

Mothers' Behaviour and Barriers in Early Childhood Sexuality Education in Central Java

Niken Meilani¹, Queenaisya Elfaiza Wibowo², Yuliantisari Retnaningsih¹

¹ Department of Midwifery, Poltekkes Kemenkes Yogyakarta, DI Yogyakarta, Indonesia 55293

² Medical Faculty, Universitas Brawijaya, Malang, Indonesia 65145

✉Email: niken.meilani@poltekkesjogja.ac.id

ABSTRACT

Background: Child sexual abuse (CSA) is a major global public health concern, affecting 18% of girls and 7.6% of boys worldwide. In Indonesia, over 14,000 cases were reported in 2022, underscoring the urgency of preventive action. Early sexuality education effectively reduces CSA risk; however, its implementation is limited by cultural taboos, parental discomfort, and inadequate communication skills. Mothers play a vital role in teaching body safety and personal boundaries, but related behaviors and influencing factors are underexplored in Indonesia. **Objective:** To examine mothers' behaviors in providing sexuality education to young children and identify the influencing factors and barriers. **Methods:** A descriptive-analytical survey was conducted among 42 mothers of kindergarten students in Sawangan District, Magelang, from January to March 2025. Mothers' behavior in delivering sexuality education served as the dependent variable, while independent variables included intention, self-efficacy, attitude, perception, communication barriers, and husband's support. Data were collected using validated questionnaires and analyzed using descriptive statistics and path analysis. **Results:** Mothers mainly discussed topics related to family roles, boundaries, and hygiene, but rarely covered pregnancy or childbirth. The analysis showed that intention influenced behavior ($B = 0.486$, $p = 0.000$), and was predicted by self-efficacy ($B = 0.714$, $p = 0.000$). Self-efficacy was shaped by barriers, perception, and attitude, while husband's support helped reduce barriers. **Conclusion:** Enhancing mothers' self-efficacy, addressing cultural barriers, and involving fathers can strengthen the delivery of sexuality education. This study advances understanding of parental determinants in CSA prevention within Indonesia's cultural context.

Keywords: Behavior, Efficacy, Intentions, Support, Sexual

INTRODUCTION

Child sexual abuse (CSA) is a significant health challenge worldwide. Globally, the prevalence of CSA is estimated at 12.7% among children, with rates reaching 18% among girls and 7.6% among boys. In Asia, reported cases are lower, with rates of 11.3% for girls and 4.1% for boys (Simon, Luetzow and Conte, 2020).

In Indonesia, CSA cases remain remarkably high. According to the Indonesian Ministry of Women Empowerment and Child Protection, in 2022, 14,827 cases of child abuse involving children aged 13-17 were recorded (Amalia *et al.*, 2025). Based on recent national estimates, only 32% of all reported CSA cases in Indonesia resulted in legal prosecution (Sumampouw, Otgaar and de Ruiter, 2020).

CSA has been extensively studied to identify its causes, risk factors, and prevention strategies. The involvement of a child's closest community, especially the mother, plays a critical role in preventing CSA, as it helps foster the child's understanding of their body and personal rights (Russell, Higgins and Posso, 2020). The World Health Organization (WHO) defines CSA as a coercive act involving a child who is unable to provide consent, which can lead to emotional and physical harm (Mary Rajan and Vati, 2021).

Parents often feel embarrassed and uncomfortable discussing these topics. A lack of knowledge and inadequate communication skills act as major barriers to parental involvement in delivering sex education, resulting in suboptimal knowledge transfer (Shin, Lee and Min, 2019).

This discomfort is often intensified by cultural beliefs and negative attitudes toward the subject. These challenges contribute to the diversity of parental sex education styles. To effectively promote healthy sexual development, it is recommended that parents deliver sex education in age-appropriate manners, using an authoritative approach that emphasizes clear communication rather than strict or permissive methods. Consequently, the approach and effectiveness of sex education at home vary between families (Nesfechi *et al.*, 2023).

Cultural norms and beliefs strongly influence attitudes towards sexuality education in Indonesia. Deep-rooted taboos around discussing sexual and reproductive topics, along with prevailing moral beliefs and gender roles, often make parents—particularly mothers—hesitant to talk openly about these issues. In many areas, premarital sex is heavily discouraged, and topics such as puberty, relationships, and contraception are considered inappropriate for children (Septya *et al.*, 2025).

These cultural expectations create discomfort and reluctance among parents, reducing children's opportunities to receive accurate information. Although mothers are typically expected to guide their children, many lack the confidence, resources, or appropriate communication methods to do so. As a result, children and adolescents often grow up with limited or inaccurate knowledge about sexual health, consent, and personal safety (Septya *et al.*, 2025).

The differences in statistics regarding boys and girls are heavily influenced by both biological and sociocultural factors, including gender norms and the ways sexuality education is distributed and understood between genders (Brosch and Dhamala, 2024). Parental influence is also affected by double standards rooted in sociocultural beliefs; it has been reported that mothers are more involved in delivering sexual education, whereas fathers tend to be absent in this role (Usonwu, Ahmad and Curtis-Tyler, 2021). Girls tend to show more interest and better comprehension of sexuality education, while boys often exhibit conflict or rejection when discussing such topics (Torres-Cortés *et al.*, 2023).

