

# “SHE FEELS AND THINKS”: MOTHER'S EMOTION AND MENTAL STATE TALK ON BOOK READING ACTIVITIES

Tasya Nafasya Putri, Ike Anggraika Kuntoro, & Dien Nurdini Nurdin

Universitas Indonesia, Jalan Margonda Raya, Pondok Cina, Kecamatan Beji, Kota Depok, Jawa Barat, 16424, Indonesia

Korespondensi: [tasyanafasyaputri@gmail.com](mailto:tasyanafasyaputri@gmail.com)

“DIA MERASA DAN BERPIKIR”: EMOTION AND MENTAL STATE TALK  
IBU PADA KONTEKS MEMBACA BUKU

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## Abstrak

Ujaran tentang emosi dan keadaan mental (*emotion and mental state talk*; EMST) yang diungkapkan oleh ibu dalam konteks membacakan buku berpengaruh positif terhadap pemahaman sosial anak. Studi sebelumnya mengindikasikan bahwa faktor budaya dan format buku dapat memengaruhi munculnya EMST. Di sisi lain, penelitian mengenai EMST pada konteks budaya Indonesia dalam berbagai buku dengan variasi tingkat kesulitan bacaan masih terbatas. Penelitian ini ingin meneliti lebih lanjut mengenai karakteristik EMST pada ibu di Indonesia. Penelitian ini bertujuan untuk mengetahui jenis EMST yang cenderung digunakan, frekuensi munculnya EMST di beragam buku dengan tingkatan kesulitan bacaan yang berbeda, dan fungsi EMST bagi ibu di Indonesia. Pada penelitian ini, data sekunder berupa rekaman video kegiatan membaca buku oleh ibu dan anak dianalisis secara kualitatif. Hasil pokok penelitian ini menunjukkan bahwa ibu di Indonesia lebih banyak menggunakan *'desire talk'* dan cenderung lebih menjelaskan mengenai deskripsi karakter, alur cerita, atau pengetahuan umum dibandingkan mengekspresikan EMST. Kurangnya EMST yang ditampilkan secara spontan oleh ibu di Indonesia dapat mencerminkan pengaruh budaya pada ekspresi emosi dan keadaan mental di kehidupan sehari-hari.

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## Abstract

Mother's emotion and mental state talk (EMST) in storybook reading context has been reported to be positively correlated with children's social understanding. Previous findings postulate that cultural context and book formats could affect the emergence of EMST. On the contrary, research about the EMST in the Indonesian cultural context and in various book formats is limited. Hence, further research needs to be conducted to explore the characteristics of EMST in Indonesian families. The current study aims to analyze which type of EMST is preferred by mothers in Indonesia, the frequency of EMST usage across various levels of reading difficulty, and the functions of EMST among Indonesian mothers. Secondary data were analyzed qualitatively from parents' video recordings of reading book activities. The main findings of this research suggest that, while most participants reported utilizing desire talk as a means of EMST, they were more likely to emphasize character descriptions, storylines, or general knowledge compared to EMST in shared book reading sessions. The lack of spontaneous EMST in Indonesian mothers may reflect the cultural influence on the expression of emotions and mental states in everyday life.

**Keywords:** emotion and mental state talk, Indonesian children's book, mother mental state talk, reading book activities

## Impact and Implication in the Indigenous Context

Shared book reading has been integrated into families' daily routines worldwide, transcending cultural boundaries. Shared reading ritual allows parents to facilitate children's social understanding using words associated with Emotions and Mental States Talk (EMST). On the contrary, research about EMST remains scarce in Indonesia's shared reading context. Therefore, the current study aimed to explore an overview of the use of EMST in shared reading activities among Indonesian parents. The results suggest that Indonesian mothers tend to utilize simpler and less spontaneous EMST and emphasize more character descriptions, storylines, or general knowledge. This finding depicts the social-cultural influence that shapes the expression of emotions and mental states in Indonesian families. This result may become a preliminary to further extensive research about EMST in Indonesia and its implication to Indonesian children's cognitive and social development.

