

REVIEW ARTICLE

Transmitting white monolingual Anglo-American norms: A concept analysis of “quality of language” in parent-child interactions

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Abstract

White monolingual Anglo-American values permeate language acquisition research, which extends into public health and educational policies. “Quality of language” in parent-child interactions is often called upon to explain weaknesses in the language development of children who are racialized, experiencing poverty, or bilingual. Indeed, many early intervention approaches build on this premise by aiming to improve the “quality of language” used by parents. We aimed to understand the conceptualizations of “quality of language” in studies of parent-child interaction through the critical lens of Community Cultural Wealth Theory and perspectives from development research across cultures. We completed a Systematic Concept Analysis of articles published from 2010 to 2022 and focused on parent-child interactions in the home environment. Our search identified 972 articles and 78 met the inclusion criteria, but only 45 papers provided a definition. These definitions covered eight conceptualizations but only three were previously described. We also found inequity in the use of this terminology, which focused on children who were bilingual, had disability, or experiencing poverty. Informed by a critical lens, we recommend the use of four new terms to encompass “quality of language.” We also recommend refraining from using this term as it is value-laden, poorly defined, and diminishes culturally sustaining language transmission practices.

Keywords: quality of language; concept analysis; critical race theory

In our field of language acquisition, white monolingual Anglo-American values, permeates the research, which extends into public health and educational policies. As a field, we value precocious talkers: children who speak early, speak lots, and speak well. For example, Hart and Risley (1995) reported on the *30 Million Word Gap* as an “early catastrophe” such that families experiencing poverty were exposed to 30 million fewer words than their more affluent peers. In this earlier

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research, the quantity of adult input was seen as a proxy for the quality of the language input. The work of Hart and Risley (1995) showed a discrepancy between children experiencing poverty and children from affluent homes in the amount of language a child heard from their caregivers. This research has been replicated and extended (see Fernald & Weisleder, 2015 for an overview and Johnson & Johnson, 2022 for a critical analysis). As an explanatory factor, the quality of language input has continued to be called upon to explain weaknesses in children's language development, school performance, and later success (Anderson et al., 2021; Walker et al., 2020). Indeed, many early intervention approaches build on these findings by aiming to improve the quality of language provided by parents to their children (Snow, 2014; Walker & Carta 2020). This explanatory factor focuses on the individual child or family unit as the source of the problem and the focus for change. This focus on the individual and the proximal environment, including parents and schools, can ignore the structural barriers, discrimination, and racism that influence the child's development (Rogers et al., 2021).

Language development research that has sought to understand how children's development is influenced by the language used and modeled by significant adults in their environment has provided important information to mainstream children. But by focusing on measures and approaches centered on white Anglo-American values, this same research can undermine and oppress culturally specific patterns of communications within communities, including families who are bilingual and multilingual. Not only are multilingual (Kidd & Garcia, 2022) and racialized (Rogers et al., 2021) children and families under-represented in developmental research, the conceptualization of "normal" is guided by research from white participants living in Western, educated, industrialized, rich and democratic countries (Rogers et al., 2021). We argue that how the "quality of language" is defined, how it is measured, and to whom it is applied are problematic. We used a Systematic Concept Analysis, a methodology that aims to describe and clarify concepts and relationships within systems of concepts (Nuopponen, 2010a). Our goal is to understand (1) how often is "quality of language" and related terms defined? (2) how has this concept been defined in studies of parent-child communication? (3) how have these concepts been measured?, and (4) who has been studied?

The following sections will continue to explore the concept of "quality of language," the harms of a deficit framing to understanding child communication development, and review two complementary frameworks, Community Cultural Wealth and development across cultures, that can inform linguistically and culturally responsive research and practice.

What is "quality of language"?

Studies often discuss the quantity and quality of language in the home environment focusing on primary caregivers, including research on children in bilingual or multilingual contexts. Before entering school, the quantity of language can be easier to measure and define, with a focus on the amount of exposure to the language by significant adults, yet even this concept is complex to measure (Carroll, 2017). As noted by Rowe and Snow (2020), the quality of the language input a child receives is poorly conceptualized. Through an analysis of child language

development research from infancy to preschoolers, these researchers propose three interconnected dimensions to understand the quality of the language input: interactive, linguistic, and conceptual dimensions (Rowe & Snow, 2020). The interactive dimension focuses on the caregiver's role in engaging their child in a back-and-forth conversation. The conceptual dimension focuses on the extent to which caregivers' conversations focus on concrete versus abstract concepts. The linguistic dimension focuses on the complexity of the caregiver's language (i.e., diversity of vocabulary, complexity of morphology and syntax). Rowe and Snow (2020) note that these dimensions are drawn mainly from research on children in Western societies who speak English. Indeed, as Kidd and Garcia's (2022) review showed, 54% of published articles in their sample on child language development have focused on English and 30% on other Indo-European languages, and only 15% of articles clearly stated that the children studied spoke more than one language. In our work, we are particularly interested in understanding the impact of this terminology on children in bi-cultural and bilingual contexts. As noted by Carroll (2017):

We should be concerned about the use of value-laden terms like “quality” of the input and the implicit claim . . . that the specific cultural practices of white, middle-class families are inherently “superior” because they lead to child vocabularies that are temporarily larger (p. 8)

As a first step, the goal of this study is to conduct a concept analysis of “quality of language” and related terms, to understand how it has been defined in the literature, how it has been measured, and the populations studied. We will also provide recommendations regarding terminology.

Deficit framing

For more than 30 years, there has been an awareness of how children from the majority culture are viewed as the norm in contrast with children who are marginalized¹ due to factors such as their racialized identity, cultural context, faith practice, experiences with poverty, language background, and immigration experience (see Rogoff & Morelli (1989) for a fulsome discussion). However, research on child language development continues to apply a deficit framework that upholds majority culture skills and language abilities as the norm. While racism is often framed as beliefs held by individuals, it is important to acknowledge and understand how racism exists outside the individual and has shaped structures and systems in which children and families live (Kendi, 2016; Rogers et al., 2021; Salter et al., 2018). Indeed, a deficit framework has been critiqued as a framework that focuses on the individual and proximal factors such as family, school, neighborhood, without acknowledging the broader structural inequities of racism (Rogers et al., 2021). The deficit model is further perpetuated by using measures and tasks based on the majority culture to compare marginalized children (Auer & Wei, 2008; Rogers et al., 2021; Rogoff et al., 2017; Yosso, 2005). For example, the application of standardized assessments across communities and cultures is problematic for several reasons, including differences in the population the task was designed for (Coll & Magnuson, 1999), the underlying concept, the value of the concept, the physical

and social environment (Carter et al., 2005), how this concept is put into practice (Bernstein et al., 2005; Coll & Magnuson, 1999), and translations (Peña, 2007). These critiques highlight that when tasks used to measure language abilities are not carefully selected and critically analyzed, a child or parent's response can be interpreted as deficient (Bernstein et al., 2005) and thus perpetuates the deficit model.

Once preschool-aged children or their parents are identified as deficient, many North-American intervention approaches focus on parent-child interaction patterns that are biased as they are based on research from white, middle-class parents rather than considering the family's culture (Awde, 2009; Simmons and Johnston 2007). Even in studies that included linguistically diverse children, the absence of details makes it difficult to inform practice. For example, in a recent review of interventions in preschool-aged children only 25% of studies included dual-language learners, and nearly half of these studies did not report the languages spoken by the children, while the remaining studies focused on children who spoke Spanish and English (Walker et al., 2020). Failing to adapt approaches may not only bring about results that are not desired (Awde, 2009) but also undermines parental confidence and their cultural knowledge. This can bring about confusing conversations between clinicians and parents where clinicians are encouraged to clarify that parent's way of interaction or their frequency of interaction has not caused the language difficulty, but that they need to change their interaction to improve their child's language development (McKean et al., 2022). By framing differences as shortcomings, the deficit framework also does not recognize the competencies that multilingual children hold and how their home language and culture are competencies in themselves (Gordon et al., 2022).

