The role of parents' beliefs regarding their children's literacy acquisition

Anna Ratka-Pauler [1]*, Lisa Birnbaum [2]* and Stephan Kröner [2]

[1]Leibniz Institute for Educational Trajectories, Bamberg, Germany, [2]Empirical Educational Research, Friedrich-Alexander-Universität Erlangen-Nürnberg, Nürnberg, Germany

Early literacy acquisition is influenced by children's social and cultural background. Several empirical studies have shown that by considering literacy activities at home and providing cultural resources, the correlation between the social and cultural background and the children's literacy achievement can be significantly reduced. This suggests a crucial importance of parents' beliefs and their role as active agents in the acquisition of literacy skills at home. The aim of the present study is therefore to provide an overview of the range of relevant parental attitudes towards joint literacy activities. In an elicitation study based on the theory of planned behavior, the statements of $N = 25$ German parents of pre-preschool and preschool children were recorded. All deductive categories based on the theory of planned behavior were confirmed, furthermore the category system could be differentiated inductively. Thus the parental beliefs about joint literacy activities were comprehensively mapped. It is discussed how the explorative results of this study can be used in further studies, for example, to generate a questionnaire based on the TPB to assess parental beliefs for joint literacy activities.

KEYWORDS

home literacy model, home learning environment, home literacy environment, parents, early childhood, beliefs

Introduction

It has been known since the 2000 Pisa cycle that a significant number of children have insufficient literacy skills (Baumert and Schümer, 2001). This is still an issue, especially among children and adolescents from families with a lower socioeconomic status (SES) or with a migration background (Baumert and Schümer, 2001). As the prerequisites for acquiring literacy skills are received before children enter the formal education system (Lehrl, 2018), early literacy acquisition is significant for children's further educational trajectories (Manu et al., 2021) and the subsequent development of children's literacy skills (Pfost, 2015; Pfost et al., 2019). Much of the current research focuses on the literacy acquisition in educational institutions (e.g., Dahlström et al., 2023). Although there is a growing body of literature on the influence of the family environment, the focus on parents is mostly limited to SES factors and joint activities and does not take into account parents' underlying beliefs (Niklas and Schneider, 2013; Niklas, 2017; Nag et al., 2024). However, children acquire early literacy skills in both school and family settings, and several empirical studies have shown that the family as a place of education may provide joined literacy activities and cultural resources (Niklas and Schneider, 2013; Shen and Del Tufo, 2022). Accordingly, the design of the family learning environment does not directly depend on the education, occupation, or income of the parents;

rather it is related to the parent's ability to provide adequate support for their children and to the associated behavioral, normative, and competency and control beliefs. It can be assumed that parents with positive beliefs about joint literacy activities are more likely to implement these activities with their children (Niklas, 2017). Some studies could show that the children's experiences with the home literacy environment (HLE) are not equally in all families which contributes to the impact of the children's social background on their literacy development (Niklas and Schneider, 2013; Niklas, 2017; Fikrat-Wevers et al., 2021; Shen and Del Tufo, 2022). Additionally, the HLE partly mediates the SES effect on children's literacy acquisition (Niklas and Schneider, 2013; Fikrat-Wevers et al., 2021). These observations led to the development of a wide range of family literacy programs aiming to encourage parents in joint literacy activities (Wasik and van Horn, 2012). As a prerequisite to tailoring interventions for joint literacy activities of parents with their children the aim of this study is to explore (a) the early literacy activities of parents with pre-preschool and preschool children and (b) the beliefs on which joint literacy activities are based. Since previous research focused on the HLE from a children's perspective integrating selected literacy activities (Marinak et al., 2015; Liebers and Heger, 2017; Silinskas et al., 2020), on school-aged children (Schiefele and Schaffner, 2016; Wendt et al., 2016; Birnbaum et al., 2020; Oxley and McGeown, 2023), or on the beliefs of kindergarteners (Takada et al., 2023), the present study considers a wide range of joint literacy activities as well as the parents' beliefs related to these activities.

Influence of the home literacy environment on literacy acquisition

In a strict sense, the term literacy covers a person's reading and writing skills (Sénéchal et al., 2001). A more comprehensive concept of literacy also includes the understanding of written text and the context, experiences with the reading and storytelling culture of the surrounding society, and the use of writing-related media (Ehmig and Reuter, 2013).

