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The influence of expressive vs. conventional typography on parent-child shared book-reading

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Introduction: Typography, that is, the typeface, size, style, color, or position of the type of the book, is considered an element of meaning-making. As such, it has been suggested that typography may relate to the nature of parent-child shared book-reading. This study examined parents' attitudes towards expressive typography (changes in font, size, added letters, flipped letters), and how this relates to shared reading of books with expressive vs. conventional typography.

Methods: Participants included 72 parents (59 mothers, 13 fathers) and one of their children (41 girls, 31 boys) whose average age was 61.86 months ($SD = 8.69$ months). All parent-child dyads read two books with conventional typography and the same two with expressive typography in a counterbalanced order; all interactions were recorded and analyzed.

Results: Results revealed that parents were generally aware of a book's typography but didn't necessarily see it as influencing how they read. Negative binomial regressions with generalized estimating equations indicated that the presence of expressive typography related to longer shared reading interactions and changes in parents' tone and pace during shared reading.

Discussion: The study suggests that attitudes towards a book's characteristics may act more implicitly in terms of parents' reading behaviors. Parents can be guided to look for typographic features in books and encouraged to consider them when selecting books for shared reading.

KEYWORDS

book characteristics, parental attitudes, shared book-reading, tone, typography

Introduction

Shared book-reading, when an adult reads to a child and discusses the book, has received extensive attention in the research literature as a tool for promoting young children's language, literacy, and socio-emotional skills (Dennis et al., 2024; Galea et al., 2025; Pillinger and Vardy, 2022; Schapira and Aram, 2026). Research indicates that parents often begin book reading during children's first year of life (Lenhart et al., 2022) and that within the adult-child-book triad of shared reading (Kucirkova et al., 2013; Mesmer, 2016), aspects of the book itself can influence the nature of the interactions. For example, the genre of the book (Bergman Deitcher et al., 2019), the presence of sensory elements such as smell or color (Kucirkova and Jensen, 2024), the presence or absence of text (Petrie et al., 2023), among others, may shape parents'

questions, explanations, and elaborations, as well as children's interpretations of and connections to the text. Alongside these elements, it has been suggested that the typography, that is, the typeface, size, style, color, or position of the type of the book may also have an impact (Phinney and Colabucci, 2010; Serafini and Clausen, 2012). In contemporary picturebooks, typography is considered an element of meaning making (e.g., van Leeuwen, 2006). Studies suggest that children pay attention to salient print, including typographical elements (Neumann et al., 2015; Richardson, 2022). Similarly, there is evidence that parents consider visual features such as appearance, structure, text length, and linguistic complexity when choosing books for shared reading (Aram et al., 2017; Bergman Deitcher et al., 2019) and may read books differently based on visual features of books (Bergman Deitcher et al., 2021; Timpany et al., 2014). Expressive typography in children's books may shape how adults read the text, which in turn, has been shown to support children's language and comprehension skills (e.g., Dowdall et al., 2023; Grøver et al., 2023). Nonetheless, to the best of our knowledge, studies have not yet examined parents' views of typographical elements in children's picturebooks, nor how these elements may influence the nature of the shared reading interaction. The current study thus aims to bridge this gap in the literature and expand the understanding of parents' attitudes towards typography and how a book's use of print elements may be reflected in shared reading interactions. This knowledge could help parents learn to intentionally draw children's attention to how typography serves the content of the book and can also inform children's book authors and illustrators when considering typographic choices (e.g., Klassen, 2025).

Typography as a meaning-making resource

Typography typically has been understood as a matter of legibility, but typography also can contribute to meaning. Van Leeuwen (2006) argues that typography functions as a semiotic resource, where visual features such as size, weight, color, orientation, and spacing can create salience, organize information, express tone, and shape how readers interpret written language and create meaning from it. This perspective is especially relevant regarding children's picturebooks, which generally utilize text and illustrations to convey meaning (Sipe, 2012). Supporting this, Treiman et al. (2016) found that visually salient print is present in books for preschool children, although it appears more often on covers than in interiors and more often in recently published books than in older books. In these books, words may be enlarged, bolded, colored, curved, tilted, embedded in illustrations, or arranged to represent sound, motion, emotion, or character voice. This kind of expressive typography can be used to reflect changes in the story, convey meaning, represent action, or advance the plot (Phinney and Colabucci, 2010; Unsworth et al., 2014).

