education System affirms that, alongside primary, secondary, and higher education, Early Childhood Education (ECE) holds a formal position within the national education system. Article 28 of the law further stipulates that kindergarten education is organized to lay the foundation for children's attitudes, skills, and creativity outside the family environment before they enter primary school. Tabroni et al. (2022) state that early childhood education is intended to support children's overall growth and development across all aspects of personality, of which social-emotional development is one of the most critical dimensions. Latipah et al. (2020) and Shonkoff (2017) note that early childhood spans from before birth until the age of six, a period widely regarded as the "Golden Age" because of the rapid and foundational development that occurs across all domains during this time.

In practice, however, the extent to which kindergartens succeed in fostering strong social-emotional foundations varies considerably, and this variation is often linked to how well supporting factors such as habituation, independence, and self-confidence are cultivated within the learning environment. Preliminary observation at Angkasapura 3 Kindergarten, Maros Regency, indicates that children's social-emotional competencies such as the ability to interact with peers, manage emotions, and act independently in daily activities are still developing unevenly among students, suggesting that these supporting factors may not yet be optimally integrated into the school's habituation practices. This condition underlines the importance of empirically examining how habituation, independence, and self-confidence jointly contribute to early childhood social-emotional development in this specific setting.

Several scholars have conceptualized social-emotional development in early

childhood. Some scholars, such as Tuncdemir (2025), Elbertson et al. (2025) and Lertbumroongchai et al. (2020), define social-emotional learning as the process through which individuals develop the skills, attitudes, and values needed to understand, manage, and express social and emotional experiences while forming relationships and solving problems. Within this view, social-emotional development is understood as behavioral change accompanied by internal feelings that emerge as children interact with others, making it a developmental task of particular importance during the pre-school years, when children first learn to navigate relationships beyond the family.

Habituation is widely discussed as a key mechanism for shaping children's social-emotional competence (Selman & Dilworth-Bart, 2024). Habituation is the cultivation of behavioral and verbal skills through routine, daily repetition, so that desired behaviors are eventually performed naturally, consciously, and without coercion (Merchie & Gomot, 2023; Selman et al., 2026; Setyowati et al., 2023). Similarly, habituation is a method for accustoming children to think, behave, and act in ways consistent with desired values. Gardner et al. (2024) add that once a behavior becomes habitual, it is carried out with minimal conscious effort, making it easier to sustain in daily life. Empirically, Azizah et al. (2025) found that implementing behavioral habituation through routine, spontaneous, role-modeling, and programmed activities played a substantial role in fostering religious, moral, and social-emotional values among children at a state kindergarten in Sidoarjo. Taken together, these studies indicate that habituation is theoretically and empirically linked to social-emotional outcomes, although this evidence has largely been examined in isolation from other supporting factors such as independence and self-confidence.

Independence constitutes a second factor consistently associated with social-emotional competence. The term independent means "to stand alone" and refers to the psychological capacity to make decisions and act without relying on others. Frame independence as rooted in the principle that individuals are responsible for their own lives, while independent individuals are generally

characterized by initiative, achievement orientation, strong self-confidence, and reduced reliance on external protection (Nythiani et al., 2025). Nythiani et al. (2025) further emphasize that independence enables children to manage their own lives without becoming a burden to others, while remaining compatible with cooperative, rather than isolated, social functioning. Supporting this theoretical position, Rusmayadi & Herman (2019) empirically demonstrated a positive and significant relationship between independence and early childhood social-emotional development. However, as with habituation, this study examined independence as a standalone predictor rather than in combination with other developmental factors.

Self-confidence represents a third factor believed to underpin healthy social-emotional functioning. Garbenis & Kaffemaniene (2025), Rusmayadi & Herman (2019), and Suweleh & Faradita (2026) collectively argue that self-confidence enables children to believe in their own capacity to adapt intensively, creatively, and optimistically to the choices and challenges they face. Self-confidence is further described as a positive mental attitude toward oneself and one's environment, which allows a person to face problems constructively and contribute positively to others. Despite this well-established theoretical basis, empirical studies examining self-confidence in relation to early childhood social-emotional development, particularly in combination with habituation and independence, remain limited.

