

Peer feedback in childhood. A systematic review

Feedback tra pari nell'infanzia. Una revisione sistematica

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OPEN ACCESS

Double blind peer review

Citation: Zoroaster, P., & Restiglian, E. (2025). Peer feedback in childhood. A systematic review. *Italian Journal of Educational Research*, 35, 78-89
<https://doi.org/10.7346/sird-022025-p78>

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Received: July 2, 2025

Accepted: December 9, 2025

Published: December 27, 2025

Pensa MultiMedia / ISSN 2038-9744

<https://doi10.7346/sird-022025-p78>

Abstract

Numerous studies in recent years have highlighted the positive effects that peer feedback has on learning. However, the studies that have been carried out on this topic mainly focus on primary, secondary, and university contexts. To investigate peer feedback in the context of childhood (0-6 years) as well, a systematic literature review was conducted to retrieve all available studies on whether feedback can support development in preschool children and also whether, and in what way, it can support their learning development. The results revealed not only a lack of studies on peer feedback in childhood but also highlighted that the term most commonly used to refer to exchanges between children in this age group is interaction and not feedback.

Keywords: peer feedback; peer interaction; kindergarten; systematic review

Riassunto

Numerosi studi degli ultimi anni hanno evidenziato gli effetti positivi del feedback tra pari sull'apprendimento. Tuttavia, gli studi condotti su questo argomento si concentrano principalmente sui contesti della scuola primaria, secondaria e universitaria. Per indagare il feedback tra pari anche nel contesto dell'infanzia (0-6 anni), è stata condotta una revisione sistematica della letteratura per recuperare tutti gli studi disponibili sul fatto che il feedback possa supportare lo sviluppo nei bambini in età prescolare e anche se, e in che modo, possa supportare il loro apprendimento. I risultati hanno rivelato non solo una carenza di studi sul feedback tra pari nell'infanzia, ma hanno anche evidenziato che il termine più comunemente usato per riferirsi agli scambi tra bambini in questa fascia d'età è interazione e non feedback.

Parole chiave: feedback tra pari; interazione tra pari; scuola dell'infanzia; revisione sistematica

Credit author statement

1. Introduction

Childhood is recognized at national and international levels as a fundamental period of life for the formation of social relational structures and as a basis for individual development (Acar et al., 2015; Acar et al., 2017). Socialization is a continuous process that promotes linguistic, cognitive, and behavioral development (Tryphon & Voneche, 1998), contributing to the formation of the individual's personality and the acquisition of social rules (Mariani, 2021). This perspective, developed particularly by Vygotsky (2004) and Piaget (1970), today underpins numerous studies focused on social interaction and learning (Tenenbaum et al., 2020; Acar et al., 2017; Acar et al., 2015; Veiga et al., 2017; Stanton-Chapman, 2014; Wang et al., 2021).

A crucial component of peer interaction is feedback, understood as a continuous exchange of information that guides children in regulating their actions and understanding (Watzlawick, 1971; Hattie & Timperley, 2007). Effective feedback helps to compare performance with shared goals, understand progress, and plan next steps, often occurring spontaneously through verbal and non-verbal means such as comments, corrections, demonstrations, or emotional signals during play and collaborative activities. Watzlawick (1971) describes feedback as a circuit in which “event a produces event b, and then b produces c, and c in turn causes d, [...] and d can be traced back to a” (p. 24), emphasizing that in interpersonal systems “the behavior of each person influences and is influenced by the behavior of every other person” (p. 24). Such interactions can create relational disequilibrium, prompting children to review ideas and behaviors. According to Piaget, this stimulates them to go beyond their current state and explore new directions (Tenenbaum et al., 2020, p. 1315). Similarly, Vygotsky (2004) emphasizes that within the zone of proximal development, what children can do with the help of others better indicates their potential than what they can do alone.