In the context of shared book-reading, expressive typography may be understood not only as a visual feature that children may notice, but also as a design cue for adult oral reading, visually marking emphasis, rhythm, volume, movement, emotion, or character voice. This is evident in O'Sullivan's (2008) analysis of Lauren Child's picturebooks, demonstrating how playful typography can blur the distinction between verbal and visual

text and can imitate oral delivery, for example by giving characters distinct typographic "voices." In shared reading, such features may therefore operate as a bridge between the visual design of the page and the adult's reading of the text.

Research suggests that preschoolers are sensitive to typographic features before they can read conventionally (Evans et al., 2008; Thiessen and Dyson, 2010). For instance, Mortensen and Burnham (2012) found that children develop an awareness of graphic features of writing, such as linearity, small units, and letter-like forms, before they can fully explain or produce conventional writing. Similarly, Papadopoulou et al. (2014) found that preschoolers noticed capitalized letters, larger and bold letters, underlining, designs, and punctuation marks in illustrated books. Further, Neumann et al. (2014, 2015) reported that children attend more to print when it is large, bold, or embedded in pictures. Importantly, children's attention to print can be increased by both adult mediation and visually salient print features (Chang et al., 2016; Zivan and Horowitz-Kraus, 2020).

Typography and print salience in shared book-reading

To date, the research on typography and shared reading seems to have been conducted primarily in preschool classrooms and focused on the function of print and print salience (e.g., capital letters, punctuation), rather than specifically on typography (e.g., Justice et al., 2005; Justice et al., 2008). Both Dynia et al. (2013) and Ellis (2023) found that teachers made more print-related comments and questions when books contained salient print features, including variations in font style, size, orientation, color, and formatting. These references often linked print features to story meaning, character speech, and comprehension, suggesting that salient typography may support both print awareness and narrative understanding.

One study conducted with parents found that they made more references to the writing system when reading an alphabet book that had a larger target letter per page, fewer sentences and words per page, and simpler illustrations, compared to a "busy" alphabet book with a smaller target letter, more sentences and words per page, and more complex illustrations (Bergman Deitcher et al., 2021). Additionally, a small study of 11 families indicated that parents acknowledged that expressive typography affected the way they read (such as emphasizing words), and children noticed typographical elements and understood the intention to change the way certain words were read (Timpany et al., 2014).

Children's and adults' attitudes toward book characteristics

Studies of parents' book-selection practices show that adults consider a variety of book characteristics, including content, genre, language, structure, visual appearance, and perceived complexity (Aram et al., 2017; Salins et al., 2025). For example, Bergman Deitcher et al. (2023) found that parents pay attention to features such as linguistic level, rhythm, rhyme, text length, appearance, and structure when choosing books for shared reading. Additionally, Nan and Tian (2025) found that families

valued books that were developmentally appropriate, visually appealing, clearly structured, rhythmic, repetitive, and engaging. These studies indicate that parents do pay attention to aspects of the book aside from the content, and these characteristics can impact their book selection and shared reading practices. However, there is little understanding of parents' attitudes towards typography and whether typography influences the nature of their shared reading with their children. Serafini and Clausen (2014, p. 4) note that "calling readers' attention to the role that typography plays in making sense of multimodal texts, in particular contemporary picturebooks, is an important pedagogical strategy as the texts readers encounter draw more heavily on visual and design elements in their presentations." Echoing the emphasis on this role, the current study aimed to delve into the role of typography in parent-child shared reading interactions.

Current study

Examining how typography shapes shared book-reading interactions is important because, as evident from the above-reviewed literature, visual features of print can raise children's attention to print and parents' reading behaviors such as prompting print-related talk. As such, typography may represent a meaningful but understudied feature of children's books that contributes to the quality of shared reading. Consequently, the current study aimed to explore the nature of parents' attitudes towards typography in children's books and parent-child shared reading of books enriched with expressive typography compared to conventional typography. Importantly, as there is evidence of variables such as child's age (e.g., Hanson et al., 2021), vocabulary level (e.g., Diprossimo and Cain, 2026), and parents' education (Hoff et al., 2024) relating to the nature of shared book-reading interactions, these variables were controlled in the current study. The following research questions guided the study. Given that studies to date have not explored the nature of shared reading in relation to books' typography, the questions remained exploratory, with no definitive hypotheses.

1. What are parents' attitudes towards typography in children's books?
2. What is the nature of parents' shared reading of books enriched with expressive typography compared to conventional typography (length of discourse, utterances, change of tone, pace, body language, voicing of characters)?
3. How do parents' attitudes towards typography relate to the nature of their shared reading, controlling for child's age, vocabulary level, and parents' education?