As the first instance of socialization and education, families offer great potential to support children's early literacy acquisition (Niklas and Schneider, 2013; Weldemariam, 2022). The HLE "consists of a variety of resources and opportunities available to children, as well as the parental abilities, skills, dispositions and resources that determine the provision of these opportunities to children" (Burgess, 2011, p. 446). This definition emphasizes the active part of the parents in their children's competence acquisition. Along these lines, family literacy programs often aim to empower parents by emphasizing their active role as co-educators (e.g., Swain and Cara, 2019; Weldemariam, 2022).

An established model for structuring the children's exposure to literacy activities is the Home Literacy Model (Sénéchal et al., 1998; Sénéchal and LeFevre, 2002). According to this model, meaning-related and code-related literacy activities may be distinguished. Meaning-related literacy activities include, in particular, reading aloud. Through this activity, children get in touch with writing and letters in everyday situations without focusing on written language. This promotes the children's general language development. On the other hand, code-related literacy activities focus on active engagement with writing and letters (Sénéchal and LeFevre, 2002, 2014). The

Home Literacy Model is often used in research on the influence of the HLE on children's literacy acquisition in preschool and primary education (Sénéchal and LeFevre, 2002, 2014; Silinskas et al., 2012, 2020).

For implementing meaning-related and code-related literacy activities, a wide variety of media can be used. Classically, analog media are used for this purpose (Ehmig and Reuter, 2013; Wendt et al., 2016). This remains relevant in spite of a digital transformation of society, as the number of digital media devices used for joint literacy activities may increase, but is often merely used for consumption (Naab, 2021). Thus, while in principle digital media could be purposefully used for children's literacy acquisition (Marsh, 2016; Danielson et al., 2019; Kumpulainen et al., 2020; Lehrl et al., 2021; Altun, 2022), little is known about the specific content of literacy-enhancing digital media (Danielson et al., 2019). The extent to which parents utilize digital media in joint literacy activities remains largely unexamined.

Previous instruments to survey the determinants of literacy activities

Among the existing research instruments on literacy activities and related beliefs, there are several quantitative instruments on motivational beliefs regarding literacy activities (for an overview see Table 1).

The Motivation for Reading Questionnaire (MRQ) developed by Wigfield and Guthrie (1997), is one of the most popular instruments to survey children's reading motivation. Various studies demonstrated that instrinsic motivation is a strong predictor for the amount of literacy activities (Wigfield and Guthrie, 1997; Pfost et al., 2019). Based on the MRQ, Schiefele and Schaffner (2016) developed the Reading Motivation Questionnaire (RMQ). The RMQ adapts some dimensions of reading motivation from the MRQ and adds two new dimensions (Schiefele and Schaffner, 2016; Table 1). While the MRQ and RMQ are focused on children's motivational beliefs on reading in general, there are also scales that focus specifically on assessing children's beliefs on recreational reading and writing (Schüller, 2014; Schüller et al., 2017; Birnbaum et al., 2019, 2020).

While the instruments mentioned so far aim at assessing the motivation of school-aged children, the questionnaire "Me and My Reading Profile" (MMRP), specifically deals with the reading motivation of kindergarten-aged children (Marinak et al., 2015).

The MRQ, RMQ, and MMRP assess children's motivational beliefs about reading, the questionnaires regarding beliefs for engaging in literacy activities solely address children's motivational beliefs, but they largely neglect the parents' perspective. If parents are involved, then only in regard to their assessment of their children's behavior and literacy skills.

One of the rare instruments that does not largely neglect the parental role is the Home Literacy Environment Questionnaire (HLEQ) by Umek et al. (2005). However, not even the HLEQ captures parents' beliefs about literacy activities, but rather focuses on reading-related parental behavior.

Thus, taken together, there is still a lack of parents' perspectives on the beliefs for engaging in joint literacy activities with their pre-preschool and preschool-aged children, which includes more motivational aspects than the children's literacy development.

TABLE 1 Comparison of different questionnaire scales concerning motivational beliefs on literacy activities from the children's and parents' perspective.