Two complementary alternatives to this deficit framing are the theoretical lens of Community Cultural Wealth and a cultural approach to understanding development. Community Cultural Wealth is informed by Critical Race Theory (Yosso, 2005) and seeks to identify and forefront capitals that families and communities build and sustain. Cultural developmental research aims to reduce ethnocentric evaluation that elevates majority cultural beliefs and practices (Rogoff & Morelli, 1989). By combining these two theoretical frameworks, we can create space in research and practice to capture different paths to becoming a good communicator across communities.

Community cultural wealth

Informed by Critical Race Theory, Community Cultural Wealth (Yosso, 2005) is a framework that aims to consider the knowledge that children who are marginalized (referred to as "Students of Color" in her 2005 paper) bring with them into schools. Yosso (2005) explicitly argues that these children and families are not deficient or disadvantaged, but rather have resources and assets. Specifically, the framework considers the Cultural Capital that is built and held by marginalized children and their families and centers the knowledge and experiences of racialized and marginalized individuals and communities. Yosso (2005) identified 6 overlapping and interacting Cultural Capitals: (1) Linguistic Capital, which includes intellectual and

social skills attained through communicating in multiple languages; (2) Family Capital, which encompasses the cultural knowledge supported and transmitted through family and carried forward as a sense of shared community, history, and memory; (3) Social Capital, which refers to one's network of people and community resources; (4) Navigational Capital, which refers to one's ability to maneuver through social institutions, including institutions that were designed for the mainstream or majority community; (5) Aspirational Capital, which refers to one's ability to maintain ambitions and goals about the future; and (6) Resistance Capital, which refers to one's ability to actively challenge inequality. By bringing a Critical lens to research that considers the language and communication between parents and children, we can provide a context for including the perspectives of children and families who have been marginalized and also elevating the Cultural Capital that they bring with them. Cultural developmental research can provide insights into the different forms of transmitting and sustaining these Capitals.

A cultural approach to child development research

A cultural approach in developmental psychology aims to understand child development from a broader perspective by studying children of different cultures and focusing on how members of the culture create meaning (Rogoff & Morelli, 1989; Syed & Kathawalla, 2017). This approach aligns with the broader theoretical model of a Community Cultural Wealth that aims to forefront the capitals that families and communities build, which can be brought to support their child's development (Yosso, 2005). It is not only important to study development across cultures but also to contextualize development within the child's own culture, or their developmental or ecocultural niche. As argued by Cameron-Faulkner and colleagues (2021) in the context of research in pre-linguistic interaction and language development, these behaviors need to be studied "in the round" as opposed to through the lens of a Western model of "typical" development" (p. 287). As outlined by Bornstein and his co-authors (2010), cultural differences in development have been observed in domains of development including early gross-motor development (Adolph et al., 2010), language development (Lieven & Stoll, 2010), and parenting (Bornstein & Lansford, 2010). Thus, a cultural developmental research approach can answer questions about how a child is developing by focusing both on individuals and also context.

The relative stability of one's culture is achieved through the socialization of the children by the older generations, and the process of transmission is embedded in specific cultural contexts (Trommsdorff & Kornadt, 2003). When studying child development, research across cultures has included studies of different elements of parenting, parent-child interactions, and child competencies. We will highlight research related to the three dimensions of "quality of language" identified by Rowe and Snow (2020): interactive, linguistic, and conceptual.

With regard to the interactive dimension, researchers have highlighted the important role that parent-child interactions play in language development and also the transmission of culture. Nonetheless, parent-child interactions can vary according to children, their parents, the setting, and the environment, resulting in a large range of differences (McCollum et al., 2000). For example, researchers have focused

on parenting cognition (i.e., expectations about developmental milestones) and parenting styles showing important differences in expectations that influence behavior such as providing visual stimulation in the first month, speaking with one's preverbal infant or young child, and the role of a parent in play (Bornstein & Lansford, 2010; Bornstein et al., 2015; Fasoli, 2014). In addition, differences in the way caregivers address their children have been documented with parents in some cultures speaking little to their children (e.g., Cristia et al., 2019) or speaking to children as one would an adult (Heath, 1983; Ochs, 1982). Researchers have also focused on parent-child dyads to identify strategies that aim to promote independence through following a child's lead or interdependence by directing the child's attention (Vigil & Hwa-Froelich, 2004), and how joint attention is fostered through pointing, showing, and physically positioning the child (Callaghan et al., 2011; Vigil & Hwa-Froelich, 2004; Harwood et al., 1999).

With regard to the linguistic and conceptual dimensions, researchers have identified differences and similarities in children's emerging competencies that can inform the understanding of developmental expectations. Differences in language development milestones and emerging structures have been observed across cultures (Bavin, 1995; Lieven & Stoll, 2010; Slobin, 1997), but as a recent review has noted only 1.5% of the world's languages have been studied in the English-language research journals (Kidd & Garcia, 2022). There are considerable differences in the linguistic structures of languages that not only make comparisons challenging but also may influence children's developmental patterns (Slobin, 1997; Lieven & Stoll, 2010). For example, the simple mean length of utterance can be deceptive cross-linguistically as what consists of a word or morpheme can vary in complexity across languages (Lieven & Stoll, 2010). Differences in the emergence of pretense and pictorial symbols have also been observed across children from different cultures (Callaghan et al., 2011). Familiarity with books and pictures is also an area where children from different cultures differ (Simmons & Johnston, 2007). These diverse perspectives that acknowledge variability between individuals and between cultures provide insight into the range of behaviors that shape communication development and how these behaviors are embedded within the child's context.

As researchers in Canada where most of our population consists of immigrants, whether recent or several generations ago, we see a need to understand how cultural research can inform our understanding of the development of children. In addition, culturally and linguistically sustainable research can contribute to decolonisation and revitalisation of Indigenous languages and cultures (e.g., Ross, 2016). Immigration is a complex process that may be taken on for a range of reasons including economic, education, and in search for a safer environment. This range of reasons is one of the components that add to the complexity of understanding the heterogeneity of immigrant experiences. For example, many new Canadians may experience poverty, despite high levels of education as previous diplomas may not be recognized (Sharaf, 2013). Part of the immigration process is navigating a new environment where culture, languages, and policies are different (Berry & Sam, 2016). For parents, part of learning about this new environment includes gaining knowledge and also adjusting how one responds to the different cultural expectations, including different family roles (Bornstein & Côté, 2010). For families, the

process of immigration and acculturation impacts parenting, interactions between parents and children, and their child's development (Bornstein & Côté, 2010; Motti-Stefanidi, 2018). As reviewed by Bornstein & Côté (2010), parents who are immigrants often occupy a place between their country of origin and their new country with regard to their parenting behaviors and interactions with their children, and these parents are also heterogeneous with differences both within and across communities. Community Cultural Wealth (Yosso, 2005) is a powerful model that can help families and communities, also using cultural developmental research, to reflect on their cultural wealth that can be honored and maintained as they also acculturate in the broader society.

Current study

Community Cultural Wealth informs our aim to identify capitals that families bring to support their child's language development. As a complement to this theoretical framework, the findings and methodologies from developmental research across cultures have the potential to inform our understanding of early language development and parent-child interactions across cultures, and also communities whose culture and language are marginalized. Within this context, we aim to understand (1) how often is "quality of language" and related terms defined? (2) how has this concept been defined in studies of parent-child communication? (3) how have these concepts been measured? and (4) who has been studied? To this end, we will use the method of a Systematic Concept Analysis, to identify conceptual definitions of the terminology. A Systematic Concept Analysis is a relevant method to understand partially developed concepts that may appear to be established and described, but confusion and disagreement exist in the literature (Morse et al., 1996). With the completion of a Systematic Concept Analysis, the vague concept of "quality of language" can be clarified in its conceptualization and terminology (Nuopponen, 2010b).