The contexts in which children live play a fundamental role in shaping their identity, influencing their thinking and behavior and also conveying relationships and emotions. The context is not only a socio-cultural framework within which the individual process of knowledge construction develops, but also an action environment in which knowledge is generated (Castoldi, 2016, p. 28). According to Sizov (2023), “it is impossible to understand human thinking without considering the cultural environment and the cognitive resources it contains” (p. 42). In this perspective, Bronfenbrenner's (1986) ecological model highlights how cognitive, physical, and emotional development is influenced by context, in a circular process guided by bidirectional interactions between the individual and the environment.

Other authors have explored the concept of space: Ferreira (2018), drawing on Soja (1996), describes it as a reality composed not only of physical elements but also of social, ideological, and cultural dimensions. In general, the concept of space as a learning environment evokes the educational-school dimension. The classroom is considered a privileged environment where children can learn new knowledge, also through interaction with adults and peers. Preschool often represents the first main context in which children are exposed to heterogeneous social groups outside the family, requiring them to acquire and enhance social skills (Fabes et al., 2009).

From these reflections, we can affirm that children learn and develop thanks to interaction with others (adults, peers) and the surrounding environment. According to Vygotsky and Bruner, “it is culture that shapes human thinking” (Sizov et al., 2023, p. 42). From an educational perspective, it is therefore essential to reflect on the contexts in which children are situated and act in relation to others. Among the people with whom children interact most are teachers, generally seen as leaders of the social environment and facilitators of positive peer interactions (Farmer et al., 2011). A child, if supported and encouraged by the teacher, can develop cognitive, linguistic, social, and relational skills. The teacher provides support, and the student, supported in this way, acts in the context and develops (Wood et al., 1976; Bruner, 2001). As Sizov (2023) states, “the teacher assumes the role of a catalyst, becoming first among equals” (p. 45). Often the actions and communications implemented by the teacher influence the child's learning and socialization. It is therefore essential that teachers operate consciously, promoting a calm classroom climate that facilitates interactions among children. To this end, teachers can use various strategies, among which direct observation, as proposed by Stanton-Chapman (2015), is particularly notable.

Teachers play a crucial role in shaping the social ecology and learning environments by establishing and enforcing rules for peer interactions (Acar et al., 2017). Reflecting on their role as a presence that

supports and encourages the learning and social interactions of preschool children is therefore necessary. However, teachers are not the only agents involved in learning and socialization processes. Children's beliefs and behaviors are also strongly influenced by their peers. "Within the new childhood paradigm, peers and peer culture are important socializing agents that contribute to children's learning" (August, 2021, p. 532). The continuous verbal, paraverbal, and non-verbal exchange that occurs between children highlights the fundamental role of feedback as an element that supports childhood development.

The concept of feedback falls within a socio-constructivist perspective. Hattie and Timperley (2007) define it as "information provided by an agent (e.g., teacher, peer, book, parent, self, experience) regarding aspects of one's performance or understanding." According to the authors, feedback thus represents a tool through which the student can reduce the gap between current understanding and performance and the target, stimulating improvement in their learning.

In general, effective feedback must help the student understand their current status, remind them of the objective to be achieved, and provide instructions to move toward that objective. It is in this dimension that children can organize themselves autonomously, exchanging suggestions and actions to improve their learning process (Hattie & Timperley, 2007). According to Hattie and Timperley (2007), "feedback has no effect in a vacuum; to be effective, there must be a learning context to which feedback is addressed [...] Feedback is one of the most powerful influences on learning and achievement, but this impact can be either positive or negative" (pp. 81-82). To be effective, feedback must be "clear, purposeful, meaningful, and compatible with students' prior knowledge and provide logical connections. It must also prompt active information processing on the part of learners" (p. 104). It must also answer three main questions: Where am I going? How am I going? Where next? The effectiveness of feedback depends on the level at which it operates, "including the level of task performance, the level of understanding how to perform a task, the regulatory or metacognitive process level, and/or the self or personal level" (Hattie & Timperley, 2007, p. 86).