The review above shows that habituation, independence, and self-confidence have each been theoretically and, to varying degrees, empirically linked to social-emotional development in early childhood. However, existing empirical studies, such as those by Nilfyr and Ewe (2025) and Tamblyn et al. (2023), have generally examined these factors separately and in different educational contexts, rather than assessing their combined contribution within a single kindergarten setting. Consequently, a research gap exists concerning the extent to which habituation, independence, and self-confidence simultaneously and jointly influence social-emotional development in early childhood,

particularly at Angkasapura 3 Kindergarten, Maros Regency, a context that has not previously been empirically investigated. Addressing this gap is important both for extending the theoretical understanding of how these three factors interact and for informing practical strategies that kindergartens can adopt to strengthen children's social-emotional development. Specifically, this study offers a novel contribution by simultaneously testing the combined influence of behavioral habituation, independence, and self-confidence within a single empirical framework to bridge external behavioral regulation and internal psychological traits in early childhood education.

Building on this gap, the present study aims to examine the partial and simultaneous influence of habituation, independence, and self-confidence on the social-emotional development of early childhood at Angkasapura 3 Kindergarten, Maros Regency. This objective is addressed through a quantitative approach using simple and multiple regression analysis, allowing the study to determine each factor's individual contribution and their combined explanatory power in accounting for variation in children's social-emotional development.

## METHODS

This study employs a quantitative method, defined as a research method grounded in the philosophy of positivism, used to examine a specific population or sample, collect data through research instruments, and perform quantitative/statistical data analysis in order to test predetermined hypotheses. The quantitative approach rests on the premise that scientific validity stems from the use of measurable data collected through questionnaires or surveys and analyzed through statistics and hypothesis testing that is free from subjectivity. This study involves four variables: habituation (X1), independence (X2), self-confidence (X3), and children's social-emotional development (Y), with the research design shown in Figure 1.

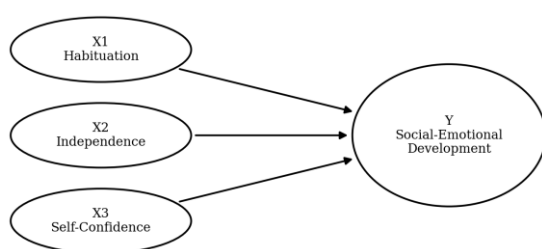


**Figure 1.** Research Hypothetical Model

The population of this study comprised all 50 students at Angkasapura 3 Kindergarten. Because the population was smaller than 100, a total-sampling (census/saturated-sampling) design was used, in which all 50 population members were included as respondents; no random sampling procedure was applied. Data were collected through teacher-rating behavioral questionnaires completed by 4 class teachers who observed the 50 students daily over a semester. Data were collected using a closed questionnaire adapted from prior instruments related to habituation, independence, self-confidence, and social-emotional development.

Children's social-emotional development (Y) was measured with a teacher-rating questionnaire consisting of 20 items adapted from the Regulation of the Minister of Education and Culture of Indonesia (Permendikbud No. 137 of 2014 concerning National Standards for Early Childhood Education), covering indicators such as self-awareness, responsibility for oneself and others, and prosocial behavior. The data on Y were therefore obtained from the structured observation ratings given by the four class teachers for each child over one semester and scored on the same 4-point scale, and not from a cognitive test, a portfolio, or an emotional-intelligence test. A higher total score indicates a higher level of social-emotional development.

The three independent variables were measured using structured teacher-rating questionnaires comprising 16 items for each construct. Habituation (X1) assessed children's routine-based behaviors across indicators including adherence to classroom discipline, queueing and waiting for turns, dining and personal hygiene etiquette (such as handwashing), and collaborative participation.

Independence (X2) measured the child's autonomous behavioral capacity, covering indicators such as self-initiative in selecting activities, responsibility in completing daily classroom tasks, ability to resolve simple learning difficulties independently, and emotional self-management without relying on continuous adult assistance. Self-confidence (X3) captured children's self-assurance and positive self-concept, indicated by their willingness to express thoughts or respond to questions in class, persistence when encountering new challenges, openness to constructive feedback, and positive, calm peer interactions. All items were measured on a 4-point modified Likert scale (1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree). Data were analyzed using SPSS 24.