Positionality statement

The term "quality of language" often targets bilingual or multilingual families, families from an immigrant or refugee background, and families who are experiencing poverty. We are two bilingual researchers with a background and previous clinical practice Speech-Language Pathology. We have extensive experience working with children and families from immigrant or refugee backgrounds. We also both have partners that immigrated to our country. While we both have completed doctoral studies, we grew up in a lower socio-economical status (SES) environment and can see how there are often shortcuts made, negative assumptions, and different definitions of "success." We thus have a professional and personal bias regarding the overwhelming critiques of children and families who are bilingual or multilingual, who are immigrants, and who have experienced low family incomes. In addition, one of us is a parent with a bilingual family in a marginalized context and can see how parenting can vary tremendously across families and cultures. Being a parent is challenging and having your language use and parenting critiqued can add stress and undermine confidence. We thus have been uncomfortable with the

implicit message that “You’re doing it wrong,” which is transmitted to parents when we speak about improving their “quality of language.” Adding to this discomfort is our observation that there is a lack of clarity in what is meant by “quality of language” and narrowness to our understanding of successful child language development. Putting aside exceptional cases of neglect, parents interact with their children and transmit their language and culture. If we are to suggest that parents change the way they talk to their children, our recommendations must be linguistically and culturally responsive. We must also highlight the strengths in the way parents communicate, rather than leaving parents feeling like the way they talk and interact with their child is causing harm. We need to empower parents, rather than undermine their confidence. As researchers who engage in Community-Based Participatory Research within a Transformative Paradigm (Mertens, 2007), we work to keep in mind who our research is serving and how the research can be used by researchers, our community partners, and families themselves to promote social justice.

Methodology

We conducted a review of the literature from 2010 to 2022 using a Systematic Concept Analysis methodology (Nuopponen, 2010a). The Systematic Concept Analysis includes six iterative phrases: (1) goal and delimitation; (2) acquisition of domain knowledge and creating a general idea of the field; (3) compiling the material; (4) elaborating a preliminary concept system and/or framework for the analysis; (5) systematic analysis of the material; and (6) further analysis and conclusions according to the goal of the concept analysis. These different phases will be discussed and will be extended to consider to whom this term has been applied and what recommendations are made based on this research.

The first step was to state the purpose and delimitation of the Concept Analysis. The goal of this study is to identify, classify, and compare the existing definitions of the concept of “quality of language.” The domain of the concept is specialized in studies targeting the quality of the language of parents and caregivers within parent-child interactions in the home environment. The disciplines of the studies look at language and communication, such as speech-language pathology, psychology, linguistics, education, health. The concept of “quality of language” is close and overlaps with the concept of “quantity of language.”

The second step in a Concept Analysis is the acquisition of domain knowledge and creating a general idea of the field. As noted in the introduction, the definitions of “quality of language” covered at least three different dimensions: interactive, linguistic, and conceptual (Rowe & Snow, 2020). This step contributed to the search strategy and establishment of inclusion and exclusion criteria.

Search strategy

While not detailed in Nuopponen (2010a), we will describe the search strategy used for this Systematic Concept Analysis. We completed a broad search across Proquest (154 databases including Education Database, ERIC, International Bibliography of the Social Sciences (IBSS), and Linguistics and Language Behavior Abstracts (LLBA)). The search terms include “quality of language” and “children.” Our goal was not to provide a historical analysis of the concept, but rather to develop a broad

overview of how the term “quality of language” was used in studies of parent-child interaction during the preschool period. We thus wanted to look for papers that discussed “quality of language” to understand whether the term was defined, and if so, how the term was defined. Therefore, we limited the search to peer-reviewed articles in English from January 2010 to May 2022. The search script was the following: (“language quality” OR “quality of language” OR “input quality” OR “quality of input”) AND children AND stype.exact(“Scholarly Journals”) AND at.exact(“Article”) AND la.exact(“English”) AND PEER(yes).

Inclusion and exclusion criteria

The inclusion criteria for the studies were the following: a focus on language development, children of preschool age (0–6 years old), and a focus on the home environment with parents. The exclusion criteria were articles or terminology used outside of the fields of language and communication (e.g., “input quality” referring to computer science, quality assurance), a focus on other subject areas (e.g., mathematics, voice, speech), and a focus on classrooms or clinical settings or siblings. The screening process was shared approximately equally between the two authors such that the manuscripts were screened by title and abstract, followed by a full-text screening of the selected manuscripts, and finally, the data from the selected manuscripts were abstracted. At each stage, cases of uncertainty were discussed and a consensus decision was made.

Results

Following the first step of stating the purpose and delimitation of the Concept Analysis and the second step of creating a general idea of the field, the third step is to compile the material as a result of the literature search. The goal of this literature search was to look at papers that discussed “quality of language” to understand if this term was defined by the authors and, if so, to lay out how was the term defined across the papers. Our compilation of the studies resulted in 972 articles that met the search terms (see Figure 1). In reviewing titles and abstracts, 114 studies remained. Next, when screened by full texts, a total of 78 met the inclusion criteria. A total of 35 articles were excluded because the study or terminology did not focus on language development (3) (e.g., other subject areas such as mathematics), was not on children of preschool age (15) (e.g., 7 years old and older), was not focusing on the home environment with parents (10) (e.g., classroom or clinical environments, siblings), and was outside of the fields of language and communication (8) (e.g., voice, speech).

The fourth step is to elaborate a preliminary concept system or framework for the analysis. For this step, the data were abstracted to gather in-text citations where “quality of language” (or related terms, e.g., parent language quality, quality of language exposure, quality parent-child interactions) was used. We abstracted the data using a table with the name of the article; the citations from the article; whether it was defined or not. We excluded papers for the next step if no definition was provided even though the term “quality of language” (or related term) was used (e.g., mention of the term, or discussion of the term as a factor influencing children’s skills). We considered the concept defined and thus included in the next step when the meaning was explained or the concept was operationalized (e.g., how the