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## INTRODUCTION

From Vygotsky's theoretical perspective, conversations concerning mental states hold significant importance in fostering children's social understanding through internalization (Tompkins et al., 2018). These mental state conversations encompass words that describe both cognitive and emotional states (Symons, 2005). The cognitive states include beliefs, thoughts, imaginative processes, metacognition, and other mental experiences represented by words such as think, know, believe, forget, and understand. In parallel, emotional states consist of feelings that are expressed either directly, such as joy, sadness, anger, and disgust, or indirectly, like pain, hunger, and excitement. The exchanges between parents and children focused on the mental and emotional states of others are referred to as Emotion and Mental State Talk (EMST) (Drummond et al., 2014). Furthermore, Drummond et al. (2014) proposed six types of EMST: desire talk, simple affect talk, emotion explanation, internal state talk, mental state talk, and emphatic statements. For instance, "*She wants her Mommy*", "*She feels sad*", "*She is angry because her Mommy does not want her*", "*She thinks it is a sad story*", "*Oh.. how sad it is to be that girl*". EMST is also categorized into two types based on its functions: EMST production, which is used to describe or elaborate such as "*He is happy*" and EMST elicitation, which is used for asking children to explain and obtain more information such as "*What do you think about his feelings?*" (Drummond et al., 2014).

Various previous studies have shown many positive effects from the discussion about emotion-mental state talk (EMST) (Taumoepeau & Ruffman, 2006; Taumoepeau & Ruffman, 2008; Taumoepeau & Ruffman, 2016; Tay & Ding, 2022). Parental usage of MST shows a significant correlation to children's understanding of theory-of-mind in children (Sehlstedt et al., 2024). Theory of mind is the human conceptual capacity to understand other people as parties who also have mental states such as beliefs, desires, and purposes as the basis for understanding social interactions that are important in communication (Rakojzy, 2022). In addition, EMST performed by parents during parent-child interaction correlates to the children's context and spontaneous use of EMST (Symons, 2005). Thus, the ability of parents, especially mothers, to use EMST is associated with higher social-emotional functioning in children (Bekar, 2014) and adaptive behavior in children (Bekar et al., 2018). In addition to similar discussions, EMST by parents is also related to children's behavior in empathy and prosocial behavior (Drummond et al., 2014).

Many studies reveal various influential factors on EMST in conversations between children and parents (Jenkins et al., 2003; Baptista et al., 2017; Robby & Scott, 2022; Drummond et al., 2014).

Jenkins et al. (2003) stated that parental gender can influence EMST. In the study, mothers spent more time talking about their mental state than fathers did. Furthermore, Jenkins et al. (2003) also revealed that in a context where only mothers are present with children, they will show more involvement and provide more diverse stimulation than in sessions where both parents are present. In addition, other studies have shown that only maternal EMST is a significant predictor of brain executive function compared to paternal EMST (Baptista et al., 2017).

According to Robby and Scott (2022), context can also affect EMST, and the effect can differ depending on the type of EMST. One of the contexts used by previous research is the activity of reading books together. Reading a book together forms a context for emerging interactions and conversations when both parties focus on and explore the same topic simultaneously (Adrian et al., 2005). In addition, reading books provides context for parents to talk about mental states when conveying characters' thoughts and feelings. For instance, children can understand the feelings and thoughts of being a kind person through classic folktales like *Bawang Merah dan Bawang Putih*. Another example, children also might learn about honesty through *The Pinocchio*. According to Drummond et al. (2014), parents use EMST more significantly when reading books than when playing together. The use of the term EMST especially in the context of reading picture books by mothers is particularly related to the successful development of the theory of mind (TOM) and the success of doing false-belief tasks (Adrian et al., 2005). The false-belief task is an activity that assesses children's ability to understand that others may have false beliefs about the world which is a very important test of the Theory of Mind (Wiesmann et al., 2017).