The role of feedback has been investigated by several authors. Boud & Molloy (2013), for example, consider it "a process whereby learners obtain information about their work in order to appreciate the similarities and differences between the appropriate standards for any given work and the qualities of the work itself, in order to generate improved work" (p. 6). In line with this view, Nigris and Agrusti (2021) also define feedback as "an ongoing message—that is, during the educational path and not at its conclusion, in a formative and not summative perspective—addressed by the teacher to the student" (p. 70). Bateson (1935) emphasizes that it is necessary to consider not only A's reactions to B's behavior but also how these reactions will influence B's subsequent behavior and the effect they will have again on A, confirming the importance of interdependence among individuals within the relationship. Exchange can occur between child and adult, adult and adult, and child and child. However, it is not only receiving feedback from peers that is advantageous but also producing it. Providing feedback to classmates activates processes of analysis, revision, integration, and re-elaboration of knowledge, with a significant impact on learning (Nicol, 2010).

The concept of feedback is closely linked to formative assessment. Sadler (1989) believes that this type of assessment is aimed at providing guidance to improve learning and generating feedback on student performance, bridging the gap between the current level and the previously established standard. It is possible to state that "understood in formative terms, assessment plays a fundamental role and is an integral part of teaching strategies as well as teacher professionalism" (Nigris & Agrusti, 2021, p. 5).

Empirical investigations into formative and learning assessment practices involving peer feedback and assessment processes in schools have built on much of the work carried out in various school and university contexts (e.g., Grion et al., 2018; Grion & Serbati, 2018; Restiglian & Grion, 2019), highlighting the positive effects of peer feedback on learning (Hattie, 2012).

In light of these findings, it is clear that the educational context, peers, teachers, and feedback generated and assimilated within social interactions constitute a fundamental resource for promoting learning processes in children.

2. The method

2.1 Objective

While on the one hand, there is well-known research on feedback in the context of primary and secondary schools and universities (for example Grion, et al., 2018; Grion & Serbati, 2018; Restiglian & Grion, 2019; Nicol, 2010), on the other hand, with this review of the literature, we also want to highlight a lack of studies on the role of feedback in childhood (0-6 years). Starting from this consideration and from the proposed theoretical framework, this review was carried out with the aim of investigating the role of feedback understood as significant reciprocal interaction, in educational contexts of childhood (0-6 years). In particular, we want to verify how much and how current literature addresses the concept of feedback in the preschool context, considering it as a possible tool to support learning. However, following an initial exploratory analysis conducted among the most common databases, it emerged that the term feedback was absent in the articles relating to the 0-6 age group, while the term interaction was frequently used. In order to make this review more complete and exhaustive, it was therefore decided to consider the term interaction as a valid synonym for feedback in the context of childhood. In this context, the concept of interaction was understood as “a reciprocal action or influence between two variables during which each undergoes a modification due to the effect of the other” (Galimberti, 2018, p. 500) and also as the space “in which the participants’ actions are interdependent such that each actor’s behavior is both a response to and stimulus for, the other’s behavior” (Rubin et al., 2015, p. 331).

Following this necessary clarification on the concept of interaction considered and starting from the previously presented investigation objective, the following research questions were formulated:

- RQ1. To what extent, and in what ways, do peer interactions among children aged 0–6 years contribute to learning processes according to the existing literature?
- RQ2. What are the educational and environmental factors that can affect the quality and frequency of peer interactions in preschool age?
- RQ3. How can teachers support or influence interactions between children in educational settings?

2.2 Identification of sources and content analysis

To answer the research questions, a systematic review of the literature was conducted (Ghirotto, 2020; Liberati, et al., 2015). The research was carried out between December 2023 and April 2024, through the consultation of the main academic databases: Google Scholar, Eric, Education Source, APA PsycInfo, and Scopus. In the initial phase, general terms such as “feedback” and “early childhood education” were considered, which however did not bring out the topic investigated. The articles identified, in this first phase, did not answer the research questions as they dealt with the concept of feedback in primary, secondary, and university schools, or analyzed it within a medical-health context. It was therefore necessary to narrow the search field by further specifying the key expressions used. The use of the Boolean operators AND, OR, NOT, was essential to further specify the field of investigation, selecting the terms to be used and excluding others from the search. The search string used was: “peer interaction*” or “peer feedback*” and “early childhood education” and kindergarten* not primary school*, not secondary school*, not university*.