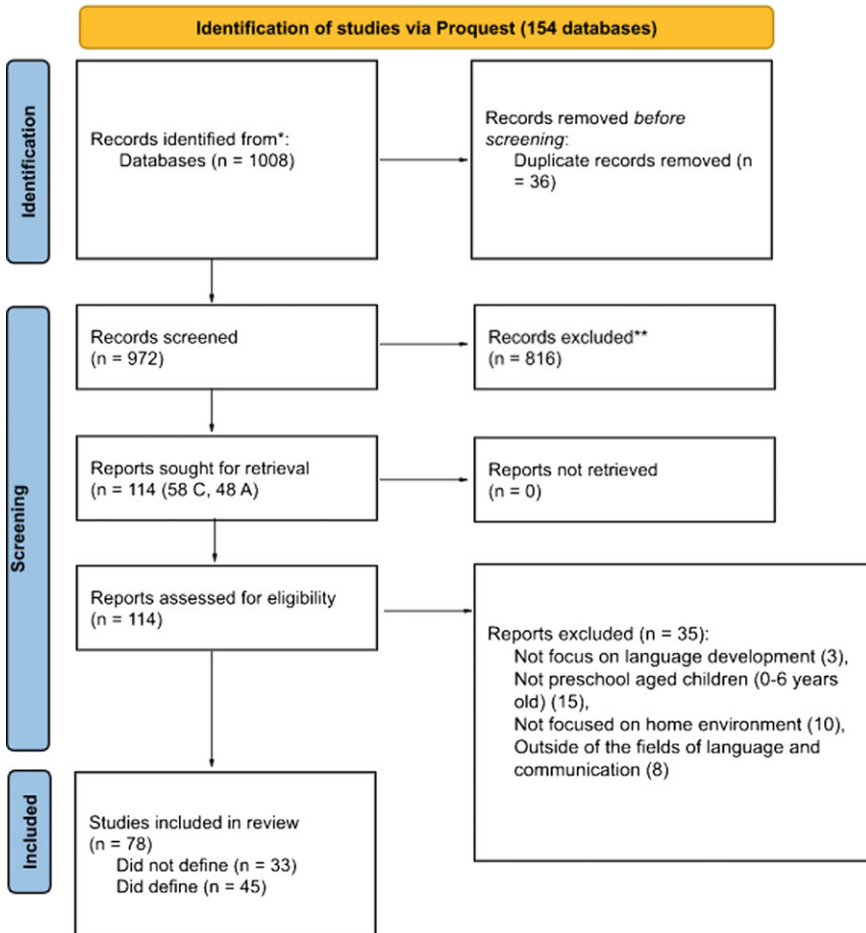


Figure 1. PRISMA Flow Diagram of Databases, Records Screened, Assessed, and Included in Our Systematic Concept Analysis on “Quality of Language.”

concept can be measured). In cases where a definition was provided, we further abstracted the following information: population studied; type of study; and discipline of the article. Within the 78 papers, 33 papers (42%) spoke about the quality of language or a related term but did not define the term in the manuscript. These findings suggest that the term is often used and left undefined, assuming a shared understanding of “quality of language.”

The fifth step focuses on a systematic analysis of the material and is the lengthiest step in our case. We had 45 papers that define “quality of language”, with 36 primary quantitative studies, 2 primary quantitative and qualitative studies, and 7 reviews (4 narrative reviews and 3 systematic reviews).

The population focus of the studies was bilingual and multilingual families for 49% of articles (n = 22), 11% of studies focused on bilingual families that were low SES or with disabilities (n = 5) (e.g., bilingual and low SES, bilingual and hearing

loss), children with disabilities for 13% of articles ($n = 6$) (i.e., autism spectrum disorder, Down syndrome, emotional and behavioral difficulties, hearing loss), families with low SES for 11% of articles ($n = 5$), and other population for 16% of the articles ($n = 7$) (e.g., teen mothers, use of a mobile device, children born preterm). The population focus was determined by the title, main objectives, and population described in the studies. For the primary studies ($n = 38$ studies), the population studied that was reported was mostly marginalized, coming from diverse ethnicities (e.g., South American, Chinese, African American, Turkish) and linguistic backgrounds (e.g., Arabic, Somali, Vietnamese, Urdu). When the population was white, they were also coming from diverse ethnicities (e.g., Germany, New Zealand, United Kingdom) and mostly from different linguistic backgrounds (e.g., Dutch, French, Irish, British Sign Language). The studies mostly reported information regarding the SES via the education of the parents, followed by the family's income and parents' professions. Besides the studies focusing on low SES, most studies reported a range of diverse SES.

The studies were from disciplines of linguistics ($n = 14$), psychology ($n = 14$), education ($n = 10$), speech-language pathology ($n = 3$), and medicine ($n = 4$). Nonetheless, we can note that these disciplines are overlapping and that parent-child interactions can be studied in any of those disciplines and could result in similar journals, despite the authors' home disciplines. The papers were from 2010 to 2011 ($n = 1$), 2012–2013 ($n = 2$), 2014–2015 ($n = 2$), 2016–2017 ($n = 5$), 2018–2019 ($n = 8$), 2020–2021 ($n = 25$), and 2022 ($n = 2$). This suggests that the term has continued to be used and defined across the span of years covered by this search.

Among the 45 papers that provided a definition, we independently identified themes in the definitions (each author completed approximately half of the papers) and then we reviewed these together to come to a consensus on how they could be grouped together into concepts. Many papers did not set out to provide an encompassing definition, but rather were identifying an aspect of language quality under study and used language such as “for example,” “was operationalized as,” “reflects,” “play a critical role in,” “are relevant to.” Once defined in this way, many authors went on to use “language quality” to refer to this aspect.

In the end, we identified 8 main categories of definitions of “quality of language”: *linguistic complexity*; *parents' language competency*; *enrichment activities*; *language-evoking strategies*; *different speakers*; *multilingual*; *quantity*; and *SES* (See Table 1). A mean of 2 different definitions was provided within a single paper with a range of 1 to 7, and in 29 cases, definitions included elements from multiple categories. The category of *linguistic complexity* was the most common but in 15 of 29 cases (52%), the definition was accompanied by another category of definition. The category of *language-evoking strategies* was the second most common category, followed by *language enrichment activities*, *parents' language competency*, and *different speakers*. Lastly, *multilingual*, *quantity*, and *SES* were used as definitions in a small subset of articles. The following paragraphs and tables will review each category of definition, including how the concept was measured, and examples of definitions from articles.

Linguistic complexity

For the category of *linguistic complexity*, authors focused on the *content* of the input according to the characteristics of the language input provided by the speaker

Table 1. Number of articles per category

Category	Number of articles
Linguistic complexity	29
Language-evoking strategies	15
Enrichment activities	13
Parents' language competency	12
Different speakers	9
Multilingual	1
Quantity	2
Socio-economic status	4

(see Table 2). Authors used other value-laden labels such as richness or intensity to discuss this category. The vocabulary or lexical diversity was mostly focused on the number of different words used by the speaker. The syntax or grammatical complexity referred to the utterance length of the speaker, but also how accurately they produced syntax. The complexity of words referred to the speaker using “sophisticated,” rare or abstract words, including mental state language. The complexity of words overlapped with the notion of decontextualized language as the speaker may use more abstract words when talking about abstract topics or that are out of context. For this definition, articles discussed this definition to study a range of diverse populations and were the most common definition.

Language-evoking strategies

Category *language-evoking strategies* referred to the *interactions* that are taking place between the speaker providing the input and the child (see Table 3). This category was also labeled as conversation skills that the speaker has or parental supportive strategies for language learning. Articles included measures of topic-continuing replies, conversational turns or turn-taking, responsiveness, and child-directed speech. The authors discussed the different strategies, techniques, or styles the speaker could use to engage the child in interactions (e.g., repetition, giving positive feedback, use of routines, joint engagement, comments, description, parallel talk, imitation, and labeling). This category of definition was mostly discussed in articles studying a low SES population, children with disabilities, and other populations. There were only a few studies with this definition on bilingual families.