Methods

Participants

Participants included 72 parents (59 mothers, 13 fathers) and one of their children (41 girls, 31 boys). Parents ranged in age between 28 and 51 years ($M = 37.73$, $SD = 4.63$), and the children ranged in age from 45 to 85 months, with an average age of

61.86 months ($SD = 8.69$ months). Nearly all the parents were married or partnered (97.20%). In terms of parents' education, most of the participating parents held a bachelor's degree (41.70%) or higher (38.90, master's degree; 6.90%, Ph.D.). The other parent (spouse) held similar degrees: bachelor's degree (45.80%), master's degree (30.60%), and Ph.D. (1.40%).

Measures

Demographic questionnaire

Parents were asked to complete a demographic questionnaire. The items solicited information about the family, including the parents' ages, education, and number of children, and about the child, including age, gender, and the like.

Parental attitudes towards typography

This measure was designed by the researchers for the purposes of the current study, with the aim of exploring parents' attention to and awareness of typography in children's books. The study's authors, who are themselves experts in children's development, parent-child interactions, and typography, in consultation with experts in children's literature from the Yemima Center for Children's Literature–Beit Berl Academic College examined existing children's books that contained expressive typography. Together, they developed the questions for the questionnaire. The questionnaire included six items, such as: "To what extent would this type of font affect your reading?" (see Figure 1) and "To what extent would you change your voice or reading style in these kinds of texts?". Content validity of the questions was ensured by the expert in typography and those in children's literature. Researchers in the Early Childhood Research Lab at Tel Aviv University, many of whom are also parents, then further evaluated the items for clarity and comprehension. All six items were retained after their evaluation. Parents were asked to rank their agreement on a scale of 1 = not at all to 5 = very much. The average of parents' scores across the six items served as the attitude scores, with higher scores indicating that parents are more aware of typography in children's books and believe it would impact their reading of a book. Inter-item reliability in the current study was acceptable with Cronbach's $\alpha = .72$.

Children's vocabulary

Children's vocabulary levels were measured using a definitions test (Snow et al., 1989), which was adapted to Hebrew (Aram and Levin, 2004). Children were asked to define 14 nouns, such as flower, bicycle, and bird. Children's answers were scored according to the number of correct elements provided by the child (e.g., purpose, characteristics, descriptions, synonyms etc.). The average across the 14 words served as the total score, with higher scores reflecting a higher level of oral language. Internal reliability in the current sample was good with Cronbach's $\alpha = .87$.



Books for shared reading

Two books were selected from the database of translated children's literature: *Grumpy Monkey* (Lang, 2018) and *The Terrible Plop* (Dubosarsky, 2009). These books were selected due to their similar characteristics. Both books have an animal as the main character, they are of similar length (~340 words), and their structure and content are similar, with both dealing with themes of friendship and both main characters facing a challenge. Alongside the fourth author, a teacher-researcher graphic designer, who is an expert in typography, students for graphic design at the Technology Institute in Holon created two versions of each book: one with expressive typography and the other with conventional typography. In books with conventional typography, the text was designed to maintain uniformity in font type and size, without special emphasis or highlighting throughout the story. The expressive typography included the following adaptations (see Figure 2):

- 1) Font variation—In some words, the font was changed. For example, in *The Terrible Plop*, in the sentence: "One day, in a forest of pear trees, a Plop! was heard!" The letters of the word "Plop!" were designed using a combination of four different fonts, some in italics. The text of the word was enlarged, emphasizing the surprising or frightening nature of the event (Figure 2A). There were five instances of font variation in each book.
- 2) Addition of letters to emphasize expression—In some words, extra letters were added to highlight the expression. In *The Terrible Plop*, "And the rabbits were terribly frightened and ran awaaay." A combined technique was used in which additional letters were added to the word "ran," and the added letters gradually became smaller. The new design invites vocal expression and conveys running far away to a distant and safe place where they can no longer be seen (Figure 2B). There were three instances of letter additions in each book.
- 3) Variation in letter size—In some words larger letters were used, or the sentence began with smaller letters whose size gradually increased. For example, in *Grumpy Monkey*, the

text states that "Jim Panzee straightened up". The word *straightened* was enlarged relative to the other words in the sentence in order to emphasize the monkey's action (Figure 2C). There were five instances of variations in letter size in each book.