The review was conducted by applying exclusion criteria related to the publication period, the language, and the availability of the full-text format. The consultation and use of the articles present in the databases were possible thanks to the access granted by the University of Padua. The research published from 2014 to 2024, in English and/or Italian and accessible in full-text format, was taken into consideration.

Following the specification of the terms and the introduction of the Boolean operators, 44,356 searches were found. After excluding the studies not accessible in full-text format and inserting the time period (2014-2024), 5,262 results were obtained. Finally, considering only the searches in English and/or Italian, 5,030 selected articles were obtained. In the Scopus and Google Scholar databases, it was not possible to automatically insert the full-text criterion, but by doing a general check it was possible to download the

full-text format of only 10 articles in Scopus and 55 articles in Google Scholar. Furthermore, in Google Scholar, it was not even possible to insert the language criterion.

In the second phase, to better contextualize the focus of the research, additional thematic filters were applied, different for each database, based on the features offered. From this process, 662 total articles were identified. Through reading the abstracts, we continued to consider only the articles pertinent to the investigated theme, and therefore 57 articles were identified. Finally, through reading the full texts, only the studies that proposed reflections and/or empirical research carried out around the theme of feedback/interaction in childhood were considered.

The final review process led to the consideration of 16 articles, deemed useful for the research purposes. The selection process in the flow diagram of the studies included in the review is proposed in figure 1.

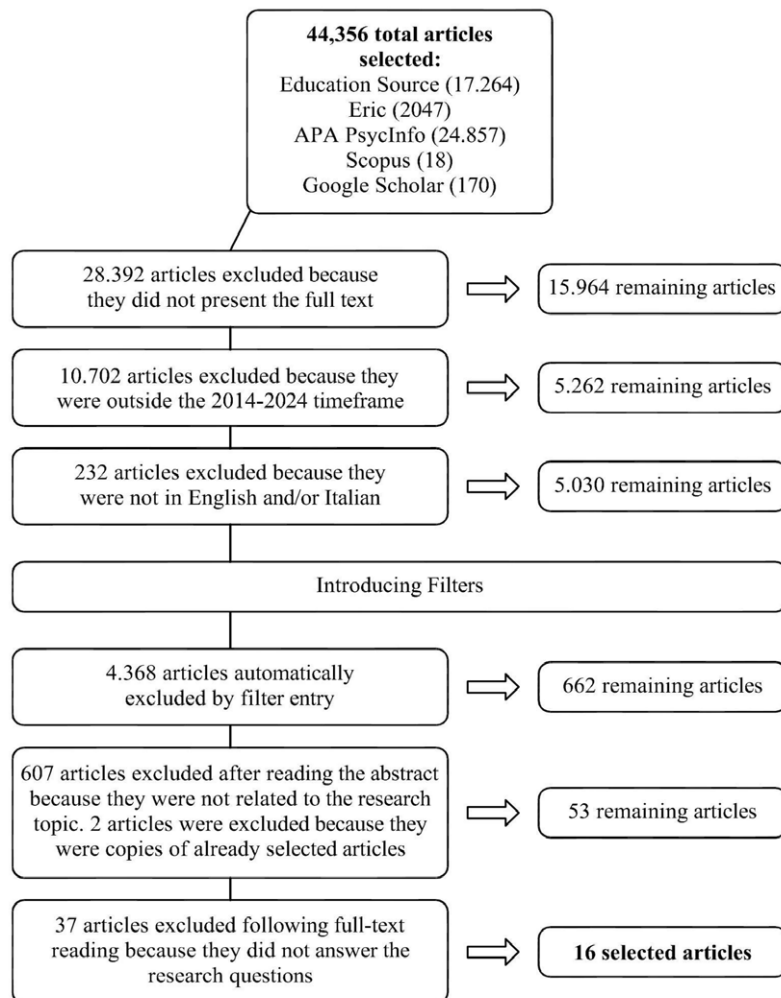


Fig. 1: Flow diagram of the studies included in the review (Ghirotto, 2020)

The 16 articles selected for the review (Table 1) were analyzed with a qualitative approach with respect to their content and the possibility of answering one or more research questions.