Enrichment activities

The category of *enrichment activities* was the *medium* of interactions with which the speaker is providing input (see Table 4). The authors labeled this category also as input, linguistic, or environment richness. Some authors also specified in which language those language enrichment activities took place. The activities discussed were often literacy activities or practices such as book reading, shared book reading, and

Table 2. Linguistic complexity definition, examples of measures, examples of definitions, references, and population

Definition	Examples of how it is measured	Examples of definitions	References to paper (n = 29)	Population
<p><i>Linguistic complexity</i></p> <p>The <i>content</i>.</p> <p>The characteristics of the language input.</p>	<p>Vocabulary or lexical diversity (e.g., number of different words (NDW), diversity of words; number of vocabulary or word types)</p> <p>Syntax or grammatical complexity (e.g., mean utterance length (MLU), syntactic input)</p> <p>Complexity of words (e.g., rare word, abstract language, sophisticated vocabulary)</p> <p>Decontextualized language (e.g., utterances that refer to objects, events or people not present in the context)</p>	<p>“<u>Language quality</u> was analyzed through an examination of number of different words for both mother and child; number of rare/sophisticated words and context of talk (mothers), [...]” (Scott et al., 2020)</p> <p>“Studies also have emphasized the contribution of <u>input quality</u>, [...]. For example, parents’ word types (a measure of vocabulary diversity) and MLU (a measure of grammatical complexity) predict children’s vocabulary growth [Hoff & Naigles, 2002; Pan, Rowe, Singer, & Snow, 2005].” (Choi et al., 2020)</p> <p>“[...], <u>quality of caregiver input</u> at 18 months, operationalized as lexical diversity (number of different words), lexical sophistication (number of ‘rare’ words), and number of decontextualized utterances (i.e., utterances that refer to objects, events, or people not present in the context), was a significant predictor of children’s vocabulary scores at later ages.” (Unsworth et al., 2019)</p>	<p>Antonijevic et al., 2020; Arnaus et al., 2021; Bosma et al., 2020; Choi et al., 2020; Cristia et al., 2020; De Cat, 2021; Demir-Lira et al., 2021; Demir-Vegter et al., 2014; Dirks et al., 2020; Erickson et al., 2021; Florit et al., 2021; Francot et al., 2021; Fulcher et al., 2021; Hilvert & Sterling, 2021; Hirsh-Pasek et al., 2015; Hu et al., 2021; Lu & Morgan, 2016; Pierce et al., 2017; Pierce et al., 2021; Quiroz & Dixon, 2012; Ryan, 2021; Salmon et al., 2016; Scott et al., 2020; Serrat-Sellabona et al., 2021; Sultana et al., 2019; Sultana et al., 2020; Sun & Ng, 2021; Unsworth et al., 2019; Vaahtoranta et al., 2021</p>	<p>Bilingual = 10</p> <p>Bilingual & low SES or disabilities = 4</p> <p>Disabilities = 6</p> <p>Low SES = 3</p> <p>Other = 6</p>

Table 3. Language-evoking strategies' definition, examples of measures, examples of definitions, references, and population

Definition	Examples of how it is measured	Examples of definitions	References to paper (n = 15)	Population
<i>Language-evoking strategies</i> The interactions between the speaker providing input and the child.	Topic-continuing replies (e.g., conversational turns, turn-taking, flow) Responsiveness (e.g., verbal responsiveness, answer to child's questions, responsive parent-child interactions) Child-directed speech (e.g., child-centeredness interaction, direct speech) Strategies to engage child in interactions (e.g., expansion, recasting, asking questions)	"[. . .] the <u>quality of the linguistic exchanges</u> (responsiveness, flow, turn-taking);[. . .]" (Salmon et al., 2016) "The <u>quality of maternal language input</u> and mother-child interactive style was calculated by [. . .], mother-to-child speech ratios and [. . .]." (Quiroz & Dixon, 2012) "Finally, the use of conversational skills such as language-evoking techniques reflects the <u>quality of parental talk</u> . [. . .] Parallel talk (talking about what a child is doing, seeing, or touching), expansion (restating and completing a child's utterance with correct grammar), recasting (changing a child's utterance into a question), and asking open questions (in and outside the immediate context, and sincere request) [. . .]" (Dirks et al., 2020)	Arnaus et al., 2021; Choi et al., 2020; De Cat, 2021; Demir-Lira et al., 2021; Dirks et al., 2020; Erickson et al., 2021; Ewine et al., 2021; Hirsh-Pasek et al., 2015; Kapengut & Noble, 2020; Pierce et al., 2021; Quiroz & Dixon, 2012; Salmon et al., 2016; Serrat-Sellabona et al., 2021; Sultana et al., 2019; Sunskind et al., 2017	Bilingual = 2 Bilingual & low SES = 1 Disabilities = 4 Low SES = 4 Other = 4

Table 4. Enrichment activities' definition, examples of measures, examples of definitions, references, and population

Definition	Examples of how it is measured	Examples of definitions	References (n = 13)	Population
<i>Enrichment activities</i> The <i>medium</i> . The type of medium with which the speaker is providing input.	Book reading (e.g., number of books, frequency and duration of literacy practices) Storytelling Singing	"Among the <u>quality factors</u> , children's reading activities are assumed to play a critical role in early language development, [...]." (Sun & Ng, 2021) "A large number of studies have shown that shared book reading, oral storytelling, and singing represent ideal conversational contexts in which to provide <u>high-quality input</u> [...]." (Florit et al., 2021)	Antonijevic et al., 2020; Arnaus et al., 2021; Budde-Spengler et al., 2021; De Cat, 2021; Fleckstein et al., 2018; Florit et al., 2021; Kapengut & Noble, 2020; Mieszkowska et al., 2022; Pham & Tipton, 2018; Rydland & Grøver, 2021; Sun & Ng, 2021; Sun et al., 2018; Unsworth et al., 2019	Bilingual = 8 Bilingual & low SES or disabilities = 3 Low SES = 2

the number of books present in the environment. A few authors discussed other activities such as storytelling, singing, playtime, conversation or family activities, media or computer use, and watching television. This definition of enrichment activities was mostly used by articles studying bilingual children. There were also a few studies discussing that definition in low SES families as well as bilingual families combined with low SES or disabilities.

Parents' language competency

For the category of *parents' language competency*, the discussions focused on the characteristics of the *speaker* providing the language input (see Table 5). Specifically, whether the speaker was a native or non-native speaker of the language spoken to the child. They also discussed the proficiency, language skills, or resources of the speaker in terms of the language spoken. Another characteristic of the speaker was the amount of language mixing or code-switches used by them. The definition of parents' language competency was solely used in articles studying bilingual families with or without disabilities.

Different speakers

The category of *different speakers* referred to the *sources* of input available to the child with a focus on a specific language (see Table 6). The authors discussed the number of different speakers, sources, conversational partners, or interlocutors

Table 5. Parents’ language competency definition, examples of measures, examples of definitions, references, and population

Definition	Examples of how it is measured	Examples of definitions	References (n = 12)	Population
<p><i>Parents’ language competency</i> The <i>speaker</i>. The characteristics of the speaker providing the language input.</p>	<p>Native vs non-native speakers Proficiency Language mixing</p>	<p>“[...] the native speaker status of sources of input, [...], and the amount of language mixing in input are all relevant to the <u>quality of input to bilingual children</u>.” (Hoff, 2016) “In actuality, it seems that language proficiency – more than native speaker status – is a better predictor of <u>language quality</u>, [...]” (Ryan, 2021)</p>	<p>Antonijevic et al., 2020; Arnaus et al., 2021; Budde-Spengler et al., 2021; Fleckstein et al., 2018; Kaščelan et al., 2021; Lu & Morgan, 2016; Paradis et al., 2017; Pierce et al., 2017; Place & Hoff, 2016; Ryan, 2021; Scheele et al., 2010; Unsworth et al., 2019</p>	<p>Bilingual = 9 Bilingual & disabilities = 3</p>

in the environment. It also included the different contexts the child is receiving input. Some authors talked about contact diversity, meaning the diversity of contacts or interlocutors accessible in the environment. This category of definition was only discussed in studies targeting a bilingual population (with or without disabilities).

Multilingual

The category of *multilingual* refers to specific characteristics of the input related to when the child is *multilingual* (see Table 7). The authors discussed this category in regard to the status or prestige of the language, the speaker’s persistence to use the minority language, and the discourse style of the speaker (i.e., monolingual or multilingual, requesting translations). Additionally, the use of translations by the speaker and affective factors, that is, their positive attitude toward multilingualism, were noted. This definition was used in one article studying bilingual families.

Quantity

This category of *quantity* is a *related concept* to quality by using the quantity of input as a substitute for the quality of input (see Table 8). This definition was discussed in an article on bilingual families and another on low SES families.