Nonetheless, the effect of EMST on the context of reading books on behavior is also mediated by cultural background. Mothers from Western countries such as New Zealand and Australia expressed significantly higher amounts of mental state talk with more varied mental state talks than mothers from Eastern countries such as China (Kong et al., 2023). Likewise, mothers from European American culture use more words that describe thoughts and emotions when telling stories than mothers from China, who often prefer using behavior-related words (Doan & Wang, 2010). Based on this research, the European American mother's tendency to express thoughts and feelings portrays European American cultural values which are individuality and autonomy, where individual realities and states of being are essential. On the other hand, Chinese mothers' focus on behaviors depicts language as a mechanism for guiding action and social interaction. However, behavior descriptions are negatively correlated with children's knowledge of situations and emotions because behavior description leads children to focus only on physical attributes of the story, may inhibit their emotional

understanding, and undermine the importance of psychological state (Doan & Wang, 2010). In other words, the emphasis on behavior descriptions may hinder children from understanding the situation and emotions that are depicted in the story. Therefore, focusing on the psychological state of the characters in book reading activity might increase children's knowledge about emotional and social situations.

Apart from cultural influences, diverse book formats will produce different qualities in the complexity and diversity of parental languages (Petrie et al., 2021). Several previous studies have analyzed comparisons between various book formats, including books with illustrations that have few to almost no words or wordless books and books with illustrations that contain story text (Petrie et al., 2021; Smadja et al., 2021; Peskin & Astington, 2004). Petrie et al. (2021) discovered that wordless books containing only illustrations produce more interactions than books with story sentences. In line with this research, Smadja et al. (2021) revealed that storytelling using wordless books stimulates EMST more than reading textbooks. Children's discussions on characteristics, the increase in EMST references, and the boost in their active participation in book-related dialogues are likely to appear during the usage of wordless books (Smadja et al., 2021). On the other hand, research in Canada states that reading books explicitly rich in cognitive vocabulary encourages children to produce more lexical features about cognition (Peskin & Astington, 2004).

Mixed results from previous researchers encourage the current research to reanalyze the impact of book formats on the production of EMST especially in the Indonesian context. Additionally, the present research uses various book formats ranging from books with few words, and books with short sentences to books with lengthy stories and will be indicated with five levels of reading difficulties, which differs from previous research that only divides the format into wordless and illustrations that contain story text. Books with difficulty level one show story books with little story text up to books with difficulty level five with more complex story texts. The additional categorization is expected to provide further information about which specific book format or level of difficulty that are best to encourage the expression of EMST.

### ***Present Study***

The present study has two research questions which will be further discussed as follows.

*Research question 1: What types of EMST occur in the context of reading books together for mothers in Indonesia?*

In addition to analyzing the EMST types from book reading videos with various book titles, it is also necessary to examine the EMST types in books with different difficulty levels. This aims to see whether there is an effect of the level of reading difficulty on the number of EMST utterances. Thus, the following is a follow-up research question.

*Research question 2: Are there differences in the type and frequency of EMST for mothers in Indonesia at different levels of book difficulty?*

The answers to these research questions will further inform the readers about the characteristics of EMST in Indonesian mothers. By knowing the characteristics, future studies may examine the underlying factors of EMST occurrence in Indonesian mothers and its correlation to behavior and emotion-related outcomes in children. For instance, future studies may compare socio-emotional functioning, social comprehension, or emotion regulation skills in children who are exposed to different amounts of EMST daily. Therefore, we can see the significance of book-reading activities and EMST that are contained in children's books and their implications for behavior and socio-emotional functioning in Indonesian children.

## **METHODS**

### ***Design***

This study utilized qualitative and quantitative research design. From a qualitative point of view, the study observed the video and the mother's speech that occurred in the video will be categorized using a coding system based on the type of EMST based on Drummond et al. (2014), including desire talk, simple affect talk, emotion explanation, internal state talk, mental state talk, and emphatic statements. On the other hand, the qualitative study aimed to investigate the EMST speech patterns of Indonesian mothers. Furthermore, a quantitative analysis was conducted by comparing the frequency of each category to see which EMST category was most used by mothers in Indonesia. Then, the frequency of each of the categories is compared quantitatively at each level of difficulty.

### ***Data***

Secondary data were used to ensure that book reading activities were voluntary and without any form of interference from the researchers. The data collection method of this study was convenient sampling by examining hashtags in several social media. In the current study, the videos were derived from an online read-aloud competition in 2022 organized by an institution in Indonesia.