Prior to data collection, the validity and reliability of the four instruments were tested with 50 respondents in a pilot sample: the habituation, independence, and self-confidence instruments, each comprising 16 statements, and the social-emotional development instrument comprising 20 statements. Validity was assessed using item-total (Pearson product-moment) correlation, and reliability was assessed using Cronbach's Alpha. Results are summarized in Table 1.

**Table 1.** Validity and Reliability Test Results

| <b>Instrument</b>                | <b>Valid</b> | <b>Invalid</b> | <b>%</b> | <b><math>\alpha</math></b> |
|----------------------------------|--------------|----------------|----------|----------------------------|
| Habituation (X1)                 | 15           | 1              | 93.8     | 0.859                      |
| Independence (X2)                | 16           | 0              | 100      | 0.950                      |
| Self-Confidence (X3)             | 16           | 0              | 100      | 0.940                      |
| Social-Emotional Development (Y) | 19           | 1              | 95.0     | 0.912                      |

Among the 48 items tested across the three predictor instruments (X1–X3), 47 (97.9%) were valid; only item 5 of the Habituation instrument was invalid ( $r = 0.296 < 0.30$ ) and was subsequently revised. Reliability for all three instruments was good to very good (Independence  $\alpha = 0.950$ ; Self-Confidence  $\alpha = 0.940$ ; Habituation  $\alpha = 0.859$ ), all above the 0.80 threshold, with an average reliability of 0.916 (very high). The social-emotional development instrument (Y)

comprised 20 items; 19 were valid, with Cronbach's  $\alpha = 0.912$ .

Simple and multiple linear regression were used because the research questions concern the influence (predictive contribution) of each independent variable on social-emotional development, rather than only the strength of association, while standardized coefficients ( $\beta$ ) indicate the relative contribution of each predictor. Before the regression analysis, the classical assumptions were tested on the unstandardized residuals of the regression model: normality (one-sample Kolmogorov-Smirnov test), linearity (test for deviation from linearity between each independent variable and Y), homogeneity of residual variance or homoscedasticity (Glejser test), and absence of multicollinearity (Tolerance  $> 0.10$  and Variance Inflation Factor (VIF)  $< 10$ ). Normality, linearity, and homoscedasticity were accepted when Sig.  $> 0.05$ . Hypotheses were tested at  $\alpha = 0.05$  using the t-test (partial effect) and the F-test (simultaneous effect), and model fit was reported with  $R^2$  and Adjusted  $R^2$ .

## RESULTS AND DISCUSSION

Before performing the multiple linear regression analysis to test the research hypotheses, we conducted a series of classical assumption tests to verify the model's statistical adequacy. These preliminary evaluations included tests for normality, linearity, homoscedasticity, and multicollinearity.

### Normality Test

Normality was tested on the unstandardized residuals of the regression model as a whole, not on each independent variable separately, using the one-sample Kolmogorov-Smirnov test. Residuals are considered normally distributed when the Asymp. Sig. (2-tailed) value exceeds 0.05. The Asymp. Sig. (2-tailed) value for the unstandardized residuals was 0.200, which exceeds 0.05, indicating that the residuals are normally distributed and that the normality assumption of multiple linear regression is satisfied.

### Linearity Test

We tested linearity using the test for deviation from linearity (ANOVA table of the Means procedure) between each independent variable and social-emotional development. The Sig. values for deviation from linearity were 0.412 (habituation), 0.376 (independence), and 0.298 (self-confidence), all above 0.05, indicating that each predictor has a linear relationship with social-emotional development.

### Homoscedasticity Test

Homogeneity of residual variance (homoscedasticity) was tested with the Glejser test, which regresses the absolute unstandardized residuals on the independent variables. The Sig. values were 0.518 (habituation), 0.563 (independence), and 0.387 (self-confidence), all above 0.05, indicating no heteroscedasticity and that the residual variance is homogeneous.

### Multicollinearity Test

Multicollinearity was assessed with the Tolerance and Variance Inflation Factor (VIF) values reported in Table 2. The Tolerance values ranged from 0.437 to 0.502 (all  $> 0.10$ ) and the VIF values from 1.993 to 2.287 (all  $< 10$ ), indicating that the model is free from multicollinearity.