Below is Table 1 including all the articles selected for the review and divided by title, author(s), year of publication, country of origin, language of publication, keywords, research context, and type of study.

Title	Author(s)	Country of origin / Language of publication	Context of Research	Type of study
How Effective Is Peer Interaction in Facilitating Learning? A Meta-Analysis	Tenenbaum, H. R., Winstone N. E., Leman, P. J., & Avery, R. (2020)	United Kingdom / English language	This meta-analysis examined the results of 62 articles with 71 peer interaction studies involving participants aged between four and eighteen years	Mixed
Social Information Processing in Preschool Children: Relations to Social Interaction	enol, F. B., & Metin, E. (2021)	Turkey / English language	Childhood (children aged between 60 and 72 months)	Quantitative
Examining the role of teacher presence and scaffolding in preschoolers' peer interactions	Acar, I. H., Hong, S. Y., & Wu, C. (2017)	USA / English language	Childhood (children between four and five years old, their parents and teachers)	Qualitative
Conversation and learning in early childhood education: what works best for children's cognitive development and how to improve pupil engagement?	Vezzani A. (2019)	Italy/ English language	Childhood (children between three and five years old)	Qualitative
Children's Perspectives on Their Learning in School Spaces: What Can We Learn from Children in Brazil and Finland?	Ferreira, J. M., Karila, K., Muniz, L., Amaral, P. F., & Kupiainen, R. (2018)	Brazil & Finland / English language	Childhood (children between three and five years old)	Mixed
Peer Interaction Patterns in Mixed-Age and Same-Age Chinese Kindergarten Classrooms: An Observation-based Analysis	Wu, J., Lin, W., & Ni, L. (2022)	China / English language	Childhood (children between three and six years old)	Quantitative
Promoting Positive Peer Interactions in the Preschool Classroom: The Role and the Responsibility of the Teacher in Supporting Children's Sociodramatic Play	Stanton-Chapman, T.L. (2014)	USA / English language	Childhood (children of preschool age)	Informative, qualitative article
Peer Collaboration of Six-year olds when Undertaking a Design Task	Yliveronen, V., Marjanen, P., & Seitamaa - Hakkarainen, P. (2018)	Finland / English language	Childhood (children of six years old)	Qualitative
An Ethnographic Approach to Peer Culture in A Turkish Preschool Classroom	Yanık, B., & Ya ar, M. (2018)	Turkey / English language	Childhood (children of preschool age)	Qualitative
Peer instruction: An evaluation of its theory, application, and contribution	Gok, T., & Gok O. (2017)	Turkey / English language	Childhood and beyond (Systematic review of 92 studies on peer education)	Qualitative
Social Competence at the Playground: Preschoolers during Recess	Veiga, G., De Leng, W., Cachucho, R., Ketelaar, L., Kok, J., Knobbe, A., Neto, C., & Rieffe, C. (2017)	Portugal / English language	Childhood (children between four and six years old)	Qualitative
Temperament and Preschool Children's Peer Interactions	Acar, I.H., Rudasill, K. M., Molfese, V., Torquati, J., & Prokasky, A. (2015)	USA / English language	Childhood (children between three and five years old)	Mixed
Examining individual children's peer engagement in pre-kindergarten classrooms: Relations with classroom-level teacher-child interaction quality	Taylor, M., Alamos, P., Turnbull, K., LoCasale-Crouch, J., & Howes, C. (2021)	USA / English language	The study uses a sample of 714 children from 214 classrooms collected within the framework of the National Centre for Professional Research on Early Childhood Education	Mixed