Boys often receive less sexuality education from parents due to cultural norms, parental discomfort, and misconceptions about male puberty. This gap can leave boys without essential knowledge about their bodies, relationships, and sexual health risks. Therefore, comprehensive sexuality education for boys—initiated early and continued through adolescence—is necessary. Parents need to be equipped with accurate information and effective communication skills to engage their sons appropriately (Azira *et al.*, 2020).

Most girls are aware of menstruation before it occurs. Their knowledge is shaped by various sources, often unreliable, with peers playing a significant role. While some understanding of menstruation as a natural and normal process exists, misinformation remains common. This underscores the need for structured, accurate, and early menstrual education (Betsu *et al.*, 2023). In Indonesia, only 48.9% of girls knew about menstruation at a young age (Wihdaturrahmah and Chuemchit, 2023).

A study found a high prevalence of CSA (15.4%) and a link to permissive attitudes toward premarital sex. This suggests that sexuality education alone is insufficient without robust CSA prevention, promotion of gender equality, and family-based protective efforts to reduce risks and long-term impacts (Rong *et al.*, 2022). Sexual health is vital for overall well-being, fostering autonomy, consent, and emotional maturity. UNESCO's Comprehensive Sexuality Education (CSE) helps children prevent CSA, challenge gender stereotypes, and develop positive, protective attitudes from an early age (Marí-Ytarte, Moreno-López and Barranco-Barroso, 2020).

The sexuality education guidelines developed by UNESCO for Level 1 are intended for children aged 5-8 years. The topics covered include concepts of relationships, values, rights, culture, and sexuality; gender; violence and its prevention; healthy life skills; the human body and development; sexuality and sexual behavior; as well as sexual and reproductive health (United Nations Educational Scientific and Cultural Organization, 2018).

According to the Theory of Planned Behavior (TPB), behavior is influenced by intention, which is shaped by attitudes,

subjective norms, and perceived behavioral control (Ajzen, I., & Fishbein, 2005). Within this framework, mothers' self-efficacy, attitudes, perceptions, and cultural barriers are key determinants of their intentions and behaviors in providing sexual education.

Research Gap: While numerous studies have examined outcomes of sexuality education among adolescents, limited research explores the behavioral mechanisms and psychosocial determinants influencing mothers' delivery of early sexuality education within the Indonesian cultural context, especially using TPB as a guiding framework. This study aims to analyze mothers' behavior in providing sexuality education to young children, identify influencing factors and barriers based on the Theory of Planned Behavior, and offer insights to strengthen family-based CSA prevention strategies.

METHODS

This quantitative study employed a descriptive-analytical survey design. Sawangan District, Magelang Regency, Central Java, was selected as the study site because it represents a rural area where discussions on sexuality education remain limited and culturally sensitive. This context is relevant for examining mothers' behaviors regarding sexuality education. The study population consisted of mothers whose children were enrolled in kindergartens and early childhood education institutions within the district. A list of 44 institutions was obtained from the local education office. Using simple random sampling, one mother from each institution was selected by assigning school identification numbers and generating random numbers. Ultimately, 42 mothers participated. Although this sample size is relatively small, it reflects the total number of respondents accessible during the study period and provides preliminary insights into the local context, while acknowledging limitations in external validity.

Recruitment was carried out in collaboration with school administrators. After the random selection, teachers contacted the selected mothers and provided an information sheet detailing the study's purpose, procedures, voluntary nature, and confidentiality. Mothers who agreed to participate provided written

informed consent. Two schools declined to participate due to scheduling constraints, resulting in a final sample of 42 mothers from 42 institutions.

Data collection occurred during scheduled school meetings, where mothers completed a self-administered questionnaire. The data were analyzed using frequency distribution and path analysis to examine maternal behavior and associated variables. The study was conducted in Sawangan District, Magelang Regency, an urban area characterized by high tourism activity. Data collection utilized validated and reliable questionnaires, with validity tested using CITC (>0.5) and reliability assessed with Cronbach's alpha (>0.7).

Table 1. Summary of Measurement Validity and Reliability

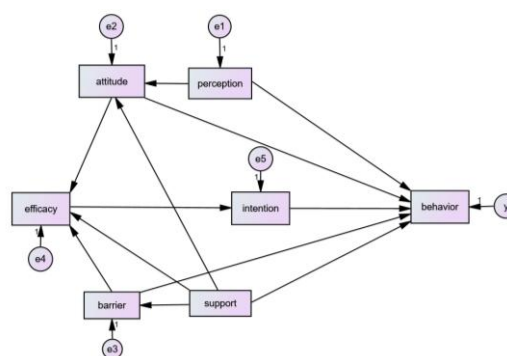
Construct	Number of Items	Response Scale	Cronbach's α	CITC Range
Perception	12 items	1 = Strongly Disagree to 5 = Strongly Agree	0.956	0.746 - 0.897
Attitude	20 items	1 = Strongly Disagree to 5 = Strongly Agree	0.891	0.160 - 0.742
Self-Efficacy	10 items	1 = Completely Not Sure to 5 = Completely Sure	0.904	0.511 - 0.805
Perceived Barriers	17 items	1 = Strongly Disagree to 5 = Strongly Agree	0.957	0.647 - 0.872
Husband Support	5 items	1 = Never to 5 = Very Often	0.908	0.634 - 0.851
Intention	12 items	1 = Strongly Disagree to 5 = Strongly Agree	0.861	0.368 - 0.801
Behavior	10 items	1 = Never to 5 = Very Often	0.917	0.606 - 0.806