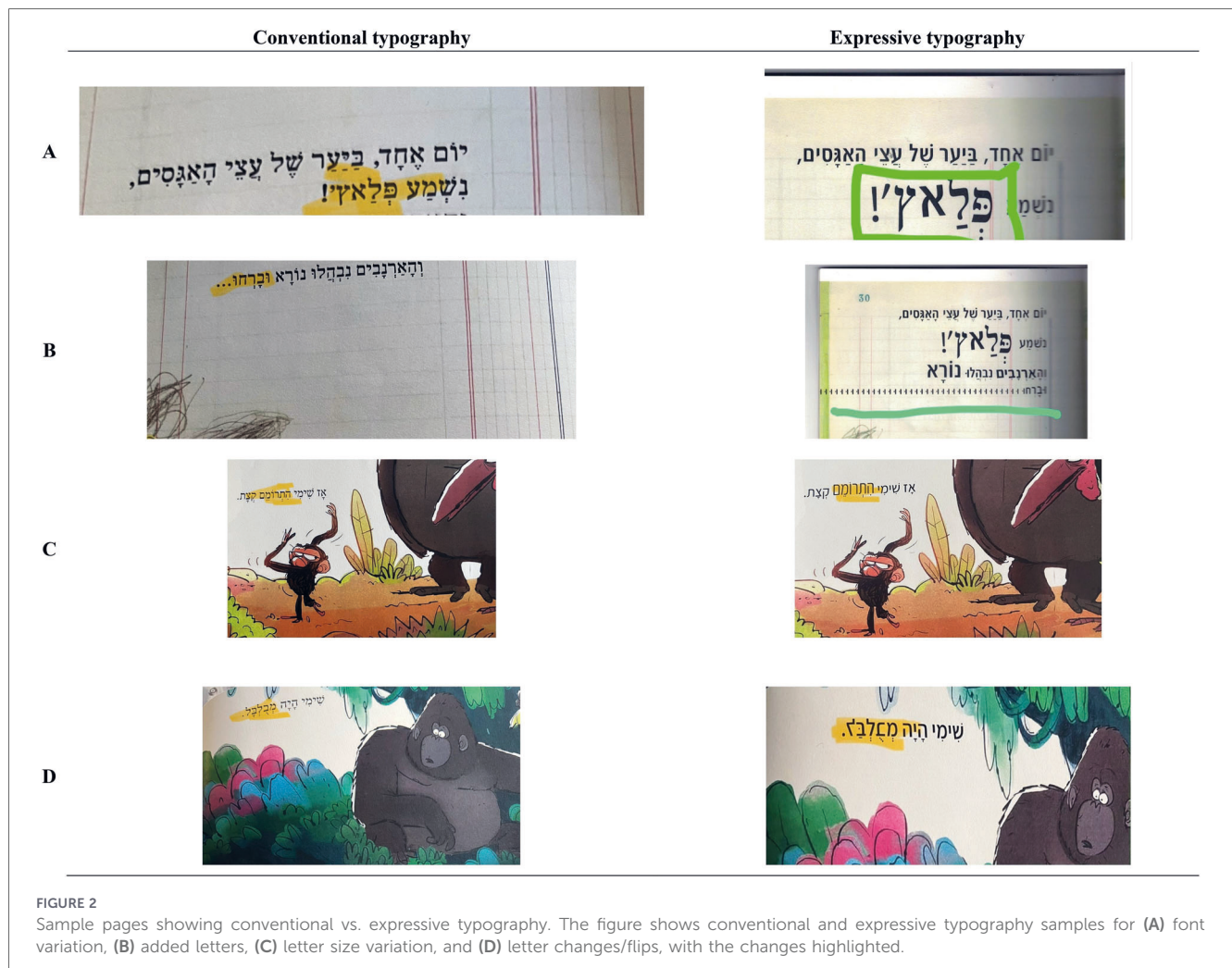
- 4) Letter changes—In some words the letters changed. For example, in *Grumpy Monkey*, the sentence "Jim was confused" appears with the c and the f in the word *confused* written in reverse, in mirror writing (Figure 2D). There were five instances of letter changes in each book.