Children's perspective				Parents' perspective
Motivation for Reading Questionnaire (MRQ, Wigfield and Guthrie, 1997)	Reading Motivation Questionnaire (RMQ, Schiefele and Schaffner, 2016)	Beliefs about leisure reading and writing (Schüller, 2014; Schüller et al., 2017; Birnbaum et al., 2019, 2020)	Me and My Reading Profile (MMRP, Marinak et al., 2015)	Home Literacy Environment Questionnaire (HLEQ, Umek et al., 2005)
- Reading Efficacy - Challenge - Curiosity - Reading involvement - Importance - Recognition - Grades - Social - Competition - Compliance - Reading work avoidance	- Curiosity - Involvement - Grades - Competition - Social recognition - Emotional regulation - Relief from boredom	- Beliefs about thematically congruent consequences - Beliefs about thematically incongruent consequences - Intrinsic value - Normative beliefs - Competency beliefs - Control beliefs	- Self-concept as a reader - Value of reading - Literacy out loud	- Stimulation to use language, explanation - Reading books to the child, visiting the library and puppet theatre - Joint activities and conversation - Interactive reading - Zone-of-proximal-development stimulation

Whereas the parents perspective could be of great importance especially for supporting preschool children at their transition to elementary school (Liebers and Heger, 2017; Ebert et al., 2020; Silinskas et al., 2020), there is little research on which beleliefs make parents engage in joint literacy activities (Yeo et al., 2014; Lenhart and Lingel, 2023). This period is of great formative importance for the children's future schooling, including the development of precursor skills for later academic competences (Näger, 2017) – such as phonological awareness, phonological working memory, or naming speed.

Despite the usefulness of the outlined instruments, it is obvious that the issue of activities and beliefs related to literacy activities could be covered more systematically. As a prerequisite, parental beliefs on joint literacy activities should be explored by a qualitative study based on comprehensive theoretical framework – and it should also be explored what activities parents of pre-preschool and preschool-aged children pursue together with their children.

Beliefs about literacy activities and related domain-general categories

To investigate the beliefs underlying the engagement in literacy activities, a broad range of domain-specific behavioral, normative and, competency and control beliefs should be considered, reflecting both personal and environmental aspects (Kröner, 2013). An established theory for this purpose is the theory of planned behavior (TPB), at the core of which are the aforementioned beliefs that explain an individual's intention to engage in a certain behavior (Ajzen, 1991, 2002; for an application in the reading and writing domain, see Birnbaum and Kröner, 2022). The following section presents the various beliefs in further details, in our case beliefs related to joint literacy activities of parents and children.

Based on the TPB (Ajzen, 1991, 2002), parents' engagement in joint literacy activities may be explained by three independent constructs: behavioral beliefs, normative beliefs, and competency

and control beliefs. The behavioral beliefs, underlying positive and negative attitudes towards joint literacy activities, include intrinsic motivation, beliefs concerning thematically congruent, and incongruent consequences (Graham, 2018; Birnbaum et al., 2020). Normative beliefs consist of perceived expectations of significant others (social pressure; Kröner, 2013; Schüller et al., 2017; Birnbaum et al., 2019). Competency beliefs include the self-assessed ability to act (Birnbaum, 2022). Control beliefs comprise external and internal resources such as if time and materials are available to engage in the activities (Ajzen, 2011; Kröner, 2013). Based on this theoretical framework, a wide range of domain-specific beliefs that are pivotal to explain joint literacy activities can be considered.

In literacy research, especially executive functions as domain-general aspects may be relevant as they are a prerequisite for the acquisition of literacy skills (Miyake et al., 2000; Nouwens et al., 2016; Chang, 2020).

Research aim

Regarding parents' perspective, previous research has focused on literacy activities and their impact on children, but not on their underlying beliefs (Umek et al., 2005; Silinskas et al., 2012; Sénéchal and LeFevre, 2014; Lehrl, 2018; Ebert et al., 2020; Silinskas et al., 2020). The purpose of the present study is to explore and categorize a wide spectrum of parental beliefs and to give an overview of the actual joined literacy activities from a parents' perspective.

Method

Sample

Interviews with $N = 25$ ($n = 19$ female, $n = 6$ male) German parents of pre-preschool and preschool children (4–7 years, $M = 5.40$,

SD = 0.71) were conducted via guided interviews. In Germany, children usually start school at the age of six or at the beginning of the seventh year, with preschool being the last year before formal schooling, where school preparation already takes place in day-care centers and pre-preschool includes two years before school entry. Thus, this age range includes children from the end of the fourth to the beginning of the seventh year of life.