The variables measured in this study included mothers' behavior in delivering sexuality education to their children as the dependent variable, and the following independent variables: intention to provide sexuality education, self-efficacy, attitude, perception, communication barriers, and husband's support. Mother's behavior in sexuality education among young children was measured using a Likert scale with the categories: never, rarely, sometimes, often, and very often. The independent variables included: 1) mother's perceptions of the benefits of

sexuality education; 2) mother's attitude towards sexuality education behavior; 3) barriers to communicating sexuality education; and 4) mother's intention to deliver sexuality education to her children. These were measured on a Likert scale with response options: strongly disagree, disagree, unsure, agree, and strongly agree. Mother's self-efficacy in delivering sexuality education was measured using a Likert scale with options: completely not sure, not sure, doubtful, sure, and completely sure. The last variable, husband's support, was measured using a Likert scale with options: never, rarely, sometimes, often, and very often. The maximum score for each variable was 100.

Participants were provided with an informed consent form and clear instructions for completing the questionnaire. Each participant was given one hour to complete the questionnaire under the supervision of the researcher to ensure clarity and accuracy in responses. Data were analyzed using frequency distribution and path analysis. Frequency distribution was used to describe the characteristics of the respondents, as well as to provide an overview of mothers' behavior and barriers in delivering sexuality education.

Path analysis was employed to examine the relationships between mothers' behavior in providing sexuality education and the variables of perception, attitude, self-efficacy, barriers, husband's support, and intention toward sexuality education. Path analysis was necessary in this study to explore both direct and indirect relationships between variables, as well as the magnitude of their effects. Although the sample size was fewer than 100 participants, the study followed rigorous research procedures; thus, the path analysis was expected to produce a model that closely reflects actual conditions in the field. Additionally, all item-level criteria for model fit were met. The hypothetical model is presented in Figure 1. Based on the Theory of Planned Behavior (TPB), the model primarily emphasizes that behavior is influenced by intention, which is strongly driven by self-efficacy. Perception and attitude enhance self-efficacy, while barriers diminish it. Husband's support represents social influence, indirectly improving behavior by reducing barriers. The analyses were conducted using SPSS and AMOS.



Source: Primary data, 2025
Figure 1. The hypothetical model

This study received ethical approval from the Health Research Ethics Committee of Poltekkes Kemenkes Yogyakarta (Approval No. DP.04.03/e-KEPK.1/511/2025). Informed consent was obtained from all participants, and confidentiality was maintained throughout all stages of the research.

RESULTS AND DISCUSSION

The frequency distribution of respondent characteristics is presented in Table 1. Most respondents were under 35 years old, had fewer than two children, held a senior high school education, were housewives, and had daughters.

Table 2. Frequency Distribution of Respondents by Characteristics

Characteristics	n	%
Mother's age	<35 years old	22 52.4
	>35 years old	20 47.6
Parity	<2	31 73.8
	>2	11 26.2
Mother's education	Elementary school	10 23.8
	Junior high school	5 11.9
	Senior high school	19 45.2
	Diploma/ Bachelor's degree	8 19.0
Mother's occupation	Housewife	27 64.3
	Laborer/ Farmer	9 21.4
	enterpreuner	3 7.1
	Private Employee	3 7.1
Child's Gender	Male	16 38.1
	Female	26 61.9

Source: Primary Data

Mothers' behavior in providing sexuality education to early childhood children indicates that most mothers have covered general topics, such as the concept of family, how to say no and seek help in cases of violence—particularly sexual violence—and the names and

functions of body parts. However, some topics are still rarely addressed by mothers, such as the concepts of pregnancy and childbirth. The average score of mothers' behavior in delivering sexuality education to PAUD/Kindergarten children is presented in Table 3.

Table 3. Average Scores of Mothers' Behavior in Providing Sexuality Education

No	Questionnaire Item	Score	Category
1.	I openly answer questions about sexuality from my child.	55,4	Sometimes
2.	I explain what a family is to my child.	76,2	Often
3.	I explain the differences between males and females in a child-appropriate way.	47	Sometimes
4.	I explain various forms of violence, including sexual violence, that can harm children.	52,4	Sometimes
5.	I explain how to refuse and ask for help when someone commits violence, especially sexual violence.	74,8	Often
6.	I explain the names of body parts and their functions.	72,4	Often
7.	I explain how to maintain personal hygiene and body health.	69	Often
8.	I explain the concept of pregnancy to my child.	38,9	Rarely
9.	I explain how babies are born in an age-appropriate way.	37,3	Rarely
10.	I provide accurate information about sexuality without replacing terms (e.g., saying "bird" instead of "penis").	47,6	Sometimes

Source: Primary Data

In the next stage, the study also analyzed the average scores of perceived barriers reported by mothers. The categories were defined as follows: strongly disagree (score 0-20), disagree (21-40), unsure (41-60), agree (61-80), and strongly agree (81-100). Table 4 presents data indicating that perceived barriers to providing sexuality education include feelings of awkwardness, inability to

explain, concerns about discussing violence—particularly sexual violence—personal hygiene, and topics such as pregnancy and childbirth. Additionally, some mothers feared that sexuality education might increase children's curiosity, while others believed that the appropriate time for such education is when children are older, rather than during early childhood.