Indirect Socialization in Preschool: How Teachers Harness Children's Ability to Shape Peer Behavior	August, A. (2021)	USA / English language	Childhood (children between three and four years old)	Qualitative
Together with my playmates: Preschoolers' peer relationships and interactions in small group settings	Wang, Y.-L., Kajamies, A., Hurme, T.-R., & Palonen, T. (2021)	Finland / English language	Childhood (children between five and six years old)	Mixed
Children in Peer Groups	Rubin, K., Bukowski, W., & Bowker, J. (2015)	USA & Canada / English language	Literature review on children's interactions, relationships and peer groups	Qualitative

Tab. 1: Studies included in the review

3. Results

The 16 articles considered differ in type. They include: a meta-analysis, informative-popular character, literature review, and observational-participatory research. All articles are written in English and the contexts of origin are European, American, and Asian. The articles considered refer to the context of childhood and explore the concepts of peer interaction, child-teacher interaction, and social competence. The qualitative analysis of the articles considered allowed us to answer (at least in part) the three research questions.

3.1 To what extent, and in what ways, do peer interactions among children aged 0–6 years contribute to learning processes according to the existing literature?

The selected articles agree that children actively participate in their own learning (Tunstall & Gipps, 1996) and that they learn more through interaction with others, especially if inserted in a stimulating and challenging context (Tenenbaum et al., 2020; Taylor et al., 2021). Social interaction implies children's ability to develop social skills such as the shared construction of meanings and rules, the exchange of points of view, empathy, and awareness of the existence and uniqueness of the other. The process of building social skills among children is therefore supported through social interaction and the exchange of feedback/information. “The total amount of time spent interacting, or the duration of these interactions with peers, might also affect the development of children's social skills” (Veiga et al., 2017, p. 3).

The selected studies recognize peer interaction as a fundamental element in promoting learning in childhood, arguing that children who are not very involved in peer interactions risk losing precious learning opportunities with a greater risk of developing maladaptive social behaviors (Taylor et al., 2021).

Peer interaction in preschool age can be considered a process of mutual influence through verbal and non-verbal modalities (Li, 2011). It is within the relationship that children “have the opportunity to be both an expert and a learner, developing and refining their understanding of themselves, their peers, and classroom activities. Children learn from peers in a variety of ways including by responding to their behavior, through direct teaching, or by helping” (Taylor et al., 2021, p. 332). In this perspective, peer interaction is considered necessary because it influences children's social, cognitive, and emotional development (Baker-Sperry, 2007; Rubin et al., 2011; Wang, 2021).

McDevitt & Ormrod (2004, cited in Yanik & Ya a, 2018, p. 489), support the importance of peer relationships in everyone's life and how useful they are for consolidating social skills, socialization, and self-esteem. “Positive peer interactions can help children gain a sense of belonging and security, thus promoting their social communication skills (Ryan, 2012) and psychological adaptability (Boivin, 2005)” (Wu et al., 2022, p. 542). The research by Tenenbaum et al., (2020), highlights that children involved in peer interaction show greater learning than others. The study analyzed 62 articles (71 studies) on peer interaction, with 7,103 participants aged 4 to 18 years. The results showed that children working in peer groups out-

performed children working individually (Wu et al., 2022). Furthermore, there were no significant differences related to the age of the children, which suggests that children of all ages can benefit from peer interaction (Wu et al., 2022), of course in different ways depending on their age.

3.2 What are the educational and environmental factors that can affect the quality and frequency of peer interactions in preschool age?

Although studies show that peer interaction can support individual learning, the conditions in which this occurs depend on various factors, both personal and non-personal. The study by Chen et al. (2006, cited in Stanton-Chapman, 2014), argues that:

When a child enters a social interaction with another child, he or she brings with them a history of positive and negative social encounters, a preferred pattern for interactions, and temperament characteristics. Culture may influence the display of these personality traits and the way they contribute to adaptive or maladaptive functioning in social interaction (p. 102).