Procedure

The study received approval from the ethics board of Tel Aviv University. Data was collected by students in an M.A. program in Educational Counseling and Special Education. Participants were recruited via a snowball sampling method, with students recruiting participants via local WhatsApp groups; those who expressed interest were asked to pass on the information to other individuals. Parents completed an informed consent form. Two meetings took place at each participant's home, with a minimum of 24 hours and a maximum of seven days apart. In the first meeting, prior to exposure to the books in the study, parents completed the attitudes towards typography and demographics questionnaires. Following this, parents read two books of the same type (expressive or conventional typography) to their child. In the second meeting, parents read two books of the other typography. The order and type of books in each session were counter-balanced within families. Parents were instructed to "please read this book as you normally would with your child." Following the readings at the second meeting, the children completed the definitions task. All reading interactions were videorecorded, and then subsequently analyzed according to the following coding scheme.

Coding of shared reading interactions

All four parent-child shared reading interactions were coded and analyzed as detailed below. The coding scheme was



developed for the current study considering typographical features in children's books, as well as reading behaviors documented during shared reading (e.g., [Cutler, 2023](#)).

Shared-reading Duration. For each dyad, the duration of the shared book-reading interactions for each of the four books was measured, and an average across interactions was calculated for each book type (expressive/conventional). This began when the parent started to read (either the title of the book, or by opening the cover if they did not address anything on the cover). The interaction ended when it was clear there was no further discussion relating to the book (e.g., the parent saying "The End," closing the back cover, indicating movement to something else).

Parents' Reading Behaviors. The analysis focused on parents' reading of the parts of the book where the typography was expressive or conventional. We coded how parents responded to the same instances of expressive typography listed above. Responses included the following:

- 1) change in tone—raising/lowering voice in tone or volume;
- 2) change in pace of reading—reading noticeably more quickly or slowly at points in the text;
- 3) physical gestures—using gestures such as pointing, directing with the head, and the like;
- 4) voicing of characters—using a playful voice or a voice unlike their natural voice to reflect the character in the book.

Parents' responses were coded as yes/no for each instance and averaged across the two books of the same type. The shared book-reading interactions were coded by the second author. Fifteen percent of the transcripts were then coded by an educational counselor (holding an M.A.), with significant experience in adult-child interactions. Cohen's kappa was .85, demonstrating strong agreement between the raters.

Data analysis

Initial analyses examined parental attitudes towards typography, as well as descriptive statistics of the interactions and correlations between aspects of typography and parental reading behaviors. Following this, regressions were conducted to predict characteristics of the shared book-reading interactions. As the data was count data (number of instances of a reading behavior) and included large standard deviations, we used Negative Binomial Distribution regressions that correct the distance between the mean and the variance ([Coxe et al., 2009](#)). To account for the repeated readings of books, we ran Generalized Estimating Equations (GEE) to evaluate repeated measures for a negative binomial distribution ([Garson, 2012](#)).

Results

RQ1: Parental attitudes towards typography

Results of the questionnaire exploring parents' attitudes towards typography indicated the mean of parents' responses was 3.32 ($SD = 0.61$). As the scale of responses on the questionnaire ranged from 1 to 5, the mean indicates that responses were above the midpoint of the scale, indicating that parents show a "medium" awareness of typography in children's books and believe it would influence their reading to a "medium" extent (based on 3 = to a medium extent).

RQ2: Typography changes and shared reading interactions

Table 1 shows the descriptive results of parent-child shared reading interactions for both the expressive and conventional typography books. As can be seen, on average, shared reading of books with expressive typography were longer in duration than books with conventional typography. Similarly, parents changed their tone and pace more frequently when reading expressive compared to conventional typography books. While changes in voices and gestures also occurred more often during expressive typography books, on average, the differences were not all that large between the book types and the standard deviations were quite large. It is apparent that significant differences emerged in reading between expressive and conventional typographies, with

more of each behavior (changes in tone, pace, voice, and gesture) for expressive typography compared to conventional typography.

To further examine shared reading interactions, we conducted Pearson correlations between the characteristics of expressive typography and parental reading behaviors.

As can be seen in Table 2, only letter additions correlated significantly with the duration of the shared reading interactions. At the same time, fairly low but significant positive correlations were found between all the aspects of typography and parents' change in tone, pace, voice, and gestures. That is, increases in changes in the font size, letter additions, font change, letter changes were associated with increases in parental reading behaviors.

RQ3: Parents' attitudes and reading behaviors

A negative binomial GEE with a log link was fitted to accommodate overdispersion in the count outcome. The negative binomial ancillary parameter, estimated by maximum likelihood, was $\alpha = .87$; the GEE scale parameter was fixed at 1. These regressions were conducted to explain the variance in duration length and parents' reading behaviors. Variables entered in the model were child age, child vocabulary, parental education, parental attitudes towards typography, and the presence of changed typography. Results are presented in Table 3. Exponentiated coefficients in log-linked count models represent ratios of expected counts, an interpretation that also applies to negative binomial regression while accounting for overdispersion (Halvorson et al., 2022; Hilbe, 2011).