Table 4. Item Analysis of Perceived Barriers in Providing Sexuality Education

No	Questionnaire Item	Score	Category
1	I feel awkward talking about sexuality with my child.	71	Agree
2	I feel unable to explain the differences between males and females in a child-appropriate way.	68	Agree
3	I feel worried when I have to explain about violence, including sexual violence, that may harm children.	72	Agree
4	I feel incapable of explaining how to say no and ask for help if someone commits violence, especially sexual violence.	43	Unsure
5	I feel uncomfortable when my child asks about their body parts and their functions.	40	Unsure
6	I feel concerned about my ability to explain how to maintain body hygiene and health.	70	Agree
7	I feel confused about how to answer if my child asks about pregnancy.	74	Agree
8	I prefer to avoid answering my child's questions about how babies are born.	80	Agree
9	I feel embarrassed using the correct terms for body parts when talking to my child.	31	Disagree
10	I prefer that my child learns about sexuality from school teachers rather than from me.	37	Disagree
11	I worry that discussing sexuality with my child will make them more curious.	90	Strongly Agree
12	I often avoid conversations about sexuality with my child because I feel unprepared.	71	Agree
13	I am afraid of giving too much information about sexuality to my child.	74	Agree

No	Questionnaire Item	Score	Category
14	I feel it's better to distract my child rather than talk about sexuality.	37	Disagree
15	I believe discussions about sexuality are only appropriate when children are older.	86	Strongly Agree
16	I fear negative reactions from my husband or family if I discuss sexuality with my child.	71	Agree
17	I don't want my child to talk about sexuality in front of others for fear of being seen as impolite.	75	Agree

Source: Primary Data

The path analysis test in this study analyzed variables such as behavior, intention, attitude, perception, barriers, and husband's support. The model fit was assessed according to the fit criteria. The results of the model fit for the path analysis of mothers' behavior and related variables are presented in Table 5.

Table 5. Reference value and obtained value of Fit Models

Indicator	Reference value	Score
RMSEA	Close to 0	0.000
GFI	Close to 1	0.962
AGFI	Close to 1	0.893
TLI	$\geq 0,9$	1.079
NFI	$\geq 0,9$	0.952
CMIN/DF	< 2	0.608
χ^2 -Chi Square	Small	6.081
Probability	$> 0,05$	0.808
Normality	$-2,58 < cr < 2,58$	-0.835

Source: Primary Data

The analysis results presented in Table 4 indicate that the path analysis model meets the criteria for a good model fit based on the reference values. The Chi-Square (χ^2) value is 6.081, and the RMSEA value is 0.000, which aligns with the standard of being close to zero. The GFI, TLI, and NFI values all exceed the recommended threshold of >0.90 . Although the AGFI value (0.893) is slightly below the ideal cutoff of >0.90 , it is still considered acceptable because AGFI is highly sensitive to small sample sizes. With only 42 participants, minor reductions in AGFI are expected. Furthermore, all other fit indices (GFI, TLI, NFI, and RMSEA) meet the recommended criteria, indicating that the

overall model fit is adequate. The CMIN/DF value is less than 2, and the probability value is 0.808. Therefore, it can be concluded that the path analysis model is well-fitted and reflects the conditions observed in the field.

The following section presents the finalized path model, illustrating the influence of the variables within it. Variables are displayed in boxes, the coefficient of determination (R^2) is shown above each box, arrows indicate the direction of influence, and the values around the arrows represent the magnitude of the effect (Ghozali, 2017).

Structurally, the variables influence one another in shaping adolescent reproductive health behavior for both males and females. The magnitude of influence or effect can be observed through the path coefficient values (p) or the standardized regression weights (as computed in AMOS), which range from 0 to 1. A value closer to 0 indicates a weaker effect, while a value closer to 1 indicates a stronger effect. The coefficient of determination (R^2) reflects the extent to which independent variables explain the variance in the dependent variable. This value, ranging from 0 to 1, indicates the proportion of variance in the dependent variable explained by the combined influence of the independent variables. A value approaching 1 suggests that the independent variables nearly fully predict the variation in the dependent variable (Ghozali, 2017).

The variables of behavior and intention each have an R^2 of 51%, meaning that the model explains 51% of the variation in mothers' behavior and intention to provide sexuality education. Mothers' behavior is directly influenced by their intention ($p = 0.000$; path coefficient = 0.486), indicating that stronger intentions lead to more active involvement in sexuality education.