### Partial and Simultaneous Effect Test

To test the proposed research hypotheses, a multiple linear regression analysis was conducted. The estimation results, including unstandardized and standardized coefficients, partial significance tests (*t*-test), and multicollinearity indices, are summarized in Table 2.

**Table 2.** Regression Coefficients

| Model           | B      | SE    | $\beta$ | t     | Sig.  | VIF   |
|-----------------|--------|-------|---------|-------|-------|-------|
| (Constant)      | 13.297 | 4.477 | —       | 2.970 | 0.005 | —     |
| Habituation     | 0.289  | 0.064 | 0.376   | 4.502 | 0.000 | 2.353 |
| Independence    | 0.284  | 0.075 | 0.330   | 3.782 | 0.000 | 2.165 |
| Self-Confidence | 0.274  | 0.073 | 0.334   | 3.733 | 0.001 | 2.232 |

Table 2 shows that the significance values of habituation ( $B = 0.289$ ,  $SE = 0.064$ ,  $\beta = 0.376$ ,  $t_{(46)} = 4.502$ ,  $p < 0.001$ ), independence ( $B = 0.284$ ,  $SE = 0.075$ ,  $\beta = 0.330$ ,  $t_{(46)} = 3.782$ ,  $p < 0.001$ ), and self-confidence ( $B = 0.274$ ,  $SE = 0.073$ ,  $\beta = 0.334$ ,  $t_{(46)} = 3.733$ ,  $p = 0.001$ ) are all below  $\alpha = 0.05$ , so  $H_0$  is rejected for each: habituation, independence, and self-confidence each partially and significantly influence children's social-emotional development. The positive  $B$  coefficients indicate that higher levels of each predictor are associated with higher social-emotional development scores, while the standardized coefficients ( $\beta$ ) show that habituation made the largest relative contribution, followed by self-confidence and independence, whose contributions were almost equal.

**Table 3.** Simultaneous Effect

| R     | R <sup>2</sup> | Adjusted R <sup>2</sup> | F      | df | Sig.  |
|-------|----------------|-------------------------|--------|----|-------|
| 0.916 | 0.839          | 0.829                   | 79.704 | 46 | 0.001 |

Simultaneously, Table 3 shows the three predictors yield  $R = 0.916$ ,  $R^2 = 0.839$ , and Adjusted  $R^2 = 0.829$  ( $F_{(3,46)} = 79.704$ ;  $p < 0.001$ ), meaning that habituation, independence, and self-confidence jointly account for 83.9% of the variance in social-emotional development (82.9% after adjusting for the sample size,  $N = 50$ ), while the remaining 16.1% is attributable to factors outside this model.

Based on Table 2 and Table 3, the resulting multiple regression equation is:

$$\hat{Y} = 13.297 + 0.289X1 + 0.284X2 + 0.274X3$$

$\hat{Y}$  is the predicted social-emotional development score,  $X1$  is habituation,  $X2$  is independence, and  $X3$  is self-confidence. The constant (13.297) is the predicted social-emotional development score when habituation, independence, and self-confidence are all zero; because a score of zero lies outside the possible range of the instruments, it serves as the baseline of the model rather than as an empirically meaningful value. Each slope coefficient is the

expected change in social-emotional development for a one-point increase in the corresponding predictor, holding the other two predictors constant: +0.289 for habituation, +0.284 for independence, and +0.274 for self-confidence.

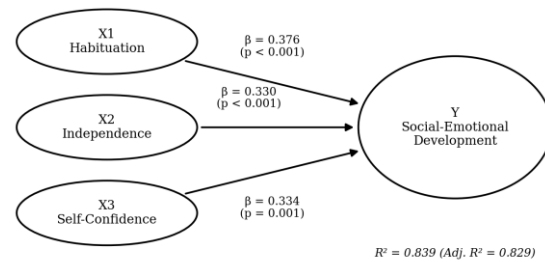


**Figure 2.** Empirical Model of Social-Emotional Development Determinants.

Overall, the empirical model depicted in Figure 2 demonstrates that all three predictors contribute positively and significantly to children's social-emotional development, both independently and collectively, with habituation demonstrating the strongest relative contribution followed by self-confidence and independence. Together with an overall explanatory power of 83.9%, these statistical findings provide strong empirical evidence supporting the proposed hypotheses; the broader theoretical implications and pedagogical relevance are further elaborated in the following discussion.