A sample size of 25 parents was considered appropriate to ensure theoretical saturation and to capture a comprehensive range of salient beliefs (Curtis et al., 2010). To avoid possible bias due to social, cultural or gender differences, the parents were assigned to a sampling plan (Table 2) including the most commonly spoken language in the families (0 = German; 1 = other language) and the higher education entrance qualification of the parents. Regarding the latter, it was differentiated between parents without a higher education entrance qualification up to General Certificate of Secondary Education (0) and parents with a higher education entrance qualification (1). As Table 2 shows, the sample was selected to include all of the social and cultural background characteristics mentioned, and to ensure that both mothers and fathers were interviewed in all combinations. The aim was to cover as wide a range of parental characteristics as possible. Thus, a comprehensive overview of parents' beliefs towards joint literacy activities is provided, across various social and cultural backgrounds of German parents.

Procedure and instrument

The structure of the interview guide was based on the guidelines of Francis et al. (2004) for TPB-based interview studies. The flexibility provided by the partial standardization meant that the interview was open enough to allow inductive extensions to the deductive categories. In the interviews, a contextual differentiation between meaning-related and code-related literacy activities was applied (Sénéchal et al., 1998; Sénéchal and LeFevre, 2002). The focus was on the meaning-related literacy activities such as reading aloud and related beliefs. This focus was set because 68% of the German parents engage in these activities with their children before the entry into formal schooling (Stiftung Lesen, 2019, 2021). The interview guideline can be found in the Appendix. After the interview, the parents filled in a short questionnaire which included questions regarding their educational level and the most spoken language in the family.

Data analysis

The study was conducted and approved in accordance with the university's institutional requirements. The participants provided their written informed consent to participate in this study. The interviews were transcribed according to Kuckartz (2018) and Kröner et al. (2012). The parents' statements were content analyzed (Mayring, 2016) using MAXQDA 2020 (VERBI Software, 2019). As introduced in the literature review, the deductive part was based on the six categories derived from recent work based on the TPB. It comprised (1) intrinsic motivation, (2) beliefs concerning thematically congruent consequences, (3) beliefs concerning thematically incongruent consequences, (4) normative beliefs, (5) competency beliefs, and (6) control beliefs (Graham, 2018; Birnbaum et al., 2020). In addition, the literacy activities and the media used were set as categories. According to the previous research, the literacy activities were deductively separated into two aspects, the meaning-related and code-related activities (Sénéchal and LeFevre, 2002, 2014). The media used were deductively separated into analogue and digital media (Lehrl et al., 2021; Naab, 2021).

Results

Tables 3–7 shows the resulting refined set of categories and the number of statements that resulted for each category.

Literacy activities and used media

Based on the Home Literacy Model of Sénéchal et al. (1998), both code-related and meaning-related activities could be identified, for example, parents mentioned that they "read picture books and non-fiction books every day" (reading aloud, Interview 4) or that you also "practice writing your own name" (writing exercises, Interview 23). Whereas exercises to promote precursor skills such as phonological recognition were rarely named by the parents.

Furthermore, parents mostly considered analogue media (Table 3), they mainly mentioned books and workbooks or worksheets. The inductive categories "plain papers" (Interview 8), educational games like "letter puzzles" (Interview 14) or "card games" (Interview 25), and "blackboards" (Interview 4 and 18) were named less frequent. Less parents mentioned digital media devices like smartphones, tablets or computers.

Behavioral beliefs

The first set of beliefs contained behavioral beliefs (Table 4). The parents emphasized the importance of intrinsic values for performing literacy activities. The intrinsic value included the categories fun vs. no fun, experience of autonomy, and imagination/creativity. The

TABLE 2 Sampling plan.

	Higher education entrance qualification	No higher education entrance qualification	Σ
German as most spoken language	7 (5 female, 2 male)	6 (5 female, 1 male)	13 (10 female, 3 male)
Other languages as most spoken language	6 (5 female, 1 male)	6 (4 female, 2 male)	12 (9 female, 3 male)
Σ	13 (10 female, 3 male)	12 (9 female, 3 male)	25 (19 female, 6 male)

TABLE 3 Part of the category system representing the literacy activities and the media used.

Category	Number of coded statements	Number of interviews
Literacy activities	148	25
Meaning-related activities	110	44
Writing exercises	60	21
Reading aloud	50	23
Code-related activities	38	23
Letter recognition	33	20
Phonological recognition	5	3
Used media	125	25
Analogue media	112	25
Books	66	23
Workbooks or worksheets	26	17
Plain Papers	8	7
Educational games	7	5
Blackboards	5	4
Digital media	13	9
Smartphones	8	6
Tablets	4	3
Computers	1	1

Multiple responses for a category within an interview were considered separately, resulting in totals that may exceed the number of interviews. The indentation indicates the hierarchy level. The number of statements in a higher hierarchy level is the sum of the statements in the level below.