Table 6. Different speakers’ definition, examples of measures, examples of definitions, references, and population

Definition	Examples of how it is measured	Examples of definitions	References to paper (n = 9)	Population
<i>Different speakers</i> The <i>sources</i> . The different sources of input available to the child.	Number of different speakers Contact diversity	“ Input quality refers to multiple factors describing the language that children are exposed to: [...], and the diversity of interlocutors in a minority language (Paradis, 2017).” (Antonijevic, 2020) “All those factors which condition or guarantee a certain diversity or variety in the input could be considered qualitative factors , such as diversity of contacts [...].” (Arnaus et al., 2021).	Antonijevic et al., 2020; Arnaus et al., 2021 Budde-Spengler et al., 2021; Czapka et al., 2021; Fleckstein et al., 2018; Mieszowska et al., 2022; Place & Hoff, 2016; Rydland & Grøver, 2021; Unsworth et al., 2019	Bilingual = 8 Bilingual & disabilities = 1

Table 7. Multilingual definition, examples of measures, examples of definitions, references, and population

Definition	Examples of how it is measured	Examples of definitions	References to paper (n = 1)	Population
<i>Multilingual</i> The <i>multilingual</i> context. The specific characteristics of the input related to when the child is in a multilingual context.	Status of language Parents’ persistence to use the minority language Parental discourse style Use of translations Affective factors	“For the quality of parental input , multilingualism research addresses the parents’ persistence to use the MiL , the parental discourse styles (e.g., request for translation) and [...]. [...] The persistence may also include [...] positive attitude toward multilingualism (De Houwer, 2009).” (Arnaus et al., 2021)	Arnaus et al., 2021	Bilingual = 1

SES

The category of *SES* was used as a *shortcut* to quality whereas *SES* was used as a proxy for the quality of input (see Table 9). The authors used measures of the *SES*, the social class, or the parent education instead of measuring the quality of

Table 8. Quantity definition, examples of measures, examples of definitions, references, and population

Definition	Examples of how it is measured	Example of definition	References to paper (n = 2)	Population
<i>Quantity</i> The <i>related concept</i> . The use of quantity of input as a substitute for quality of input.	Quantity	“[...] must rely on quantity as a proxy for <u>quality parent-child interactions</u> .” (Pierce et al., 2021)	Pierce et al., 2021; Unsworth, 2013	Bilingual = 1 Low SES = 1

Table 9. SES definition, examples of measures, examples of definitions, references, and population

Definition	Examples of how it is measured	Example of definition	References (n = 4)	Population
<i>Socio-economic status (SES)</i> The <i>shortcut</i> . The use of SES as a proxy to quality of input.	Social class, social-economic status Parent education	“The aim of this study is to probe the role of SES as a hypothetical proxy for <u>input quality</u> in bilingual children, [...].” (Cat, 2021)	Antonijevic et al., 2020; Arnaus et al., 2021; Blom et al., 2021; De Cat, 2021	Bilingual = 2 Bilingual & low SES = 1 Low SES = 1

language. This definition was used mainly in studies on bilingual families with one study also focusing on low SES families and one study only focusing on low SES families.

Discussion

By using a Systematic Conceptual Analysis, we aimed to describe how “quality of language” and related terms are defined in recent research. While we likely did not gather *all* of the definitions of “quality of language” in recent research, our broad search terms were able to compile a sense of the range of definitions that are frequently used to describe parent-child interactions in preschool children. Our Systematic Concept Analysis process began by reviewing 78 papers published in English between 2010 and 2022 that included “quality of language” or related terms and children under the age of 6 years. We focused on studies on parent-child interactions and thus did not include definitions aimed at teachers within the preschool or early school settings. Within this set of publications, we answered the following questions: (1) how often is “quality of language” and related terms defined? (2) how has this concept been defined in studies of parent-child communication? (3) how have these concepts been measured? and (4) who has been studied?

For the first question, we observed that “quality of language” is often evoked in publications but is not defined (42%). This practice contributes to a lack of

specificity of the concept. For example, researchers report that quantity and quality of input will impact children's language acquisition or that language input varies in terms of quantity and quality, yet the terms are not defined. As we found, what is meant by the term "quality of language" varies across researchers, it may refer to the way that parents evoke language, or the language enrichment at home, or the language proficiency of the parents. Thus, these broad statements can be problematic as "quality of language" is defined and measured differently across researchers.

The results from the second research question are the main outcome of this study: to conduct a Systematic Concept Analysis to identify, classify, and compare definitions of the concept of "quality of language." For this question, we reviewed the definitions provided by the authors in the remaining 58% of the articles and found that the definitions could fit into 8 categories, only three of which were previously described (see Figure 2). Specifically, the first three categories are related to Rowe & Snow's (2020) dimensions: *linguistic complexity*, *language-evoking strategies*, and *enrichment activities*. In addition, we identified three categories that are related to the bilingual context: *speaker competency*, *number of different speakers*, and *multilingual strategies*. Finally, we identified two categories that are proxies of other measures: *quantity* and *SES*. In addition, in some cases, researchers did not provide explicit definitions but rather proposed a link between the undefined concept of "quality of language" and the specific characteristics that contribute to the concept. The discussion in the following section will further explore these categories.

The third question focused on how the concept has been measured and showed that even within one category of definitions a variety of measures were used as seen in Tables 3–9. In some cases, the "quality of language" was measured via counting occurrences such as the number of different words, the number of books at home, or the number of different speakers. Within categories of definitions, we can see that the measures varied such as for language complexity measures, which included vocabulary diversity, syntax complexity, complexity of words, and decontextualized language; or for enrichment activities measures, which included the number of books or the frequency of literacy activities. The complexity of the concept of "quality of language" is such that researchers tended to focus only on a subset of measures of the concept. These findings complement the main outcome of the study underscoring that not only is this concept defined differently but it is also measured very differently, even within the same category.

And finally, our fourth question revealed that the population described in those studies was mostly marginalized: 49% of papers focused on bilingual families, 11% of papers focused on bilingual families also having disabilities or a low SES, 13% on children that have a disability, and 11% on families who have low SES. This distribution of studies highlights an implicit norm and othering: monolingual, middle, and upper SES families with typically developing children have not been the topic of studies investigating "quality of language" in the past 12 years, particularly in studies that focused on the home setting and interactions with parents. With regard to bilingualism, Kidd and Garcia (2022) noted that only 15% of published research they reviewed explicitly included bilingual children, yet this population was included in 60% of papers in this study (including bilingual families with low SES or children with disabilities). This observation provides weight to our concerns

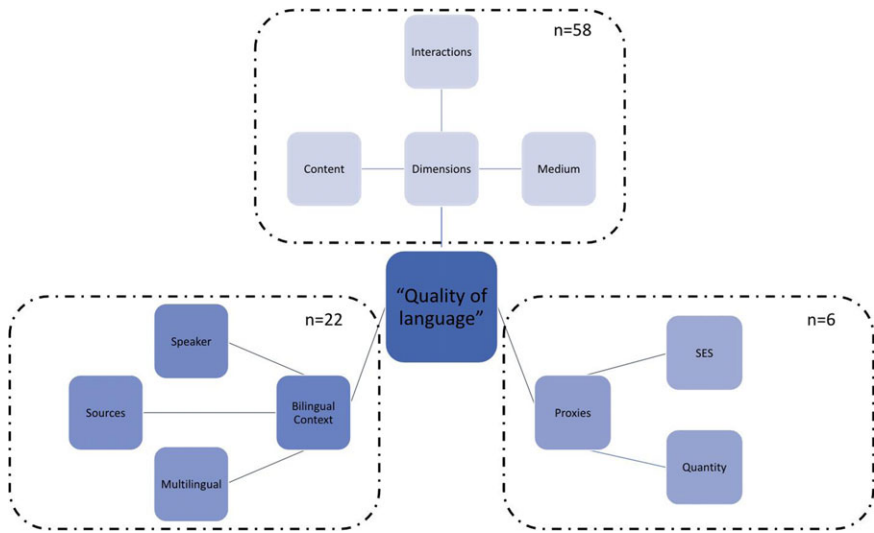


Figure 2. Categories of the Definitions of “Quality of Language”: Dimensions, Bilingual Context, and Proxies.

that families with children growing up bilingually are subject to scrutiny with regard to the quality of language being provided, as defined by monolingual Western, Anglo-American standards.