Numerous videos of Indonesian parents reading books to their children were published on Instagram by using the same hashtag (#letsreadaloudchallenge2022). Videos were uploaded voluntarily by the parents in publicly disclosed Instagram profiles prior to the research. Parents chose the book title they wanted to read themselves so that the researchers were not involved in determining the book titles. Even though the data that was used in this research was taken from public Instagram profiles, researchers were committed to the confidentiality of the identity of the participants. Further demographic data of each of the participants such as age, education, or social-economic background also cannot be accessed because parents do not disclose it in their respective public profiles.

The data that were used in the study were 20 videos of Indonesian mothers and children reading story books aloud in Indonesian with 2–10 minutes duration. The videos selected for analysis in the study featured ten girls and six boys. Gender of the children of four videos were not identified due to the change of access to the public profile by the parents. Videos were chosen randomly but have to meet the following criteria: (1) the language that was used must be in Indonesian, (2) the video showed the faces of both children and mothers, (3) the video might include one or two children simultaneously in one reading session, (4) the reading had to be done from the beginning to the end of the books, (5) the books that were read in the videos had to be accessible online to be analyzed by the researchers. Digital books that were read by the parents consist of 13–24 pages and had reading difficulty levels from 1 to 5. The levels of the books were already predetermined by the organization that sourced all the e-books (<https://www.letsreadasia.org/>). Level 1 indicated that books contain simpler tenses and fewer words, whereas level 5 books have more complex sentences and longer narratives.

### ***Procedure***

Informed consent and ethical clearance were not obtained for this study because it utilized secondary data that is publicly accessible and available prior to the research. The researchers analyzed the video by calculating the frequency of the mother's EMST that appeared both in the form of spontaneous statements put forward by the mother and the EMST coming from reading textbooks. After conducting video analysis, the researcher accessed the electronic book read in the video through the website. The researcher conducted a book analysis by noting the frequency of EMST occurrences contained in the written content (book content) and grouping them into six EMST categories. Three types of data such as production EMST, EMST elicitation, and EMST contained in the book were

obtained after this procedure. Furthermore, on the website, the researcher also collected information regarding the title, author, number of pages, and difficulty level of reading.

To answer the second research question, the analysis focused on the level of reading difficulty. Therefore, the data from Study 1 were re-examined and ten videos were chosen to represent five levels of difficulty. As a result, each difficulty level was represented by two videos featuring the same book titles that were read by different families. Similar to the previous study, the book reading sessions were categorized into six types of EMST.

### ***Analysis Strategy***

The videos were analyzed using a coding system based on six EMST categories, such as simple affect, desire talks, emotional explanations, internal state talks, mental state talks, and empathy statements (Ruffman et al., 2006; Symonsetal, 2006; Brownell et al., 2013; Drummond et al., 2014). In addition, EMST was also categorized into two categories based on its function. The first category is production, which is used to label or elaborate, and the second is elicitation, which aims to ask children (Drummond et al., 2014). The following are the examples of each category of EMST.

Table 1.  
*Definition and Examples of EMST According to Drummond et al. (2014)*

No.	Types	Examples	
		Production	Elicitation
1	<i>Simple Affect Talk</i> Nouns, verbs, or adjectives that describe feelings, emotions or behaviors or preferences, desires, or intentions in the absence of emotional imitation	“The boy is happy.”	“How is he feeling?”
2	<i>Desire Talk</i> Words that indicate the desire or need for something concrete	“He wants his ice cream.”	“Does he need a hug?”
3	<i>Emotions Explanation</i> Words or statements that explain or clarify the reasons or possible causes of a mental state or provide background or context to help the child understand it or evaporate or explain how a person acquires or knows the mental state he or she is experiencing.	“The monkey is sad because he doesn’t have a hug.”	“Why is the monkey sad?”
4	<i>Mental State Talk</i> Words or sentences that refer to the past or to think, know, remember, pretend, or suppose.	“I think they’re lizards.”	“What do you think they’re doing?”
5	<i>Internal State Talk</i> Words or sentences that describe an internal state other than mental and emotional states.	“He is hungry.”	“Did she get tired?”
6	<i>Empathy Statement</i> Sentences associated with an emotion that encourages the emergence of empathy for the character’s emotions.	“Poor monkey.”	(Does not occur)

The six categories of EMST frequencies, both production and elicitation, contained in EMST books were compared to see which EMST categories appeared most often from both books and Indonesian mothers' utterances. Furthermore, a frequency comparison was carried out at each different level of difficulty between books with different and the same title.