Culture is not the only factor that influences peer interactions, in the study by Acar et al. (2015), the connection between children's temperament and the possibility of building social interactions is emphasized, while in the study by Wang et al. (2021), the idea that emotional aspects can influence the structuring of peer interactions is supported. According to Johnson et al. (2000 cited in Wang et al., 2021), mutual sympathies between children can favor the emergence of positive social interactions and consequently can be decisive in emotional development and in the formation of social competence, “just as peer acceptance is associated with positive social and emotional interactions, peer rejection relates to negative social and emotional interactions” (p. 2).

Yliverronen et al. (2018) also highlight that interaction between children can also occur in the absence of verbal communication.

In kindergarten, collaborative action between children usually happens in informal situations, such as play, frolic, and games, where children must negotiate game rules. [...] Group members can express their feelings freely, challenge peers' opinions, and justify their points of view. Shared understanding is usually created through language, but [in this age group] communication might also be non-verbal (Yliverronen et al., 2018, p. 4).

Similarly, the study by Enol & Metin (2021), conducted on children aged between 60 and 72 months, highlights that in addition to verbal skills, children's ability to interact with peers depends on their ability to process social information. The age variable is also influential, Wu et al. (2022), found that older children (six years old) have more numerous and longer interactions than those established by younger children (three years old). Furthermore, among the results, it also emerged that classes with children of mixed ages had interactions with a longer duration than those with children of the same age.

Children's interactions with peers naturally also depend on the type of activity that will be carried out (free or structured), the environment in which it will take place (indoor or outdoor), and who manages the activity itself (children or teachers), (Acar et al., 2015). Furthermore, “interactions can have many characteristics (e.g., they can be short or enduring, balanced or imbalanced) and they may vary in their content” (Rubin et al., 2015, p. 331). “Peer interactions serve a variety of purposes for children including: participating in play opportunities with peers, learning how to share and problem-solve during play, providing and implementing play ideas with peers, and taking on roles within play” (Stanton-Chapman, 2014, p. 99).

Another element that can affect the development of peer interactions is represented by physical space. The environments in which children are inserted have an important effect on the nature of their relationships and their games (Veiga et al., 2017). With adequate support and control, kindergarten classrooms can become “potentially fruitful contexts for children to hone their ability to initiate and sustain positive peer interactions as they engage in play or in small work groups oriented toward academic tasks (Taylor et al., 2021, p. 331). The classroom therefore becomes a privileged place where children can experiment

and experiment with themselves as active agents of their development. In this protected and circumscribed space, it becomes possible for children to interact with materials, with peers, and with adults, thus experimenting with different methods of interaction. The classroom becomes not only a learning space but also a place where it is possible to practice and develop one's social skills. It is within an educational space such as kindergarten that feedback, understood as that information provided or received that concerns performance aspects (Hattie & Timperley, 2007), can be most developed. It is in this period of life that relational exchanges between children become progressively more structured and significant. "the years [spent in kindergarten] are marked by increasingly complex social interactions" (Taylor et al., 2021, p. 332).

Exchanges between children can be increased in educational contexts by building a positive climate based on trust, mutual respect, and a redesign of learning spaces (Gordy et al., 2020).

Finally, the adoption of collaborative and laboratory methodologies represents a relevant factor in promoting peer interactions. The study by Michinov et al. (2015, cited in Gok & Gok, 2017) highlights that peer instruction is "based on a social constructivist approach to learning, in which social interaction plays a crucial role in the construction of knowledge, and where discussion and collaboration between peers have a positive impact on learning".

Group work is one of the most important and commonly used teaching techniques in active learning spaces (Baepler et al., 2014; Beichner et al., 2000; Dori & Belcher, 2005; Gordy et al., 2018). "Having students work in groups increases peer interaction, promotes the generation of varied ideas, develops collaboration and critical thinking skills, and fosters learner accountability" (Hansen, 2006; Harmer, 2007; Scrivener, 2011) (in Gordy et al., 2020, p. 42).