A perspective across cultures on definitions related to dimensions of “quality of language”

The review of definitions for the concept of “quality of language” only partially aligns with the dimensions identified by Rowe and Snow (2020): interactive, linguistic, and conceptual. The definitions that align the most clearly are our definition of *linguistic complexity* with their linguistic and conceptual dimensions and *language-evoking strategies* with their interactive dimension. We found that researchers included definitions that drew from Rowe & Snow’s conceptual dimension when speaking of different areas. For example, when referring to *linguistic complexity* some studies included decontextualized language use in conversation; or when referring to *language-evoking strategies*, some researchers pointed to eliciting and engaging children in conversations; or when referring to *enrichment activities*, some researchers focused on book reading. The overlap between dimensions was also noted by Rowe and Snow (2020). Bringing a critical lens, informed by research across cultures, to these first three categories of definitions of “quality of language” is important. As noted in the introduction, research across cultures has shown that parent-child interactions can vary broadly due to children, parents, the presence of other caregivers, settings, and environment (McCollum et al., 2000; Cristia et al., 2019). In addition, despite the high number of papers on bilingual families in this Systematic Concept Analysis, these dimensions do not explicitly include ways that multilingual speakers use their languages as a form of quality, such as translating

and code-switching. This suggests that the monolingual bias in research impacts the way that language quality is captured among bilingual and multilingual families. Specifically, the language development research reviewed in the concept analysis has valued a subtype of parent-child language and interactions, rather than including a range of practices and acknowledging their value. As noted in *linguistic complexity* definitions, these subtypes of parent-child language use include using many words, using varied or complex words, using complex sentences, and using decontextualized language. While *language-evoking strategy* definitions focused on topic-continuing replies, responsiveness, child-directed speech, and engaging the child in the interactions. This valuation of a specific type of parent-child language and interactions has led to framing differences as deficits that need to be fixed by early intervention.

With regard to *linguistic complexity*, research has placed value on the *content*, that is, number of words used, diversity of words used, complex syntax and longer utterances, and decontextualized language. First, the extent to which cross-linguistic comparisons can be made can be influenced by differences in what consists of a “word” across languages and how sentences are constructed with regard to morphemes and utterance length (Hetrick, 2022; Lieven & Stoll, 2010; Slobin, 1997). The definitions we encountered in this Systematic Concept Analysis did not acknowledge these cross-linguistic differences, and while these cross-linguistic differences may have influenced which measure was focused on in studies, we found little explicit discussion or acknowledgment of these potential differences. Second, differences in the ways that children are addressed can impact these measures, but these differences are not accounted for in the definitions related to *linguistic complexity* used by researchers. For example, research across cultures has shown that some cultures do little to modify their speech toward children, which could lead to more complex forms (e.g., Heath, 1983; Ochs, 1982), while other cultures speak infrequently to children, which could lead to fewer utterances to analyze (Cristia et al., 2019; Casillas et al., 2020; Shneidman & Goldin-Meadow, 2012). In addition, the focus on language input from parents without including other caregivers may also be a bias that masks other important sources of direct language input (Shneidman et al., 2013). When embedded in the community, it is not clear how these differences in *linguistic complexity* would influence children’s language development and communicative competence in the short or long term. Thus, *linguistic complexity* measures should include careful consideration of what is measured and of the relevance of the measure for the specific language community.

With regard to *language-evoking strategies*, research has placed value on a subset of *interactions* that are contingent, responsive, and child-centered. Research across cultures has documented differences in the types of interactions between parents and children. As noted above, parents in some cultures use language infrequently with their children and thus will have fewer contingent interactions overall. With regard to responsiveness and child-centeredness, parents in some cultures may be more directive to bring the child’s attention to others or an established activity, use more imperatives to communicate, and ask questions to redirect the child’s attention (Vigil & Hwa-Froelich, 2004). These types of interactions are thought to foster interdependence and a respectful relationship with one’s elders, which contrast with interactions that aim to foster independence, such as following the child’s lead,

providing descriptions, and describing the child's actions (Vigil & Hwa-Froelich, 2004). In addition, cultures differ with regard to expectations around the role of parents in play: some cultures focus on showing the child how to play with an object (Farver & Howes, 1993), while others do not see parents as having a role in children's play (Vigil & Hwa-Froelich, 2004). Indeed, in an international survey of more than 127 000 parents from developing countries, only 60% of mothers reported playing with their children in the past 3 days (Bornstein & Putnick, 2012). While the language-evoking strategies used by parents are certainly an important component of language development, it is important to consider a broader range of strategies and caregivers and seek to understand what are the cultural expectations within the families' community, rather than framing differences as deficiencies.

The *enrichment activities* are a *medium* that can support the *linguistic complexity* and *language-evoking strategies*. Research has placed value on the number of books families have at home as well as books and literacy practices in the child's environment. However, there is only occasional mention of oral storytelling and singing. In the international survey mentioned above, an average of 25% of mothers had read to their child in the past three days but 35% had told their child a story, and more than 50% had sung to their child (Bornstein & Putnick, 2012). This difference speaks to the different roles of books, oral storytelling, and song in cultures around the world. Books remain expensive and difficult to access in non-majority languages. In addition, in conversations with parents, we have learned that certain language varieties may not often be presented in written form, adding to the distance between the language spoken at home and the language in books. When language enrichment narrowly focuses on interacting with books, the other forms of language enrichment that a family engages in are overlooked. This narrow focus is particularly problematic when considering the importance of language maintenance and transmission of marginalized languages, which may be done through practices that do not systematically include books.

Critical lens on definitions related to “quality of language” and contexts that are bilingual or multilingual

We identified three categories of definitions specific to the bilingual or multilingual context that were not mentioned by Rowe and Snow (2020). These definitions are the *speaker* with *parents' language competency*, the *sources* with the *number of speakers* a child hears, and the *multilingual* context with the use of *multilingual* strategies. These three definitions were discussed exclusively in papers studying bilingual families, often in combination with the definitions 1–3 reviewed above.

Measuring language quality through the *number of speakers* of the language and the *language competency* of the speakers (e.g., code-switching) has the potential to be problematic and contribute to a deficit framing of bilingual and multilingual families. When the focus is on the majority language, definitions that focus on the *number of different speakers* can undermine the role of parents, or other main caregivers, in language transmission and maintenance efforts. Thus, focusing on this number without acknowledging the broader context may lead to recommendations for a family to diversify the speakers with which the child interacts, leading to less exposure to the marginalized language. When the marginalized language is considered,

particularly when the language has as with small speaker community ties, caregivers may not have access to many speakers of the language.

Similarly, some studies assumed that the *parents' language competency* determined by being a non-native speaker will provide a lower "quality of language" input regarding *linguistic complexity* (e.g., Pierce et al., 2017; Unsworth et al., 2019). A "non-native speaker" is not unidimensional: they may produce accented speech in their second language, while also producing diverse vocabulary and complex morphology and syntax. In addition, "non-native speakers" are native speakers of a language and thus can nurture interactions and put in place enrichment activities that are culturally relevant, which may or may not include reading books. Nonetheless, the availability of materials and activities in the marginalized language outside the home can be a barrier to families who speak marginalized languages.