## RESULTS

The first research question focused on the type of EMST occurring most often among Indonesian mothers in the context of reading books together. The results indicated that the mother spoke all EMST categories in the form of production and only some in elicitation form (Table 2). Specifically, the participants did not produce emotional explanations and empathy statements in elicitation form. The following is an example of utterances spoken by mothers from this study sample.

Table 2.

*Results of Indonesian Mothers' Utterances based on EMST Types*

No.	Types	Examples of the Results	
		Production	Elicitation
1	<i>Simple Affect Talk</i>	"He is still disgusted and scared"	"His mother is sad, huh?"
2	<i>Desire Talk</i>	"Do you want to know about them?"	"Would you like to make a garden?"
3	<i>Emotions Explanation</i>	"His neighbors were so happy because they saw him."	(Does not occur)
4	<i>Mental State Talk</i>	"Mercury doesn't know where Pluto is going."	"He had that idea?"
5	<i>Internal State Talk</i>	"His mother is sick."	"What do you usually feel when you scratch?"
6	<i>Empathy Statement</i>	"Too bad, Kuau bird's leg was injured."	(Does not occur)

Based on the video samples, the average frequency of mothers' EMST was  $M = 5$  ( $SD = 2.5$ ), the number of book pages was  $M = 17.6$  ( $SD = 4.8$ ), and the average duration was 7 minutes 2 seconds. Overall, the type of mothers' EMST that is mainly produced was desire talk (21 times) (Table 3), such as: "I do not want to!", "He never wants to get wet", and "I always want to have flowers there". However, 20 of 21 desire talks were already in the book narratives. Aside from book content, parents only used the desire-talk type spontaneously once. It only appeared in the elicitation form: "(name of child), would you like to get to know them?" This finding indicates that a person is likely to utter the EMST type contained in many book narratives.



Table 3.  
*EMST Frequency of Mothers in Indonesia on Book Reading Activities*

Types	Frequency		Total EMST
	EMST from Mothers' Utterance	EMST in Books	
<i>Simple Affect Talk</i>	10	1	11
<i>Desire Talk</i>	11	20	21
<i>Emotions Explanation</i>	2	5	7
<i>Mental State Talk</i>	1	11	12
<i>Internal State Talk</i>	2	5	7
<i>Empathy Statement</i>	0	1	1
Total EMST	16	43	

On the other hand, if we only look at utterances not included in storybooks, mothers in Indonesia mentioned EMST more in the simple affect talk or emotions category. For example, “He is still disgusted and scared!” or “Her mother is sad, huh?” Of all simple affect talks, mothers in Indonesia use elicitation in the form of questions more than production. For instance, “Do you like vegetables?” or “Mom, do you love (child's name)?”. However, simple affect talk only occurred once in the books' narratives. The books mentioned only a few simple affect talks, but the fact that many mothers spontaneously mentioned this category strengthened the argument that they were prone to say what was unstated in the books. When comparing EMST in books and from mothers' utterances, EMST contained in the book had a higher frequency than EMST spoken by mothers. The books included 43 EMSTs: 20 were desire talks, and 11 were mental state talks. However, the mothers only said spontaneous EMST 16 times.

The second research question aimed to investigate the differences in the mothers' EMST type and frequency at each level of book difficulty. Based on the analysis of the EMST at each level of difficulty (Table 4), the book with the lowest level of difficulty (level 1) contained only one type of EMST (simple affect talk). The desire and internal state talk only occurred in books at difficulty level 2. Furthermore, emotional explanations, mental state talks, and empathy statements occurred at difficulty level 3, 4 and 5. The results indicate that the sentences describing the wants, needs, and internal conditions exist in the books with few words. On the other hand, sentences that show emotions, the reasons for those emotions to occur, mental states, and empathy are contained in books with more words and complex word structures.