## Discussion

This study examined the influence of habituation, independence, and self-confidence on early childhood social-emotional development. The empirical findings confirm that all three variables serve as significant positive determinants, both individually and simultaneously. The following sections interpret these results in relation to relevant theories, prior literature, and practical implications in early childhood education.

### *Habituation and Early Childhood Social-Emotional Development*

The findings show that habituation has a strong, positive, and significant relationship with early childhood social-emotional development, both on its own and when

considered alongside independence and self-confidence. Habituation also made the largest standardized contribution among the three predictors ( $\beta = 0.376$ ;  $t = 4.502$ ;  $p < 0.001$ ). This finding is consistent with Gardner et al. (2024) and Selman et al. (2026), who argue that spontaneous habits can be sustained once a behavior requires minimal conscious effort, allowing children to carry out positive behaviors more consistently, and with Merchie & Gomot (2023), Riswandi et al. (2025), and Zuhro et al. (2018), who state that the purpose of habituation is to help children acquire new, contextually appropriate attitudes and habits suited to the demands of their time and setting.

Operationally, the habituation measured in this study is reflected in indicators such as establishing routines for tidying up play materials, waiting in line, dining etiquette, and washing hands independently, and being accustomed to discipline, politeness, questioning, and collaboration habits that, when consistently reinforced at school and at home, plausibly translate into stronger self-regulation and social engagement. This finding also aligns with Madanipour et al. (2025), who found that teachers' strategies for habituating positive interaction through center-based learning effectively stimulate early childhood social-emotional aspects, as well as Jackson et al. (2025), who found that a consistently supportive learning climate encourages sustained social-emotional development in young children. Notably, this study extends that evidence by showing that the effect of habituation remains strong even after controlling for independence and self-confidence, indicating that its influence is independent rather than merely a proxy for other developmental factors.

#### ***Independence and Early Childhood Social-Emotional Development***

Independence also shows a strong and significant relationship with social-emotional development, both on its own and after controlling for habituation and self-confidence. Its standardized contribution in the regression model was  $\beta = 0.330$  ( $t = 3.782$ ;  $p < 0.001$ ). It is consistent with Fitriani et al. (2024), who describe early childhood independence as the ability to think, feel, and act on one's own initiative in fulfilling daily

responsibilities without relying on others a capacity closely tied to the sub-indicators measured in this study, such as planning one's own learning activities, taking responsibility for learning outcomes, overcoming learning difficulties independently, and managing learning-related emotions. In addition, appropriate learning strategies and media have been shown to increase independence in children aged five to six years meaningfully. Furthermore, Șîtoiu and Pânișoară (2023) reported that habituation, emotional intelligence, and parental support jointly contribute to the formation of children's independence.

Compared with these studies, the similarity lies in the shared assertion that independence does not develop in a vacuum but is shaped through interaction with the learning environment; the difference is that this study specifically positions independence as a predictor of social-emotional development within a multiple-regression framework alongside two other psychological variables, which has seldom been investigated or explored in prior studies, which have tended to examine independence separately or as a single, isolated variable.

#### ***Self-Confidence and Early Childhood Social-Emotional Development***

Self-confidence also contributes a significant partial effect within the multiple-regression model ( $\beta = 0.334$ ;  $t = 3.733$ ;  $p = 0.001$ ), second only to habituation in standardized contribution and nearly equal to independence ( $\beta = 0.330$ ). This finding supports Maslow's view (Nikadambaeva et al., 2021) that self-confidence is a prerequisite for self-actualization, enabling individuals to develop their inner potential, and Suweleh & Faradita's (2026) definition of self-confidence as the mental attitude that allows a person to trust their own ability to act according to their capacities. Garbenis and Kaffemaniene (2025) further note that self-confidence is a core personality characteristic that helps individuals navigate life's demands. These findings are reflected in the self-confidence sub-indicators measured in this study, including children's willingness to express opinions or answer questions in class, persistence when facing learning difficulties,

ability to accept and act on criticism, and a calm, non-self-centered disposition toward peers.