An examination of Table 3 reveals that variation in interaction length was significantly explained by the presence of varied typography in the book. That is, the interaction was significantly longer (*Marginal Mean* = 5.09, $SE = .19$) when reading a book with expressive typography compared to reading a book with conventional typography (*Marginal Mean* = 4.71, $SE = .16$). In terms of effect magnitude, the model-estimated reading duration was approximately 8% longer for books with expressive typography. Regarding reading behaviors, results indicated that parents changed their tone significantly more when reading the books with expressive typography (*Marginal Mean* = 10.68, $SE = .39$) compared to books with conventional typography (*Marginal Mean* = 6.48, $SE = .39$). The model-estimated frequency of changes in tone was approximately 64% higher for books with expressive typography. Similarly, parents changed

TABLE 1 Descriptive statistics for shared reading of expressive and conventional typography.

Parental reading behaviors	Expressive typography			Conventional typography		
	Range	<i>M</i>	<i>SD</i>	Range	<i>M</i>	<i>SD</i>
Duration (in minutes)	2.51–13.35	5.08	1.76	2.50–11.21	4.69	1.47
Change in tone	1–17	10.62	3.76	0–15	6.59	3.76
Change in pace	1–18	10.17	3.89	0–14	6.57	3.78
Change in voice	0–9	2.98	2.81	0–10	2.02	2.43
Gesture	0–9	2.89	2.63	0–10	2.41	2.53

N = 72.

TABLE 2 Pearson correlations between aspects of expressive typography and parental reading behaviors.

Expressive typography	Duration	Change in tone	Change in pace	Change in voice	Gestures
Font variation	.050	.219**	.258**	.217*	.232*
Letter additions	.133*	.217**	.222**	.203**	.181*
Font size	.037	.298***	.278**	.245**	.230**
Letter changes	.061	.298***	.302***	.289***	.246*

N = 72.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

TABLE 3 Negative binomial regressions predicting shared reading duration and parental behaviors during reading.

Variable	Duration					Change in tone					Change in pace							
	Wald χ^2	B	p	Exp(B)	95% CI	Wald χ^2	B	p	Exp(B)	95% CI	Wald χ^2	B	p	Exp(B)	95% CI			
					LL	UL				LL	UL				LL	UL		
Intercept	49.58	1.44	<.001	4.21	2.82	6.28	58.58	2.23	<.001	9.33	5.26	16.52	10.02	1.57	.002	4.82	1.82	12.78
Child age	.01	.000	.93	1.00	1.00	1.00	.04	.001	.83	1.00	.96	1.01	.01	.001	.91	1.00	.99	1.01
Child vocabulary	.25	.02	.62	1.02	.94	1.12	.75	.06	.39	1.06	.93	1.21	.02	.01	.90	1.01	.85	1.20
Parent education	.42	.02	.52	1.02	.96	1.08	.16	.02	.69	1.02	.93	1.12	3.02	.13	.08	1.14	.98	1.32
Parent attitudes	.23	.02	.63	1.03	.93	1.13	.07	-.02	.80	.98	.86	1.13	1.56	.11	.21	1.11	.94	1.32
Typography (expressive vs. conventional)	7.77	-.08	.01	.93	.88	.98	102.64	-.50	<.001	.61	.55	.67	88.73	-.54	<.001	.58	.52	.65

their reading pace significantly more when reading books with expressive typography (*Marginal Mean* = 11.35, *SE* = .62) compared to books with conventional typography (*Marginal Mean* = 6.63, *SE* = .62). In terms of effect magnitude, the model-estimated frequency of changes in reading pace was approximately 72% higher for books with expressive typography. Child’s age, child’s vocabulary, parents’ education, and parents’ attitudes were not significant in explaining the variance in duration or parents’ reading behaviors, and none of the variables significantly explained variance in parents’ use of voices or gestures (see Table 4).

Discussion

The current study examined parents’ attitudes to typography in children’s picturebooks, and explored the nature of parent-child shared reading of books with expressive typography compared to conventional typography, and whether this related to their attitudes. Results revealed that parents were generally aware of a book’s typography but didn’t necessarily see it as influencing how they read. Similarly, their attitudes did not relate to the way in which they read during the shared reading interactions. However, the presence of expressive typography in the book significantly explained variance in the duration of the shared reading interactions along with changes in parents’ tone and pace during shared reading.