Other findings from this study indicate that apart from utterances that fall into the EMST or non-EMST categories (Table 4), Indonesian mothers utter many descriptive questions to evaluate children's cognitive knowledge about objects in story books. For example, “What tree is that?”, “Carrot is a fruit or vegetable?”, “How many orangutans are there?”, “What planet is next to Venus?”

Questions about children's knowledge from book reading videos with level 1 difficulty emerged and continued to appear until level 5 book reading. Furthermore, mothers also often asked questions related to descriptions of objects or character behavior, such as “What is going on there?” and “What is he doing?”. Mothers often raised questions to lure children into predicting what would happen in the next storyline, such as “Who do you think that is?”, “What do you think the tiger is up to?”, "Do you think (he) will take it or not? "I wonder what happened after this?". In other words, it seems that mothers in Indonesia also prefer to ask questions related to cognitive aspects, such as asking about children's previous knowledge, object descriptions, and storylines, and predicting plots from books.

Table 4.

*Overview of EMST Types of Mothers Who Read Different Books at Every Level of Difficulty*

Reading Difficulty	Book Title	Simple Affect Talk	Desire Talk	Emotions Explanation	Internal State Talk	Mental State Talk	Empathy Statement	Non-EMST
1	<i>Sayur Buatan Mama</i>	v						v
1	<i>Berjalan-jalan di Taman</i>							v
2	<i>Ibu, Aku Sakit!</i>	v	v		v			
2	<i>Aku tak mendengarmu</i>		v					
3	<i>Perang!</i>	v	v			v		
3	<i>Nilam Si Tabib</i>		v	v		v	v	v
4	<i>Katak yang Cerdik</i>		v		v	v		
4	<i>Kebun di Atap</i>	v	v	v		v		
5	<i>Bukan Jamu Biasa</i>	v	v			v		
5	<i>Mencari Pluto</i>	v		v	v	v		v

In the case of the total EMST frequency (Table 5), the books with the lowest difficulty level get the lowest average EMST. Nonetheless, the level 2 difficulty has a higher total EMST frequency in comparison to levels 3, 4, and 5 despite having more complex sentences. However, most of the EMST came from the text of the book mothers read rather than spontaneous utterances. In contrast, if we only consider the mother's EMST apart from the book-reading activities, the highest frequency of the mother's EMST at each difficulty level is not significantly different.

Table 5.

*Overview of EMST Types of Mothers Who Read Different Books at Every Level of Difficulty*

Difficulty Level	Book Title	EMST Frequency		Total EMST	Mean Total EMST
		EMST from Mother's Utterance	EMST in Books		
1	<i>Sayur Buatan Mama</i>	3	0	3	1,5
1	<i>Berjalan-jalan di Taman</i>	0	0	0	
2	<i>Ibu, Aku Sakit!</i>	2	7	9	8
2	<i>Aku tak mendengarmu</i>	0	7	7	
3	<i>Perang!</i>	2	3	5	5,5
3	<i>Nilam Si Tabib</i>	0	6	6	
4	<i>Katak yang Cerdik</i>	1	5	6	7,5
4	<i>Kebun di Atap</i>	3	6	9	
5	<i>Bukan Jamu Biasa</i>	1	4	5	6
5	<i>Mencari Pluto</i>	3	4	7	

Next, the study examined the comparison of the EMST frequency videos with the same book title at each difficulty level. Two book-reading videos represented each level. Different mothers read the exact title of the book. This comparison strived to see whether mother characteristics had something to do with the EMST. Based on Table 6, the frequency range of EMST spontaneously uttered by the mother was 0-3 EMST at each difficulty level. In one video, mothers only said three EMSTs that were not in the textbooks. No significant difference in EMST frequency was found from the book-reading videos, regardless of the difficulty level.

Table 6.

*EMST Frequency Comparison of Mothers Who Read the Same Book at Every Level of Difficulty*

Difficulty Level	Book Title	EMST Frequency of Video	
		1	2
1	<i>Sayur Buatan Mama</i>	3	0
2	<i>Ibu, Aku Sakit!</i>	2	1
3	<i>Nilam Si Tabib</i>	0	3
4	<i>Kebun di Atap</i>	3	1
5	<i>Mencari Pluto</i>	3	0

This finding is similar to previous analyses comparing EMST frequencies in reading books with different titles. This result shows that despite the large number and complexity of texts, the EMST of Indonesian mothers still ranges from zero to three. The higher difficulty level does not necessarily mean that the number of EMSTs of the mother will increase.