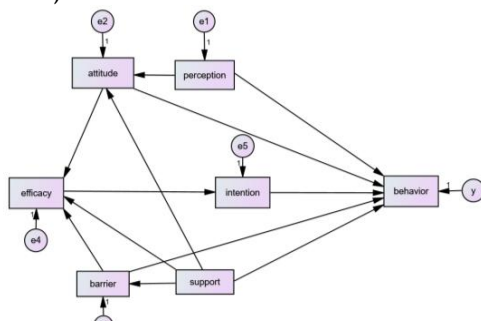
Intention is strongly influenced by mothers' self-efficacy ($p = 0.000$; coefficient = 0.714), indicating that mothers who feel more capable are more likely to intend to educate their children. Self-efficacy is affected by several factors: barriers ($p = 0.018$; coefficient = -0.315), perception ($p = 0.000$; coefficient = 0.556), and attitude ($p = 0.000$; coefficient = 0.534). This suggests that positive perceptions and attitudes increase

mothers' confidence, while perceived barriers decrease it.

Attitude is significantly influenced by perception ($p = 0.000$; coefficient = 0.517), meaning that mothers who view sexuality education more positively tend to have a better attitude toward providing it. Barriers are affected by husband's support ($p = 0.000$; coefficient = -0.514), indicating that greater support from husbands helps reduce mothers' perceived obstacles.

Overall, the negative coefficients reflect factors that make providing sexuality education more difficult—such as barriers decreasing self-efficacy and low husband support increasing perceived barriers—while positive coefficients illustrate factors that enhance mothers' readiness and confidence.

Figure 1 presents the finalized path analysis model, illustrating the influence of each variable within the model. Variables are represented in boxes, with the coefficient of determination (R^2) displayed above each box. Arrows indicate the direction of influence, and the numbers around the arrows represent the magnitude of that influence (Ghozali, 2017).



Source: Primary data, 2025
 Figure 2. Path Analysis Results

Figure 2 illustrates the structural relationships among variables that influence adolescent reproductive health behavior for both males and females. The magnitude of influence or effect is represented by the path coefficients (p) or the standardized regression weights (as shown in AMOS), which range from 0 to 1. A value closer to 0 indicates a weaker effect, while a value closer to 1 indicates a stronger effect. The coefficient of determination (R^2) reflects the extent to which independent variables influence the dependent variable. R^2 values range from 0 to 1, representing the proportion of variance in the dependent variable

explained by the combined effect of the independent variables. A value approaching 1 suggests that the independent variables account for nearly all the information needed to predict variation in the dependent variable (Ghozali, 2017). In this model, the variables of behavior and intention each have an R^2 of 51%.

Table 6. Intervariable Effects in the Path Analysis Model of Mothers' Behavior in Providing Sexuality Education

Measured Variable	Influencing Variable	Path Coefficient	p
Behavior	Intention	0.486*	0.000*
	Support	0.190	0.152
	Attitude	0.135	0.247
	Barriers	-0,153	0.263
Intention	Self-Efficacy	0.714*	0.000*
	Husband Support	0.134	0.314
Self-Efficacy	Barriers	-0.315*	0.018*
	Perception	0.556*	0.000*
	Attitude	0.534*	0.000*
	Perception	0.517*	0.000*
Attitude	Husband Support	0.175	0.182
	Husband Support	-0.541*	0.000*

Source: Primary Data

Note: * indicates statistically significant values at $p < 0.05$

Based on the structural model, mothers' behavior was associated with intention (path coefficient = 0.486; $p = 0.000$). In turn, intention was positively linked to self-efficacy (path coefficient = 0.714; $p = 0.000$). Several variables demonstrated modeled associations with maternal self-efficacy: perceived barriers showed a negative association (path coefficient = -0.315; $p = 0.018$), while perception (path coefficient = 0.556; $p = 0.000$) and attitude (path coefficient = 0.534; $p = 0.000$) exhibited positive associations. Perception was also positively related to attitude (path coefficient = 0.517; $p = 0.000$). Additionally, husband's support demonstrated a negative association with perceived barriers (path coefficient = -0.514; $p = 0.000$), suggesting that greater

support from husbands is associated with fewer reported barriers.

Overall, the modeled effects indicate that intention is the primary variable linked to mothers' behavior in providing sexuality education, with self-efficacy playing an important intermediary role. Negative effects were observed for barriers on self-efficacy and for husband's support on perceived barriers. This suggests that higher perceived barriers are associated with lower self-efficacy; however, these barriers tend to be lower among mothers reporting stronger husband support.

These findings should be interpreted as associations within the model rather than causal effects, given the cross-sectional design and the moderate sample size ($n=42$), which limit causal inference and generalizability. Although the sample met minimum sensitivity requirements for detecting medium-to-large effects, it is below the conventionally recommended sample size of over 100 for complex path models. As a result, smaller effects may not have been detected, and covariance estimates may be less stable. Therefore, these findings should be interpreted with caution, and future research with larger samples is recommended to verify the model.