Typography as a potential implicit influence

The finding from the attitudes questionnaire that parents identify typography in books’ design is consistent with research showing that parents consider other aspects of children’s books when selecting books for shared reading, such as appearance, structure, text length, and linguistic complexity (Aram et al., 2017; Bergman Deitcher et al., 2019; Timpany et al., 2014), and extends this awareness to an underexplored area of picturebook design. However, parents’ views that typography changes would not really influence their reading did not align with their actual behaviors during the shared reading interactions. Consistent with this finding is broader typographic research suggesting that readers’ subjective perceptions of type does not always map directly onto behaviors. For instance, Richardson (2022) highlighted how legibility only weakly correlated with reading-speed performance. Nonetheless, preferences and attitudes may impact perceptions, motivation, or engagement (Richardson, 2022; Thiessen et al., 2020; van der Waarde and Thiessen, 2025). Illustrating this, Medved et al. (2023) found that rounded letters and softer typefaces created more pleasant feelings in both children and adult readers, and led to faster reading speeds. In this way, expressive typography may act more implicitly, despite the fact that it is an explicit design element. This reinforces the view that expressive typography, with changes in fonts, font size, altered letters, and the like, can help convey elements such as excitement, movement, and volume (loud/soft) when read aloud, and may serve as a semiotic resource (e.g., Pantaleo, 2014; Serafini and Clausen, 2012; Serafini and Reid, 2024). This further

TABLE 4 Negative binomial regressions predicting parental use of voices and gestures during reading.

Variable	Voices						Gestures					
	Wald χ^2	<i>B</i>	<i>p</i>	Exp(B)	95% CI		Wald χ^2	<i>B</i>	<i>p</i>	Exp(B)	95% CI	
					LL	UL					LL	UL
Intercept	.02	2.03	.89	7.63	.00	1.17	.81	1.02	.37	2.78	.30	25.86
Child age	.07	.11	.79	1.12	.50	2.49	.81	.01	.37	1.01	.88	1.20
Child vocabulary	.002	−.09	.96	.91	.02	34.18	.19	−.11	.66	.90	.56	1.45
Parent education	.52	−.75	.47	.47	.06	3.68	1.61	−.24	.21	.79	.54	1.14
Parent attitudes	.30	−1.49	.59	.23	.001	47.71	.14	.09	.71	1.10	.68	1.78
Typography (expressive vs. conventional)	1.92	−.18	.17	.83	.64	1.08	.11	.03	.75	1.03	.88	1.20

aligns with [O’Sullivan’s \(2008\)](#) research on how typography can serve as a cue for reading behaviors.

Possible benefits of reading expressive typography

Our finding that expressive typography predicted changes in parents’ tone and pace during reading is consistent with research showing that visual features of text can guide oral reading prosody—reading expressively ([Bessemans et al., 2019](#); [Patel et al., 2011](#); [Patel et al., 2014](#)). Although these studies have generally focused on children’s oral reading rather than parents’ shared reading, [Timpany et al. \(2014\)](#) also reported that parents perceived expressive typography as affecting their use of voice, expression, and tone. This aligns with evidence that oral reading prosody is associated with reading comprehension (e.g., [Wolters et al., 2022](#)) and with children’s language skills ([Zuk et al., 2025](#)). For instance, [Davison et al. \(2025\)](#) found that greater caregiver intonation range during shared reading was positively related to preschoolers’ receptive vocabulary, whereas more frequent inappropriate pauses were negatively related to children’s core language skills. The incorporation of expressive typography in children’s books may have a cascading impact—it may change the way adults read the text, which in turn, is associated with children’s language and comprehension skills. This potential impact on children’s learning outcomes can be explored in further research.

The presence of expressive typography was also associated with longer reading interactions. It may be that expressive typography functions as a mediating sign system. According to [Vygotsky \(1978\)](#), signs such as language, gesture, print, and symbols first function in social interactions before becoming assimilated by the child, propelling cognitive development. The presence of expressive typography may encourage parents to mediate more in order to scaffold their children’s understanding, leading to more time spent talking about the book. Accordingly, whether and how expressive typography leads to more parental scaffolding of children participation during book reading could be explored in future research.