## DISCUSSION

This study examines the trend of EMST mothers in Indonesia when reading books in various difficulty levels. According to the analysis results, mothers in Indonesia frequently mentioned desire talks which are words that refer to wanting and needing something concrete during the book-reading context. For instance, “I *want* the flowers to grow quickly!”, “He *wants* a bike.”, “Do you want to get to know them?”, etc. A similar finding was suggested by Widyaesmi's study (2003). A deeper examination of the narratives within the books reveals that the majority of the desired verbal utterances by the readers occurred within the context of the book content. This is supported by the fact that the desired talk frequency is the highest compared to other types of EMSTs.

If we eliminate the EMST in book content, Indonesian mothers mostly cited simple affect talk or simple emotions attributed to the characters in the book. This finding aligns with previous research conducted in Hong Kong, where parents tended to display simpler affect or emotional words than desire talks (Chan et al., 2020). According to Labounty et al. (2008), mothers' use of emotional vocabulary and explanations of emotions may foresee children's development of emotional understanding. In other words, mothers are the primary promoters of emotional issues in children, as demonstrated by their use of emotive language.

If the EMST frequency of book material is contrasted with the mother's utterance, however, the EMST frequency in stories is significantly higher than the EMST mothers who naturally speak in both production and elicitation. In the book reading competitions, the EMST was 46, while the production and elicitation rates were each 18 times. In comparison to other forms of parent-child connection, books provide a rich source of information about mental state, as evidenced by the abundance of EMSTs found in children's storybooks (Dickinson et al., 2014; Doan & Wang, 2010; Stich et al., 2015; Farkas et al., 2020). Books are the source of basic terminology to explain mental experiences (Dyer-Seymour et al., 2004; Farkas et al., 2020).

The lack of spontaneous EMST among Indonesian mothers may be caused by cultural values compatible with those of Eastern nations. For instance, compared to Chinese mothers, who frequently describe behavior, parents in American and European cultures use more words to explain ideas and emotions while narrating stories (Doan & Wang, 2010). In contrast to China, the individualistic cultures of American and European parents encourage people to express their thoughts, ideas, and emotions. Doan and Wang (2010) attribute this difference to cultural ideals in both countries. According to previous studies, adults and children use verbs that describe behavior rather than

adjectives, particularly in East Asia. The results of the current research align with the previous findings by Doan and Wang (2010) where Chinese mothers share similarities with Indonesian mothers in focusing on behavioral aspects of the story. In the current research, Indonesian mothers tend to ask their children more questions that prompt them to explain things or actions in the storybook aside from EMST.

The result of further analysis indicated that mothers who read level 1 books elicited exactly as many EMSTs as mothers who read level 5 books. However, level 1 books have shorter and simpler word counts than level 5 books, in which mothers should have more opportunities to elaborate on the character's emotional and mental state. This study's findings also contrast with those of Smadja et al.'s research from 2021, which found that wordless or nearly wordless books can increase EMST. The study found that children's discussion of characters occurs more frequently when stories are told and that using wordless books that do not rely on text encourages engagement in discussions about books rather than story reading (Smadja et al., 2021). However, current research analysis demonstrated no significant variation in frequency when reading five books of varying difficulty levels. In the current research, the level of reading difficulty did not affect the number of EMSTs spontaneously raised by mothers in Indonesia.

Another finding of this research is that based on the analysis of EMSTs in the books' narratives alone, internal state talks and desire talks are more frequently found in books that have lower difficulty levels compared to simple affect and mental state talks. The EMSTs in books are consistent with the emergence of EMST in children, which shows that children can describe internal states like exhaustion and discomfort before they can talk about mental states (Bretherton & Beeghly, 1982). According to Taumoepeau and Ruffman (2006), who cited Bretherton and Beeghly (1982), children also master desire talks sooner since it is simpler for them to comprehend their desires than other people's opinions. For instance, parents can express their desires, but they cannot convey what their parents are thinking. Previous findings about the early emergence of desire talks before mental state talk in children also reflect in the current research in which mental state talks are mentioned in books with higher levels of difficulty compared to desire talks. Thus, it can be inferred that the types of EMST described in the book in Indonesia are in line with the nature of the emergence of EMST in children.