Sexuality education aims to reduce reproductive health problems among children and adolescents. This is supported by data indicating that adolescent reproductive health issues—particularly those related to the Triad of Adolescent Reproductive Health (KRR), namely sexuality, HIV, and drug abuse (NAPZA)—remain high among youth populations (Rini and Tjadikijanto, 2019). The child marriage rate in Indonesia for individuals under 18 remains significant, affecting at least one in nine girls. Indonesia is therefore among the top 10 countries with the highest absolute number of child marriages globally. Early marriage, often resulting from unintended pregnancy, also increases the risk of maternal death (Muntamah, Latifiani and Arifin, 2019).

Parents often face barriers when discussing sexuality education. Common concerns include the belief that such discussions are taboo or inappropriate, or

that sexuality education should only be provided once children are older. Some parents also fear that discussing sexuality will spark curiosity in children. These barriers have been identified in other studies as well. A scoping review found that taboos surrounding sexuality education are strongly influenced by social, cultural, and religious norms, making reproductive health a “forbidden conversation” (Mohd. Tohit and Haque, 2024). In this study, respondents also expressed concerns that sexuality education might increase children's curiosity.

Sexuality education serves as a preventive strategy to help children understand their bodies and protect themselves from unwanted experiences. By teaching children about their bodies, private parts, personal boundaries, and the right to say “no,” sexuality education helps them develop a clear understanding of what constitutes safe and unsafe touch. It also encourages open communication between children and trusted adults, making it easier for children to disclose uncomfortable experiences (Hulth, Lindgren and Westberg Broström, 2024).

In Sweden, sexuality education for young children has evolved through three main perspectives: encouraging, conditioning, and repressing child sexuality. Despite these shifts, the importance of acknowledging children's rights and agency remains consistent. The authors emphasize that well-designed sexuality education helps children understand their bodies, personal boundaries, and how to protect themselves. They advocate for a balanced approach—one that safeguards children from harm while also allowing space for natural sexual development in a safe, age-appropriate manner. This balance supports both child protection and healthy emotional growth (Hulth, Lindgren and Westberg Broström, 2024).

In this study, respondents also expressed the view that sexuality education might increase children's curiosity. However, sexuality education is actually a preventive effort aimed at helping children understand their own bodies so they can protect themselves from unwanted situations. Previous studies have yielded similar results, with some respondents voicing concerns that sexuality education might arouse undue

curiosity in children, arguing that “they are still too young” or that “the education can disturb children and cause negative outcomes” (Shin, Lee and Min, 2019). Moreover, international guidelines, including those from UNESCO, recommend starting comprehensive sexuality education around age five. The focus at this stage is on understanding one’s body, recognizing emotions, and learning about relationships, respect, and consent in a developmentally appropriate manner. Substantial evidence indicates that, when carefully tailored, such education does not prompt early or risky sexual behavior; rather, it is associated with delayed sexual initiation and reductions in harmful sexual practices (United Nations Educational Scientific and Cultural Organization, 2018).

Sexuality education is one of the strategies to prevent sexual exploitation and abuse among children. Data show that in Indonesia, between 2020 and 2021, approximately 11% of children aged 12-17 years were victims of online sexual exploitation and abuse, representing around 160,000 children (UNICEF (United Nations Children’s Fund), 2022). Furthermore, data from 2022 indicate there were 2,024 cases of sexual violence against children aged 0-5 years and 4,655 cases against children aged 6-12 years (Kemenppa, 2022). Sexuality education not only serves as a preventive measure but can also be an approach to addressing issues related to child sexual abuse. A harmonious family environment, supportive friendships, and a positive educational setting can help child victims of sexual abuse develop the ability to regulate emotions, control impulses, and maintain optimism, thereby fostering resilience. In this context, resilience refers to the child’s capacity to recover and adapt positively after experiencing psychological distress or trauma resulting from sexual abuse (Muhamad, 2023).

Sexuality education for children plays an important role in promoting healthy sexuality among children and adolescents. Parents’ ability to communicate effectively with their children is a key factor in the success of sexuality education (Ahari *et al.*, 2022). One of the main barriers to providing sexuality education is limited knowledge and skills related to the subject (Ndugga *et al.*, 2023). In this study, social media

emerged as one of the factors associated with mothers’ behavior in delivering sexuality education. Previous research has shown that social media influences adolescent behavior, particularly regarding pornography (Meilani, Hariadi and Haryadi, 2023). Other studies have also indicated that social media use contributes to increased access to information, especially related to reproductive health (Olamijuwon and Odimegwu, 2022).

His study also found that fathers’ support is a significant factor associated with mothers’ behavior in providing sexuality education to early childhood students. This aligns with previous research emphasizing the important role fathers play in sexuality education, even though most of these responsibilities are carried out by mothers (Thomas *et al.*, 2022). Additionally, intention was identified as another variable linked to mothers’ behavior in delivering sexuality education. This finding is consistent with theories and previous studies, which describe intention as the closest predictor of behavior, shaped by an individual’s personal beliefs. An individual will have the intention to engage in a certain behavior when they believe they should carry it out (Márquez Vega, 2019).