TABLE 4 Part of the category system representing the behavioral beliefs.

Category	Number of coded statements	Number of interviews
Intrinsic value	114	25
Fun vs. no fun	53	23
Experience of autonomy	48	19
Imagination/creativity	13	10
Beliefs about thematically congruent consequences	96	22
Reading competence	28	14
Language competence	23	10
Writing competence	21	11
Vocabulary	11	9
Precursor skills	8	6
Listening	5	5
Beliefs about thematically incongruent consequences	59	23
Parent–children relationship	15	10
Knowledge acquisition	14	10
Time compatibility	11	8
Children's relaxation	10	8
School readiness	6	6
Value education	3	2

Multiple responses for a category within an interview were considered separately, resulting in totals that may exceed the number of interviews. The indentation indicates the hierarchy level. The number of statements in a higher hierarchy level is the sum of the statements in the level below.

category fun vs. no fun summarized general statements about the intrinsic motivation without giving reasons: "[…] we notice that he enjoys it [reading aloud] and that this is mutually dependent, then it also gives us a lot of pleasure" (Interview 12). Here it was shown that the behavioral beliefs are not solely related to the parents themselves, but also to the children. Being intrinsically motivated includes perceived autonomy, which parents reported to open up to their children by, for example, letting them choose books. The stimulation of children's imagination and creativity was another aspect of intrinsic value. Some parents mentioned that they experienced their children as emotionally involved in the story being read aloud.

The parents mentioned that the thematically congruent consequences are a common concern for performing literacy activities. The parents declared that they perform literacy activities purely because of the direct effect of activity performance on their children (Table 4). The parents highlighted the children's competence acquisition, for example, parents mentioned that their child asks: "what does this word mean" (Interview 23) or that the child "already tries to write words" (Interview 13). In addition, parents with a non-German mother language described that literacy activities help their children to learn how to speak and pronounce words – "because [the child] can talk better, speak better and communicate better"

(Interview 2). Most of the parents perceived literacy activities as beneficial for children's vocabulary acquisition and some named beneficial effects on school precursor skills.

Besides beliefs about thematically congruent consequences, parents mentioned various other consequences that were not thematically related to literacy activities (Table 4). On an affective level, parents highlighted the positive parent–children relationship during joint literacy activities and children's relaxation as a common concern for performing literacy activities: Parents described reading aloud as a ritual after a stressful day or to end the day with a sense of affection and belonging: "This togetherness that we need, even if the day was stressful or we often argued during the day or I scolded a lot" (Interview 8). The parents also emphasized the knowledge acquisition of their children through literacy activities. However, only some parents mentioned the school readiness of their children as a motivational belief for joint literacy activities. For parents, their personal priorities and the importance of literacy activities bother them from enjoying literacy activities: "[…] also leisure time stress – that you have to go to gymnastics on Tuesday, then you come home

TABLE 5 Part of the category system representing the normative beliefs.

Category	Number of coded statements	Number of interviews
Inside the family	51	15
Other relatives	41	13
Other parent	7	7
Children (siblings of the child)	3	2
Outside the family	39	17
Other adults	37	17
Kindergarten teacher	2	2

Multiple responses for a category within an interview were considered separately, resulting in totals that may exceed the number of interviews. The indentation indicates the hierarchy level. The number of statements in a higher hierarchy level is the sum of the statements in the level below.

TABLE 6 Part of the category system representing the competency and control beliefs.

Category	Number of coded statements	Number of interviews
Competency beliefs	35	16
General competences	22	12
Literacy competences	13	7
Control beliefs	98	24
Environmental conditions	40	18
Parent–child interaction	22	15
Availability of time	19	12
Selection/content of the book	9	6
Support from outsiders	8	3

Multiple responses for a category within an interview were considered separately, resulting in totals that may exceed the number of interviews. The indentation indicates the hierarchy level. The number of statements in a higher hierarchy level is the sum of the statements in the level below.

TABLE 7 Part of the category system representing the executive functions.

Category	Number of mentions	Number of interviews
Executive functions	59	22
Concentration	23	14
Attention	18	14
Working memory	18	12

Multiple responses for a category within an interview were considered separately, resulting in totals that may exceed the number of interviews. The indentation indicates the hierarchy level. The number of statements in a higher hierarchy level is the sum of the statements in the level below.

later, then everyone is somehow stressed and rushed, although it's supposed to be fun. It's also fun, but you are still somehow more stressed on such a day, if you also have something else to do"

(Interview 19). But time compatibility as a reason to perform or not perform literacy activities is only mentioned by a few parents. In addition to these deductive categories, parents were found to associate literacy activities with their children's learning about values, for example, one parent describes: "Without reading, you cannot understand whether stranger persons are good or bad, […], just recognize the world" (Interview 13).