This research had several strengths and limitations. An important strength of this work is the use of qualitative research design. Qualitative research design allows a deeper understanding of the characteristics of Indonesian mother EMST. Moreover, studying video recordings of book-reading

sessions was also the strength of this research. Parents and children voluntarily created book-reading videos without any interference from the researchers. It allowed them to choose their own book and read in comfortable settings without feelings of being evaluated. Therefore, it provides more detailed and representative information about the emergence of mother state talks in its natural context in Indonesian families. In contrast, this research also has limitations. This research used secondary video data that were available online prior to the research. Hence, the researchers did not access and collect further personal or demographic data from the parents and children involved in this research.

## **CONCLUSION AND RECCOMENDATIONS**

Based on current studies, several key findings have been discovered. Firstly, amongst the six categories of EMST, Indonesian mothers from the current research tend to express desire talks which are already mentioned in the storybook. However, if we examine the spontaneous utterances that are unavailable in the books, the mothers use more simple affect talks. Although the frequency of simple affect talks that were already in the books was fewer than desire talk, simple affect talks were mentioned across all levels of difficulties, ranging from books with few words to books with more comprehensive tenses. Therefore, simple affect talks that are mentioned in the books might be related to the occurrence of spontaneous simple affect talks in mothers. Similar to previous research, the use of simple affect talks by Indonesian mothers also aligns with findings from countries that adopt Eastern culture (Chan et al., 2020). Thus, this result confirms the effect of cultural values on the emergence of EMST in Indonesian mothers. The impact of culture on mothers' expression is also reflected by the utterance other than EMST. In the book reading sessions, Indonesian mothers prefer to challenge the children by asking about children's previous knowledge, object descriptions, and storylines, and predicting plots from books. Indonesian mothers focus on the behavior or physical aspects of the characters rather than stimulating the child to understand the emotional or mental states of the characters. Indonesian mothers' emphasis to describe behavior is also similar to mothers from Eastern culture (Doan & Wang, 2010). Therefore, Indonesian parents need to enrich EMST utterance beyond the content of reading books, especially in the case of frequency and diversity. Thus, reading activities can be a better means of learning words related to mental states that encourage children's social and emotional understanding.

Another finding from this study is that the numbers of Indonesian mothers' spontaneous EMST across difficulty levels are not varied. Regardless of the complexities of the text and the

number of words, spontaneous EMST remains relatively low. Thus, Indonesian mothers' expression of EMST is still dependent on the EMST that is mentioned in the books. As a result, we can conclude that book format does not directly impact the utterance of EMST in Indonesian mothers. On the contrary, previous research postulates that there is a correlation between the different forms of books with EMST expression (Petrie et al., 2021; Smadja et al., 2021). These findings add novel information regarding what affects the occurrence of EMST and may become a predecessor for future studies.

Future studies could examine the socio demographic backgrounds of both children and parents and explore its correlation to the EMST. Additionally, future research may conduct follow-up interviews to analyze parents' perspectives regarding the book-reading activities

This study has practical implications for emotional and mental state talks understanding in children. It raises the importance of story book-reading and can be a stimulus for families in teaching children about emotion and mental state in a social context. These findings also can be a consideration for teachers, writers, and educators to incorporate more EMSTs in Indonesian story books that are essential in social-emotional learning.

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## **COMPLIANCE WITH ETHICAL STANDARD**

### ***Ethical Statement***

All procedures performed in this study were in accordance with the 1964 Helsinki Declaration and its amendments or with comparable ethical standards. Informed consent and ethical clearance were not obtained since this research utilized and analyzed data accessible to the public.

### ***Conflict of Interest***

The authors declare no potential conflict of interest is involved in this research.

### ***Data Availability***

The datasets used in this study are available from the corresponding author through email [tasyanafasyaputri@gmail.com](mailto:tasyanafasyaputri@gmail.com).

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