CONCLUSION

This study investigated the factors influencing mothers’ behavior in delivering sexuality education to young children and aimed to identify the pathways through which self-efficacy, intention, attitudes, perceptions, perceived barriers, and spousal support interact. The findings demonstrated that mothers’ intention—strongly influenced by self-efficacy—was the primary predictor of their behavior, with spousal support playing a key role in reducing perceived barriers. Notably, this study provides a detailed, context-specific understanding of how these factors operate within Indonesian cultural norms, offering new insights into the application of the Theory of Planned Behavior in early childhood sexuality education.

These results underscore the importance of strengthening mothers’ confidence, addressing cultural and personal barriers, and promoting active involvement of fathers to improve the quality and effectiveness of sexuality

education at home. While this study offers valuable insights into maternal roles in sexuality education, certain limitations should be acknowledged, such as its cross-sectional design, reliance on self-reported data, and geographic focus on a single district, which may limit the generalizability of the findings. Future research should employ longitudinal and mixed-method approaches, include diverse cultural and socio-economic contexts, and explore both mothers' and fathers' perspectives to enhance understanding and develop culturally sensitive interventions for preventing childhood sexual abuse.

This study examined factors influencing mothers' behavior in delivering sexuality education to young children, showing that intention—primarily driven by self-efficacy—was the main predictor, while spousal support reduced perceived barriers. The theoretical implication of this study extends the Theory of Planned Behavior (TPB) by emphasizing self-efficacy as a key element of perceived behavioral control and highlighting the indirect influence of spousal support within cultural and social norms. The practical implication supports the need for family-based interventions that build mothers' confidence, address barriers, and involve fathers to strengthen sexuality education at home.

Future studies should adopt broader, longitudinal designs and explore perspectives from both parents across diverse contexts. Strengthening these components, supported by accessible health promotion media and community programs, can improve the delivery of sexuality education in Indonesian households.

REFERENCES

Ahari, S. B. *et al.* (2022) 'Evaluation of effectiveness of a sexuality education program for parents of male adolescents: Promoting of parent-adolescent sexual communication', *International Journal of Adolescent Medicine and Health*, 34(4), pp. 249-256. doi: 10.1515/ijamh-2020-0079.

Ajzen, I., & Fishbein, M. (2005) *The Influence of Attitudes on Behavior*. In B.T.D. Albarracín, *The Handbook of Attitudes*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Amalia, D. O. *et al.* (2025) 'Childhood violence exposure and its contributing factors in Indonesia: a secondary data analysis of the National Survey on Children and Adolescents' Life Experience', *BMJ Open*, 15(1), pp. 1-9. doi: 10.1136/bmjopen-2024-090618.

Azira, N. *et al.* (2020) 'The role of parents in providing sexuality education to their children', *Makara Journal of Health Research*, 24(3). doi: 10.7454/msk.v24i3.1235.

Betsu, B. D. *et al.* (2023) "'Menstruation is a Fearful Thing": A Qualitative Exploration of Menstrual Experiences and Sources of Information About Menstruation Among Adolescent Schoolgirls', *International Journal of Women's Health*, 15, pp. 881-892. doi: 10.2147/IJWH.S407455.

Brosch, K. and Dhamala, E. (2024) 'Influences of sex and gender on the associations between risk and protective factors, brain, and behavior', *Biology of Sex Differences*, 15(1), pp. 1-17. doi: 10.1186/s13293-024-00674-4.

Ghozali, I. (2017) *Model Persamaan Struktural Konsep dan Aplikasi Dengan Program AMOS 24.0*. doi: <https://doi.org/10.1016/j.ando.2009.02.007>.

Hulth, M., Lindgren, A. L. and Westberg Broström, A. (2024) 'Child sexuality and interdependent agency in sexuality education texts for Swedish preschool practitioners 1969–2021: three discourses on children's sexual play', *Sex Education*, 24(5), pp. 678-693. doi: 10.1080/14681811.2023.2261382.

Kemenppa (2022) *SIMFONI-PPA, Kementrian Pemberdayaan Perempuan dan Perlindungan Anak RI*.

Mari-Ytarte, R., Moreno-López, R. and Barranco-Barroso, R. (2020) 'Sex and Relationship Education for the Autonomy and Emotional Well-Being of Young People', *Frontiers in Psychology*, 11(May), pp. 1-13. doi: 10.3389/fpsyg.2020.01280.

Márquez Vega, M. A. (2019) 'Sexual Communication of Parents and Children: The Theory of Reasoned Action and Planned Behavior', *Biomedical Journal of Scientific & Technical Research*, 19(3), pp. 14272-14275. doi: 10.26717/bjstr.2019.19.003290.

Mary Rajan, N. and Vati, J. (2021) 'Child Abuse and Prevention', *International Journal of Science and Research (IJSR)*, 10(6), pp. 477-479. doi: 10.21275/sr21605051901.