The presence of expressive typography did not significantly relate to parents’ use of voices or gestures. This finding does not

align with studies on shared reading with infants and toddlers that have shown that parents may use gestures, primarily pointing, during shared reading ([Cutler et al., 2023](#); [Muhinyi and Rowe, 2019](#); [Salley et al., 2022](#)). It may be that parents naturally use gestures during shared reading, and the expressive typography prompted increased use of gestures or voice, but it was not sufficient to reach significance in the regression analysis. There may also be an association between the use of gestures and age, given that existing studies show the use of gestures with infants and toddlers ([Muhinyi and Rowe, 2019](#); [Salley et al., 2022](#)), younger than the children in the current study. More systematic research is needed on parents’ use of gestures during shared book-reading, and in turn, whether there are benefits to this kind of expressive reading in terms of children’s outcomes.

Limitations and suggestions for future research

A number of limitations should be considered regarding the current study. Although parental education did not significantly relate to the shared reading outcomes, the participants did have a fairly high level of education, limiting generalizability to other individuals. Additionally, given the use of snowball sampling and the preponderance of mothers in the sample, it is important for future studies to include a more diverse sample that is recruited using more independent approaches yielding greater heterogeneity. The books with expressive typography were designed specifically for this study and may not be as representative in terms of the presence of expressive typography in available children’s picturebooks. Going forward, studies can include books with naturally occurring typographic differences to determine if there is a threshold for instances of typography that impact shared reading or if there are differences in the kinds of typography and how this relates to the nature of shared reading. Additionally, it is possible that the presence of expressive typography increases overall visual salience or complexity, making it difficult to isolate typography-specific effects. Future studies could examine visually matched conventional text and non-typographic visual enhancements to try to disentangle the effects. Similarly, although the parents’ reading behaviors were more evident when reading the expressive typography books regardless of the order of

presentation, it is possible that the questionnaire relating to the presence of typography primed the parents to notice typography during reading. Having parents complete the questionnaire after the shared-reading sessions can better determine if this played a role. Further, we did not examine whether more or fewer typographic changes related to how parents read the books. Future studies can vary the number of typographic changes and determine if this makes a difference in the reading.

Implications and conclusions

The study's results lend themselves to some potential practical implications. As books with expressive typography were associated with changes in parents' tone and pace, and increased time spent during the interaction, parents could be encouraged to look for these features in books, or be guided to include these considerations when selecting books for shared reading. Given that studies show that elaborative conversation is related to children's linguistic, literacy, and social-emotional development (e.g., [Dong et al., 2024](#); [Pillinger and Vardy, 2024](#); [Schapira and Aram, 2020](#); [van Steensel et al., 2024](#)), and expressive typography stimulates more time during the interaction, this may indirectly promote children's outcomes. Along similar lines, parents should be encouraged to draw children's attention to typography and show them how the writing serves the content of the book. This can help raise children's print awareness ([Ellis, 2023](#)), facilitate their visual literacy ([Farrar et al., 2024](#)), and multimodal literacy ([Taylor and Leung, 2019](#)). The study also can inform publishers, graphic designers, authors, and illustrators to consider the typography in the books that are published. They can think about what they are aiming to evoke in readers and how the nature of the typography can promote or inhibit their aims.

The current study's unique exploration of parents' attitudes towards typography and how parents shared books with expressive versus conventional typography with their children extends research on books' characteristics and suggests new directions for exploring parent-child shared reading interactions. The study highlights how attitudes towards a book's characteristics may act more implicitly in forming behavioral changes, and emphasizes how parents and children co-construct meaning from the text relying on typographical elements of a book.

Data availability statement

The datasets presented in this article are not readily available because in accordance with the Ethics Committee, the data is restricted from being shared to protect the parents and children who participated. Requests to access the datasets should be directed to deb@deitcher.net.

Ethics statement

The studies involving humans were approved by Ethics Committee of Tel Aviv University. The studies were conducted in accordance with the local legislation and institutional requirements. Written informed consent for participation in this study was provided by the participants' legal guardians/next of kin.

Author contributions

DB: Writing – original draft, Writing – review & editing, Formal analysis. OR-Z: Formal analysis, Writing – review & editing, Data curation, Conceptualization, Investigation. GE: Conceptualization, Methodology, Writing – review & editing, Resources. JL: Writing – review & editing, Formal analysis, Conceptualization, Methodology. DA: Writing – original draft, Formal analysis, Project administration, Investigation, Methodology, Supervision, Writing – review & editing, Conceptualization.

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