This result is consistent with Yunifia & Wardhani (2023), who found that macro role-play activities effectively increase early childhood self-confidence, and with Khotimah et al. (2025), who demonstrated a significant increase in children's self-confidence through role-play methods among children aged five to six. The similarity with these studies lies in their shared emphasis on the central role of self-confidence in children's social competence; the difference is that this study positions self-confidence not as an outcome of an intervention (such as role-play), but as a predictor that directly contributes to social-emotional development, thereby broadening the understanding of the direction of the relationship between these variables.

#### ***Combined Contribution of Habituation, Independence, and Self-Confidence***

Taken together, habituation, independence, and self-confidence jointly explain a very large proportion of the variance in early childhood social-emotional development, providing empirical support for treating these three factors as interrelated determinants rather than isolated ones. It addresses the identified research gap and offers a substantially more complete explanation of children's social-emotional development than any single factor alone. This simultaneous pattern also aligns with the contemporary Social and Emotional Learning (SEL) perspective, which holds that children's social-emotional competence is formed through layered interaction between behavioral regulation, environmental support, and self-concept, as shown by Korucu et al. (2022), who demonstrated that preschoolers' self-regulation factors simultaneously predict both pre-academic and social-emotional competence, and by Silkenbeumer et al. (2024), who stated that teacher support for children's emotion regulation plays a critical role in shaping social-emotional competence holistically.

Compared with most prior early childhood education research, which tends to be descriptive-qualitative or to focus on a single intervention variable such as role-play,

this study's novelty lies in its quantitative approach, which tests three psychological-behavioral variables simultaneously and partially, allowing it to map the relative contribution of each factor to children's social-emotional development.

A key novelty of this study lies in bridging two critical yet frequently segregated dimensions of child development: external behavioral routines (habituation) and internal self-concept attributes (independence and self-confidence). By synthesizing these dimensions into a unified empirical framework, this research offers a more comprehensive understanding of how structured daily habits and psychological agency interact to foster early childhood social-emotional competence.

Theoretically, this study enriches the SEL framework by showing that habituation, which is more externally behavioral in nature, and self-confidence, which is more internally cognitive, can work in a complementary fashion, consistent with prior findings (Cordeiro et al., 2021) showing that the children's self-concept is closely linked to their ability to recognize and respond to emotions in social interaction. Practically, this study offers early childhood institutions an empirical foundation for designing multidimensional social-emotional development programs rather than relying on a single type of intervention. Consequently, this underscores the critical need for professional teacher training focused on delivering holistic, rather than piecemeal, emotional and behavioral support in the classroom (Luo et al., 2022; Welsh et al., 2024).

This study has limitations that should be considered when interpreting the findings and designing future research. First, this study is correlational-quantitative and was conducted at a single early childhood institution. Therefore, findings should be cautiously generalized to other settings with different demographic and cultural characteristics, particularly because children's emotional regulation and developmental outcomes are heavily shaped by their socio-cultural context (Silkenbeumer et al., 2024). Second, the cross-sectional design utilized in this study does not capture the longitudinal dynamics of children's social-emotional development over time. Future research should therefore employ

longitudinal designs to examine how habituation, independence, and self-confidence evolve and interact across the early school years. Third, this study did not incorporate parents' perspectives or direct observation of children's behavior at home, even though family involvement has been shown to play an important role in shaping children's social-emotional development. Future research is therefore recommended to combine quantitative data with in-depth qualitative observation and source triangulation across teachers, parents, and children, while also considering moderating variables such as parenting style and family socioeconomic status, and digital media engagement habits at home (Wibowo et al., 2026), in order to obtain a more comprehensive picture of the determinants of early childhood social-emotional development.

Practically, these findings suggest that early childhood educators and parents should not implement habituation, independence training, and self-confidence building separately. Instead, the three should be integrated into daily activities through a coherent strategy, such as involving children independently in classroom routines (habituation), providing opportunities to make small decisions in completing tasks (independence), and giving positive appreciation to boost children's self-confidence during social interactions with peers.