Normative beliefs

Normative beliefs comprise how the parents perceive their social environment (Francis et al., 2004). The social environment was deductive divided into people inside and outside the family (Table 5).

Within the family, the parents highlighted the injunctive norms of other relatives. However, significant others outside the family were also to be found. Parents commented that they exchange ideas about joint literacy activities with "friends" (Interview 10), "daycare acquaintance" (Interview 23) and other parents "on the playground" (Interview 15).

Competency and control beliefs

Regarding competency beliefs, parents highlighted that they belief their general and literacy competencies affect joint literacy activities (Table 6). "The most important factor [for joint literacy activities] is the caregiver, […] the inner resources, the readiness [of the parent]" (Interview 10). In Interview 6 also the parent's literacy competences were mentioned: "If I do not know what does this word mean and then I cannot read aloud".

Additional, control beliefs could be differentiated into five sub-categories (Table 6). The parents emphasized environmental conditions as aspects that facilitate or hinder literacy activities. From the parents' perspective, having a silent, welcoming, and peaceful space is an important aspect of control beliefs. Furthermore, parents' limited time availability due to unavoidable commitments, like work ("first and foremost the work," Interview 19) or school ("my study tasks," Interview 3), hinders their engagement in literacy activities. The shortage of time may be exacerbated, in case of single parenthood by the accomplishment of the increased everyday tasks ("I am a single parent and I have a lot to do.," Interview 20). This differs from time compatibility in behavioral beliefs, where parents can affect the factors causing their time constraints.

In the category selection/content of the book, parents pointed out that "books must fit for the children and [the] age of the children" (Interview 4). Besides the connection to the children's interests, the parents describe that reading aloud is easier for them if the books are also personally appealing to them: "[…] for example, I really like reading books with stories. With a story that has something behind it, and less like non-fiction books" (Interview 19).

Furthermore, three parents emphasized that themselves and their children get help for literacy activities, thus the category regarding support from outsiders was subsequently added to the category system.

Executive functions

In addition to the deductive categories based on the TPB, the children's executive functions were inductively derived as a domain-general aspect related to joint literacy activities. Based on Miyake et al. (2000), the executive functions could be deductively divided into the categories of concentration, attention, and working memory (Table 7).

It is remarkable that all three categories could be assigned based on the parents' statements. In the interviews, it was mentioned that it is necessary that the children may focus on the activity ("concentrate, then read, then understand all thing," Interview 1) and is attentive ("But when we are dealing with it [the story] intensively, we first look at the pictures, then read it aloud and then I ask him: "[…] 'Explain to me briefly what the story is about?'. Simply so that I notice how attentive he is and how he listens.," Interview 8). Furthermore, parents mentioned that it is relevant for them that children remember, for instance, the content of yesterday's reading ("There are also stories that are much longer, which are divided into several parts anyway, where I say: 'What was it like yesterday, can you still remember?', 'Can you tell me again what happened?' and then we practically pick up where we left off" Interview 21).

Discussion

Main results

The aim of the present study was to elicit and categorize the parents' beliefs about joint literacy activities and to capture these activities from a parents' perspective. Parental beliefs can provide important insights into how joint literacy activities are implemented in the HLE. Therefore, it is of great importance to collect a comprehensive set of parental beliefs and to design a systematic questionnaire to identify aspects that are particularly relevant to parents, as well as aspects that are not yet anchored in parents' minds or that are wrongly motivated. The present study summarizes the parents' beliefs about joint literacy activities, which can now be further processed and used to design a questionnaire. Thus, the potential of the HLE can be harnessed to counter an inequality of opportunities in literacy acquisition caused by factors of social and cultural background (Niklas, 2017; Lehrl, 2018). Therefore, it is of great importance to support parents in gaining confidence to perform literacy activities on a regular basis.