- Meilani, N., Hariadi, S. S. and Haryadi, F. T. (2023) 'Social media and pornography access behavior among adolescents', *International Journal of Public Health Science*, 12(2), pp. 536-544. doi: 10.11591/ijphs.v12i2.22513.
- Mohd. Tohit, N. F. and Haque, M. (2024) 'Forbidden Conversations: A Comprehensive Exploration of Taboos in Sexual and Reproductive Health', *Cureus*, 16(8). doi: 10.7759/cureus.66723.
- Muhamad, S. S. (2023) 'Emotion Regulation and Impulse Control of Child Victims of Sexual Harassment in Makassar City', *Journal of Public Health and Pharmacy*, 3(1), pp. 15-19. doi: 10.56338/jphp.v3i1.4242.
- Muntamah, A., Latifiani, D. and Arifin, R. (2019) 'PERNIKAHAN DINI DI INDONESIA: FAKTOR DAN PERAN PEMERINTAH (PERSPEKTIF PENEGAKAN DAN PERLINDUNGAN HUKUM BAGI ANAK)', *Widya Yuridika*, 2, p. 1. doi: 10.31328/wy.v2i1.823.
- Ndugga, P. et al. (2023) 'Si tu madre no te enseña, el mundo te enseñará...': un estudio cualitativo de la comunicación entre padres y adolescentes sobre temas de salud sexual y reproductiva en los distritos fronterizos del este de Uganda', *Salud pública de BMC*, 23(1), pp. 1-12.
- Nesfechi, E. F. et al. (2023) 'Approaches and styles of mothers in sex education process of children and the related factors', *BMC Nursing*, 22(1), pp. 1-12. doi: 10.1186/s12912-023-01410-w.
- Olamijuwon, E. and Odimegwu, C. (2022) 'Sexuality Education in the Digital Age: Modelling the Predictors of Acceptance and Behavioural Intention to Access and Interact with Sexuality Information on Social Media', *Sexuality Research and Social Policy*, 19(3), pp. 1241-1254. doi: 10.1007/s13178-021-00619-1.
- Rini, I. M. and Tjadikijanto, Y. D. (2019) 'Gambaran Program Generasi Berencana (GenRe) di Indonesia dan di Provinsi Jawa Timur Tahun 2017', *Jurnal Biometrika dan Kependudukan*, 7(2), p. 168. doi: 10.20473/jbk.v7i2.2018.168-177.
- Rong, Z. et al. (2022) 'Relationship between childhood sexual abuse and attitudes toward premarital sexual permissiveness among middle school students in Luzhou, China', *BMC Public Health*, 22(1), pp. 1-11. doi: 10.1186/s12889-021-12490-1.
- Russell, D., Higgins, D. and Posso, A. (2020) 'Preventing child sexual abuse: A systematic review of interventions and their efficacy in developing countries', *Child Abuse and Neglect*, 102(August 2019), p. 104395. doi: 10.1016/j.chiabu.2020.104395.
- Septya, A. et al. (2025) 'Cultural Norms and Adolescents' Sexual and Reproductive Health in Bali, Indonesia: A Narrative Review', *Journal of Applied Youth Studies*, 8(1), pp. 37-62. doi: 10.1007/s43151-024-00145-y.
- Shin, H., Lee, J. M. and Min, J. Y. (2019) 'Sexual knowledge, sexual attitudes, and perceptions and actualities of sex education among elementary school parents', *Child Health Nursing Research*, 25(3), pp. 312-323. doi: 10.4094/chnr.2019.25.3.312.
- Simon, J., Luetzow, A. and Conte, J. R. (2020) 'Thirty years of the convention on the rights of the child: Developments in child sexual abuse and exploitation', *Child Abuse and Neglect*, 110(January), p. 104399. doi: 10.1016/j.chiabu.2020.104399.
- Sumampouw, N., Otgaar, H. and de Ruiter, C. (2020) 'The Relevance of Certain Case Characteristics in the Successful Prosecution of Child Sexual Abuse Cases in Indonesia', *Journal of Child Sexual Abuse*, 29(8), pp. 984-1003. doi: 10.1080/10538712.2020.1801930.
- Thomas, K. et al. (2022) 'What have dads got to do with it? Australian fathers' perspectives on communicating with their young children about relationships and sexuality', *Sex Education*, 22(2), pp. 169-183. doi: 10.1080/14681811.2021.1908249.
- Torres-Cortés, B. et al. (2023) 'Shared Components of Worldwide Successful Sexuality Education Interventions for Adolescents: A Systematic Review of Randomized Trials', *International Journal of Environmental Research and Public Health*, 20(5). doi: 10.3390/ijerph20054170.
- UNICEF (United Nations Children's Fund) (2022) *Evidence on online child sexual exploitation and abuse. Global Partnership to End Violence against Children*.
- United Nations Educational Scientific and Cultural Organization (2018) *International technical guidance on sexuality education, United Nations Educational Scientific and Cultural Organization SDGs*.
- Usonwu, I., Ahmad, R. and Curtis-Tyler, K. (2021) 'Parent-adolescent communication

on adolescent sexual and reproductive health in sub-Saharan Africa: a qualitative review and thematic synthesis', *Reproductive Health*, 18(1), pp. 1-15. doi: 10.1186/s12978-021-01246-0.
Wihdaturrahmah and Chuemchit, M. (2023)

'Determinants of Menstrual Hygiene Among Adolescent School Girls in Indonesia', *International Journal of Women's Health*, 15(April), pp. 943-954. doi: 10.2147/IJWH.S400224.