## CONCLUSION

Based on the results of this study on the influence of habituation, independence, and self-confidence on the social-emotional development of early childhood at Angkasapura 3 Kindergarten, Maros Regency, it is concluded that habituation, independence, and self-confidence each have a strong, positive, and significant effect on children's social-emotional development when examined individually, and that the three variables also have a strong, positive, and significant effect when considered jointly, together accounting for a very large proportion of the variance in children's social-emotional development. This indicates that the three factors function not as isolated influences but as interrelated

determinants that reinforce one another in shaping how young children regulate their emotions and engage socially. Kindergarten teachers and parents are therefore encouraged to implement habituation practices in daily routines consistently, and to actively and deliberately foster children's independence and self-confidence from an early age, rather than treating these as separate or incidental aspects of early childhood education.

This study is limited by its relatively small sample drawn from a single kindergarten, which restricts the generalizability of the findings beyond similar institutional and demographic contexts, and by its reliance on questionnaire-based data, which may be subject to response bias and does not fully capture the day-to-day behavioral nuances of young children. Future research is recommended to replicate this model across a larger and more diverse sample of kindergartens, to incorporate observational or mixed-methods data collection that combines quantitative measurement with direct classroom observation, and to examine additional predictors such as parenting style, teacher-child interaction quality, and peer relationships that may account for the portion of variance in social-emotional development not explained by the present model.

## REFERENCES

- Azizah, I., Rahmawati, T., & Aisyahrani, A. I. B. (2025). Management of local culture-based education curriculum in Taman Indria-IPTs Kindergarten and Pedagogia Laboratory Kindergarten. *Journal of Innovation in Educational and Cultural Research*, 6(1), 229–241.
- Cordeiro, T., Botelho, J., & Mendonça, C. (2021). Relationship between the self-concept of children and their ability to recognize emotions in others. *Frontiers in Psychology*, 12, Article 672919.
- Elbertson, N. A., Jennings, P. A., & Brackett, M. A. (2025). The role of educators in school-based social and emotional learning. *Social and Emotional Learning: Research, Practice, and Policy*, 6, 100134.

- Garbenis, S., & Kaffemaniene, I. (2025). Developing traits of self-confidence and intrinsic motivation in students with severe special educational needs in physical education lessons. *Behavioral Sciences*, 15(11), 1449.
- Gardner, B., Rebar, A. L., de Wit, S., & Lally, P. (2024). What is habit and how can it be used to change real-world behaviour? Narrowing the theory-reality gap. *Social and Personality Psychology Compass*, 18(6), Article e12975.
- Jackson, J. E., Rawson, R., Colman, R., & Kotera, Y. (2025). Building resilience and supporting emotional well-being in climate change education: A systematic review of school-based climate change literacy programmes for children. *Environmental Education Research*, 32, 1–19.
- Khotimah, K., Barata, M. A. S., & Kharismawati, I. (2025). Efforts to increase self-confidence through role play activities for 4-5 year old children. *Dharmas Education Journal (DE\_Journal)*, 6(1), 80–88.
- Korucu, I., Ayturk, E., Finders, J. K., Schnur, G., Bailey, C. S., Tominey, S. L., & Schmitt, S. A. (2022). Self-regulation in pre-school: Examining its factor structure and associations with pre-academic skills and social-emotional competence. *Frontiers in Psychology*, 12, Article 717317.
- Latipah, E., Kistoro, H. C. A., & Putranta, H. (2020). The effects of positive parenting toward intolerance in pre-school children. *International Journal of Early Childhood Special Education*, 12(2), 137–146.
- Lertbumroongchai, K., Saraubon, K., & Nilsook, P. (2020). The social-emotional learning process to develop practicing skills for hands-on students. *International Journal of Information and Education Technology*, 10(8), 597–602.
- Luo, L., Reichow, B., Snyder, P., Harrington, J., & Polignano, J. (2022). Systematic review and meta-analysis of classroom-wide social-emotional interventions for pre-school children. *Topics in Early Childhood Special Education*, 42(1), 4–19.
- Madanipour, P., Garvis, S., & Cohrsen, C. (2025). Teaching strategies to enhance executive functions in early childhood education: A systematic review. *Journal of Early Childhood Education Research*, 14(1), 73–104.
- Merchie, A., & Gomot, M. (2023). Habituation, adaptation and prediction processes in neurodevelopmental disorders: A comprehensive review. *Brain Sciences*, 13(7), 1110.
- Nikadambaeva, K., Klicheva, K., & Klicheva, G. (2021). The concept of self-actualization in the 21st century. *Psychology And Education*, 58(2), 304–308.
- Nilfyr, K., & Ewe, L. P. (2025). Thriving children's emotional self-regulation in pre-school: A systematic review discussed from an interactionist perspective. *Education Sciences*, 15(2), Article 137.
- Nythiani, I. A., Valentina, T. D., & Natalya, N. P. (2025). Overview of early childhood independence: Understanding parents' perspectives through photovoice. *Jurnal Pendidikan Anak Usia Dini Undiksha*, 13(2), 398–409.
- Riswandi, F. N., Nisa, M., Sasmita, W., & Tiariyanti, A. (2025). The role of the habituation method in developing children's independent behavior. *Bidayatuna Jurnal Pendidikan Guru Mandrasah Ibtidaiyah*, 8(1), 99–112.
- Rusmayadi, R., & Herman, H. (2019). Effects of social skills on early childhood independence. *Journal of Educational Science and Technology (EST)*, 5(2), 159–165.