Joint literacy activities in the home literacy environment

The present study showed that all interviewed parents used analog media for performing literacy activities. As assumed due to previous studies, a comparing small number of parents use digital media for joint literacy activities (Ehmig and Reuter, 2013; Wendt et al., 2016; Kucirkova and Flewitt, 2022). It should also be emphasized that the deductive categories for recording the use of digital media were sufficient. Obviously, interactive picture books and interactive audio pens such as TipToi are not widespread enough to be relevant in our sample (e.g., Pfost et al., 2018; Pfost and Freund, 2018). Thus, related items in questionnaires would probably cause floor effects. However,

in today's society, digital media are gaining importance. In terms of the HLE, the availability and manner of digital media use is changing (Marsh et al., 2005). Parents must be aware of the potential of digital tools and their role model function in the use of media, so they can use them specifically for joint literacy activities (Brito et al., 2017; Kucirkova and Flewitt, 2022). At the same time, digital tools do not replace the printed book.

Further, quantitative studies should examine whether the use of digital media for performing literacy activities is actually not very common. In addition, possible factors for the apparently rare use of digital media should be analyzed to counteract or compensate them. Previous research provides clues to explain the seemingly low use of digital media for literacy activities: possible aspects are the parents' lack of media competence (Brito et al., 2017; Kucirkova and Flewitt, 2022) and the fact that children before school entry use digital media mainly for consumption (Naab, 2021).

Parental beliefs on joint literacy activities

Behavioral beliefs

This study revealed the assumption that the perceived benefits of reading aloud for the children's development are the main motivation of parents for engaging in joint literacy activities (Ehmig and Reuter, 2013). As expected, the intrinsic value is the most prevalent aspect of behavioral beliefs (Durik et al., 2006; Schüller et al., 2017; Birnbaum et al., 2019).

The beliefs about thematically congruent consequences included a variety of subcategories that describe children's competence development through joint literacy activities. Based on previous theoretical knowledge, joint literacy activities are expected to promote language, reading, and writing skills as well as other school precursor skills (Näger, 2017). The children's competence development, in particular, is considered relevant by the interviewed parents. However, school precursor skills like phonological awareness, phonological working memory, and naming speed were rarely mentioned or not at all. Basically, the competence development of their children seems to play an important role for parents for performing literacy activities. This suggests that the HLE offers potential for compensating inequality of opportunity in literacy acquisition (Niklas, 2017; Lehrl, 2018).

Nearly all parents provided information about thematically incongruent consequences. Especially meaning-related literacy activities were often part of a ritual that strengthens the parent–child relationship (Eisenwort et al., 2018). The children's literacy acquisition is not the focus of these activities (Stiftung Lesen, 2012). Rather, the impression is that home literacy activities also have a social character in addition to that. It is therefore important to understand every kind of literacy activity as a social interaction (Graham, 2018; Gavora, 2022).

Normative beliefs

The parents stated that the expectations and opinions of people outside the family are important to them. Previous studies pointed out that parents adapt to socially desirable behaviors and to the expectations of others (Umek et al., 2005). Thus, according to the ecological approach of Bronfenbrenner (1979), there is a relationship between educational institutions, such as day-care centers, work and how parents interact with their children (Melhuish et al., 2008; Anders

et al., 2012). Further qualitative studies should clarify what role the day-care centers actual play in the area of home literacy and how parents can be supported in joint literacy activities by suggestions from the educational institution (Becker-Stoll, 2015; Betz et al., 2017; Stiftung Lesen, 2021).

In addition, this study indicated that future literacy research should investigate the relationship between parental beliefs and the parents' personal networks. Based on the parents' recorded statements, it may be assumed that their network effects their beliefs regarding joint literacy activities. It became apparent that especially the normative beliefs of non-family members seem to play a large role. This assumption fits with Umek et al. (2005) findings that parents want to conform to social norms. Thus, future research should expand the study of relationships between parents and day-care centers to include the perspective of parents among themselves.

Competency and control beliefs

The survey of the parents' competency beliefs is based on the theoretical concept of Marsh (1990). The self-concept is intentionally preferred to the self-efficacy, due to prior studies indicating that self-concept correlates higher with the performed literacy activities (Marsh et al., 2019; Birnbaum, 2022). It should be quantitatively examined whether a positive literacy self-concept actually has a positive effect on the quality and frequency of joint literacy activities (Marsh, 1990).

As assumed disruptive variables caused by the environment, such as loudness and distraction are relevant to the parents in addition to the available material resources (Schüller, 2014; Birnbaum et al., 2019). For example, in the parent–child interaction category, the statements of a parent who described that her child does not want to stay seated when they read aloud are particularly noticeable. This raises the question what influences cause the child to react in this way (e.g., Gavora, 2022). Based on the parents' statements, it also seems to be particularly relevant for families with a non-German mother language how external persons support the parents in implementing joint literacy activities.