A subset of studies has explored the role of code-switching as a subtype of sub-optimal language input regarding *parents' language competency*. Based on the research on infant speech perception and toddlers, code-switching has been hypothesized to make speech perception more challenging, leading to difficulties in identifying and learning new words (Byers-Heinlein, 2013). However, this perspective on code-switching does not consider the important and dynamic role it plays in communication within bilingual families and communities (Chen & Padilla, 2019). Code-switching can be used to signal one's position, mark one's identities, and serve interactional functions (see Nilep, 2006 for review). Producing and understanding code-switching is an important bilingual ability and can be seen as an ability that needs to be fostered in bilingual children.

Finally, a subset of *multilingual* strategies was identified that are strength-based. Despite this, some families are still encouraged by some professionals to stop speaking their home language and to focus on the majority language of the setting. There are therefore some contextual barriers that can impact families in making use of some *multilingual* strategies. These strategies are often overlooked as an asset that can serve to sustain and enhance language maintenance in marginalized contexts.

Rather than placing the burden on individual families to support marginalized language learning and transmission, families who speak these languages should be supported by their educational institutions. Moving forward, researchers need to consider how this focus on multilingual speakers will be used by stakeholders and policymakers, and whether it will encourage and foster the use of the marginalized language or be used to encourage families to focus on the majority language. Future research has the potential to contribute to strategies that families can use to bolster language transmission and language acquisition (e.g., video chat with extended family, community events, visits with extended family) and to explore the longitudinal course of language maintenance.

Considering proxies of "quality of language"

We found two definitions that are the *related concept* of *quantity* and the *shortcut* of using the SES as proxies to "quality of language." These two definitions assume that there is more "quality of language" with more quantity or higher SES. However, we can argue that while language quantity and "quality of language" are intertwined, these are separate concepts. Parents could address more language to a child, but the

characteristics of the language may vary. Additionally, as mentioned before, many new Canadians may experience poverty or low income but possess higher levels of education as previous diplomas that may not be recognized (Sharaf, 2013). We will not expand on these proxies as fulsome critiques have been made previously (e.g., Carroll, 2017; Johnson & Johnson, 2022).

By understanding what is meant by “quality of language” across studies, how it was measured, and who were studied, we are able to provide a starting point for future research that can aim to understand the relationship between parent communication and their child’s language and communicative development.

Implications

As noted by Johnson and Johnson (2022), the language researchers’ use in their work is important and influences the hypotheses, choices of measures, interpretation of the results, and practical implications. Our field has strong research that can inform intervention and prevention for specific families in specific contexts that share cultural, linguistic, and socio-economic commonalities with the participants in the research. However, based on this Systematic Concept Analysis and informed by research across cultures, we recommend rethinking the use of the concept “quality of language” as it is value-laden, poorly defined, and has the power to diminish culturally sustaining language transmission practices. One strategy is to continue to use the term, but to expand it to include a broader idea of what is meant by “quality” and thus making space for different perspectives. However, we suggest another strategy due to the history of the term, which has potential to continue to harm communities and contribute to a biased research focus. Specifically, we recommend not using the term “language quality,” but rather focus on terms that describe the behavior being observed.

We propose this reframing to open the door toward research that is more transparent, more equitable, and easier to compare across studies. This renaming aims to provide clarity about the focus of the study and also avoids value-laden terms such as “quality,” “richness,” “sophisticated,” and “enrichment.” In practice, this reframing has the potential to inform early intervention by broadening the consideration of parenting practices and abilities that are valued. This reframing can serve to recognize different cultural and linguistic abilities as assets within early education and kindergarten classrooms (Johnson & Johnson, 2022). This reframing also has the potential to influence policies by refocusing early intervention and early education strategies to be culturally and linguistically sustaining and empowering, rather than framing certain child-parent interactions as deficit or lacking (e.g., interactions that are less child-directed or contingent, infrequent storytelling with books) and not documenting others (e.g., oral storytelling, code-switching).

Specifically, we propose to abstain from the use of “quality of language” and instead use specific terminology to refer to what is being measured (see Figure 3).

- When “quality of language” measures the *content of linguistic complexity* of parents’ language, we suggest referring to “characteristics of child-directed language.”

Recommended specific terminology to use instead of quality of language

Characteristics of child-directed language	Characteristics of parent-child interactions	Exposure to storytelling	Multilingual communication strategies
<ul style="list-style-type: none"> • Describes the content of parent's language. 	<ul style="list-style-type: none"> • Describes parent-child interactions. 	<ul style="list-style-type: none"> • Describes exposure to storytelling mediums (including books, songs, and oral storytelling). 	<ul style="list-style-type: none"> • Describes how families support language transmission.

Figure 3. Summary of Recommended Specific Terminology to Use Instead of “Quality of Language.”

- When “quality of language” describes the *interactions* with *language-evoking strategies* used by parents when interacting with their child, we suggest referring to “characteristics of parent-child interactions” and these may include a range of contexts, including interactions during book reading.
- When “quality of language” refers to the *medium* of *enrichment activities* related to book reading, we suggest referring to “exposure to storytelling” which would include measuring how storytelling occurred using books but also oral storytelling, and song.
- We suggest “multilingual communication strategies” as a category to include in future studies of children in bilingual contexts to better capture and understand how families are supporting language transmission, especially in marginalized contexts.
- Lastly, we recommend avoiding definitions of a concept that uses another concept as a proxy, such as *quantity* of language and *SES*.

By carefully and critically understanding the intervention and prevention approaches, we can work with families and communities to enhance and support Community Cultural Wealth (Yosso, 2005) and empower rather than undermine culturally sustaining language transmission practices.

Conclusion

This paper grew out of our growing discomfort around how “quality of language” in parent-child interactions was used to explain differences in a child’s language development. Given this discomfort, we have abstained from using the term but this silence was also a form of complicity. Our work is informed by the critical framework of Community Cultural Wealth (Yosso, 2005) that aims to value the knowledge and practices of marginalized individuals, families, and communities. We also drew on cultural developmental research to highlight differences in parent-child interactions that exist and are valued as part of language and cultural transmission across communities. Through a Systematic Conceptual Analysis, we identified 8 different categories of definitions used by researchers between 2010 and 2022, and only three of these categories were previously captured as dimensions of “quality of language.” Related to this diversity in definitions, we observed a marked variation in the

way the concept was measured across studies, even within a category of definitions. In addition to these definitions that align with the dimensions identified by Rowe and Snow (2020), we identified 5 additional definitions that did not fit within these dimensions. This breadth of definitions for “quality of language” speaks to a lack of specificity – which is particularly problematic when one considers how this term has been used to influence practice and policies. Indeed, language quality research does not exist in a vacuum but has been used to inform early intervention and early education policies. We also observed that marginalized parents and children were more often the focus of these studies, including children who are bilingual, children who experience poverty, and children with disabilities. As outcomes of this Systematic Concept Analysis, we recommend (a) no longer using “quality of language” to describe parent-child communication, (b) using terminology that is neutral and specific (i.e., avoiding value-laden terms such as “richness,” “quality,” “sophisticated”), and (c) moving research forward by understanding the cultural assets and strengths that underlay parent-child interactions across communities.

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Note

1. We use the term “marginalized” to refer to children and families who experience marginalization from mainstream culture and unequal power relations across economic, political, social, and cultural dimensions (NCCDH, n.d.) and acknowledge that this experience will differ across countries. For example, within the Canadian context, this includes racialized identities, Indigenous identities, faith practices that are not Christian, experiences of poverty, experiences of disability, bi and multilingualism, immigrant experiences, and LGBTQ+ identities.

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