- Selman, S. B., & Dilworth-Bart, J. E. (2024). Routines and child development: A systematic review. *Journal of Family Theory & Review*, 16(2), 272–328.
- Selman, S. B., Distefano, R., Dilworth-Bart, J. E., & Brooks-Gunn, J. (2026). Child routines across pre-school and associations with socioemotional adjustment. *Journal of Family Psychology*, 40(1), 25–36.
- Setyowati, P. J., Muhajir, M., & Wahyuningtyas, S. (2023). The concept of habituation learning in developing students' talents, interests, and creativity in dance art learning at Andhe-andhe Lumut Art Studio Kediri. *Jurnal Teknologi Pendidikan: Jurnal Penelitian Dan Pengembangan Pembelajaran*, 8(4), 777.
- Shonkoff, J. P. (2017). Rethinking the definition of evidence-based interventions to promote early childhood development. *Pediatrics*, 140(6), Article e20173136.
- Șițoiu A and Pânișoară G (2023) The emotional intelligence of today's parents – influences on parenting style and parental competence. *Frontiers in Public Health* 11, Article 1120994.
- Silkenbeumer, J., Lüken, L. M., Holodyski, M., & Kärtner, J. (2024). Emotion socialization in early childhood education and care—How pre-school teachers support children's emotion regulation. *Social and Emotional Learning: Research, Practice, and Policy*, 4, Article 100057.
- Suweleh, W., & Faradita, M. N. (2026). Self-confidence characteristics in early childhood education students during learning at school. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 10(2), 865–872.
- Tabroni, I., Hardianty, D., & Sari, R. P. (2022). The importance of early childhood education in building social and emotional intelligence in children. *Jurnal Multidisiplin Madani*, 2(3), 1219–1226.
- Tamblyn, A., Sun, Y., May, T., Evangelou, M., Godsman, N., Blewitt, C., & Skouteris, H. (2023). How do physical or sensory early childhood education and care environment factors affect children's social and emotional development? A systematic scoping review. *Educational Research Review*, 41, 100555.
- Tuncdemir, T. B. A. (2025). Integrating social-emotional learning through play: Perspectives from early childhood educators. *Journal of Research in Childhood Education*, 40, 1–19.
- Welsh, J. A., Bierman, K. L., Jacobson, L. N., Mincemoyer, C. C., Gest, J. M., Jones, D. E., Matt, L. H., & Bayly, B. L. (2024). Supporting SEL in childcare centers with curriculum enrichment and an adapted professional development model. *Social and Emotional Learning: Research, Practice, and Policy*, 3, Article 100036.
- Wibowo, T. O., Mujiono, M., & Parlindungan, D. R. (2026). Proposing a literacy model for early prevention of multiplayer game addiction and cyberbullying risk in Indonesia. *Social Sciences & Humanities Open*, 14, 103436.
- Yunifia, R. N., & Wardhani, J. D. (2023). Efektifitas bermain peran terhadap kepercayaan diri anak usia dini. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 7(2), 2163–2176.
- Zuhro, Z., Sukartiningsih, W., & Bachri, B. S. (2018). Influence of habituation on self-awareness and prosocial behavior in 4-5-year-old children. *Advances in Social Science, Education and Humanities Research*, 173, 386–389.