Executive functions and domain-general variables

In addition to the aforementioned domain-specific beliefs, parents also mentioned children's executive functions. They are domain-general aspects, i.e., related to children's general cognitive abilities (Miyake et al., 2000). The perceived importance of executive functions by parents goes hand in hand with recent studies indicating that executive functions can predict children's literacy skills (Nouwens et al., 2016; Chang, 2020).

Overall, the present qualitative study was conducted to identify a wide range of parental beliefs about joint literacy activities. The categories of beliefs were developed from the data material and validated against existing theories. They may inform further questionnaire development.

Limitations and avenues for further research

Regarding limitations of the present study, first, it must be taken into account that the data collection took place in Germany. In Germany, preschool is not mandatory to the same extent as in other countries and it not as closely related to formal education. Consequently, in contrast to other countries, it can be assumed that in Germany, parental competency beliefs may be less salient in the context of home literacy activities. Due to this difference in the educational system, social and cultural perceptions of the importance of joint literacy activities may also differ from country to country. It would therefore be desirable to conduct the present study again in another country with the same questions targeting beliefs about literacy activities. Previous studies from other countries usually had a stronger focus on the effect of the HLE on the children's literacy learning (Umek et al., 2005; Silinskas et al., 2012; Sénéchal and LeFevre, 2014; Silinskas et al., 2020; Weldemariam, 2022).

Second, the qualitative research design of the present study aimed at capturing a broad range of parental beliefs rather than at discovering geographic differences in these beliefs. Along these lines, in our sample plan we focused on the language spoken and the educational level of the subjects rather than on their geographical distribution. While it may be of interest for future quantitative studies whether the beliefs are regionally more or less pronounced, they are not expected to differ qualitatively. In addition, the question arises to what extent the gender, SES, or migration background of the interviewed parent influence the parents' beliefs about joint literacy activities. According to Kröner (2013), their effect on activities should be mediated by the domain-specific beliefs. To capture as many of parental beliefs as possible, including those based in part on domain-general variables, we used a sampling plan to select our sample. However, the extent to which parents' native language, for example, influences their literacy self-concept needs to be investigated quantitatively.

Third, a comprehensive questionnaire can be generated based on the collected and systematized parents' beliefs. This draft questionnaire could be validated in future, quantitative studies and explain the assumed correlations between parental beliefs and joint literacy activities. The knowledge of parents' beliefs for joint literacy activities can be used as a starting point for developing interventions that link to the HLE and support parents in creating a stimulating learning environment. Thus, children's literacy development can be sustainably.

Conclusion

The findings of the present study revealed that parents have very diverse beliefs about literacy activities with their pre-preschool and preschool children. Contrary to previous studies, beyond more commonly studied constructs such as literacy skills and intrinsic value, other beliefs emerged. These included beliefs regarding the importance of concurrent activities (such as work or stronger appreciation of other leisure activities) or regarding the parents literacy competencies (e.g., Krijnen et al., 2021; Tsirmpa et al., 2021). In addition, we chose a sampling procedure that provided us with beliefs of parents from a broad range of educational and social backgrounds. We conclude that it is important to address a wide range of parents' beliefs in order to develop a questionnaire of parental beliefs about joint literacy that can be used to identify a broad range of parental beliefs. Such a questionnaire can be used as an instrument to measure the impact of interventions aimed at empowering parents to support their children through joined literacy activities in the HLE (Yeo et al., 2014). As a next

step, we suggest the categorization of parental beliefs can be used to generate scales for the recording of parent's beliefs and literacy activities. These instruments are needed to investigate effects of experiments and interventions aiming at strengthening joint literacy activities in the HLE and the related parental beliefs.

Data availability statement

The original contributions presented in the study are included in the article/Supplementary material, further inquiries can be directed to the corresponding authors.

Ethics statement

Ethical approval was not required for the studies involving humans because this study was conducted and approved in accordance with the university's institutional requirements. The participants provided their written informed consent to participate in this study.

Author contributions

AR-P: Data curation, Formal analysis, Investigation, Methodology, Writing – original draft, Writing – review & editing. LB: Conceptualization, Methodology, Supervision, Writing – original draft, Writing – review & editing. SK: Conceptualization, Methodology, Supervision, Writing – review & editing.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Supplementary material

The Supplementary material for this article can be found online at: https://www.frontiersin.org/articles/10.3389/feduc.2024.1330091/full#supplementary-material

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