3.3 How can teachers support or influence interactions between children in educational contexts?

The teacher is a fundamental figure for the child, supports his development, encourages his autonomy, and facilitates his interactions with others and with the world by placing himself in a position of active, empathetic, and collaborative listening. To effectively carry out this function, the teacher must know how to intentionally and consciously observe what happens around him. Observation, in fact, represents a fundamental tool for knowing the child and grasping his strengths and any weaknesses (Jablon et al., 2007). However, it is not only through observation that the teacher becomes a facilitator of experiences for children, but also through language and communication. Vezzani (2019), identifies four communication modes that the teacher can use during the day: ritual conversation, the introduction of new knowledge, evocation of shared knowledge, and narrative context/storytelling. These forms of communication support children's participation and relational dynamics. In parallel, Stanton-Chapman (2014) argues that there are different communication methods that teachers can implement in the educational relationship and summarizes them in the concept of "teacher talk" or "a form of support that educators can use to enhance peer interactions and play" (p. 103).

Through observation and communication, the teacher collects useful information to promote successful peer interactions. Taylor et al. (2021) highlight that when teachers are actively engaged, they are able to create environments that are favorable to high levels of engagement. Teachers, through their intentional practices, offer personalized support to children's learning and development and intentionally create a positive classroom climate (Taylor et al., 2021). In this context, teachers have a dual function: on the one hand, they are invested in educational responsibility; on the other, they can influence children's behavior in their peer interactions. In a qualitative case study, August (2021), found that teachers encourage children to model others' behavior in ways they consider appropriate for the classroom, "their teachers introduce, model, and encourage three increasingly sophisticated peer-influence strategies for the children to apply independently and collectively: simple communication strategies, generalized exclusion strategies, and selective inclusion strategies" (August, 2021, p. 529).

The idea that children reproduce in their interactions with their peers, behaviors, and cultural constructs learned and assimilated from the relationship with reference figures (parents, teachers) is widely recognized. The child is an active recipient of the teacher's feedback (Havnes et al., 2012), it, therefore, becomes of fundamental importance to understand how "the teachers, recognizing their students' agency and influence, use the greater authority of their social role to shape the power dynamics of child peer relationships"

(August, 2021, p. 533). Understanding this is particularly important because socialization and school interaction are directly linked to the social dimension and can contribute to the reproduction or reduction of existing social inequalities (August, 2021). Farmer et al. (2011), introduce the concept of the “invisible hand” to describe the potentially influential, but relatively little studied, contribution that teachers have on children's peer relationships and on their broader interpersonal growth. The authors attribute two roles to teachers: that of authority over the rules of society and expectations for social behavior and that of facilitator of social interactions. In their analysis, they identify four areas in which, according to the authors, teachers can have an impact on the ecology of peers: student-teacher relationships; fostering supportive and productive general classroom climates; developing and utilizing knowledge of social dynamics to augment academic instruction and classroom behavior management; scaffolding the social opportunities and activities of students to correspond with their developmental abilities and needs (Farmer et al., 2011). In conclusion, the contribution of Farmer et al. (2011) reinforces the idea of the teacher as the only professional in the life of a child capable of seeing him in his entirety and understanding his areas of functioning in relation to the social ecology in which he is inserted.

4. Discussion and conclusion

This work was undertaken with the aim of investigating the role of feedback understood as significant reciprocal interaction, in educational contexts of childhood (0-6 years). Paying particular attention to how much and how current literature addresses the concept of feedback in the preschool setting, considering it as a possible tool to support learning. Through an exploratory phase conducted on scientific databases, a lack of studies relating to the topic of peer feedback in kindergarten emerged. Furthermore, it was noted that in literature, the term most used to indicate exchanges between children in this age group is that of interaction and not feedback.

Despite this, the review highlighted that peer interaction, understood in this study also as feedback, can be a useful tool to support children's learning. It is in fact through interaction that children develop their cognitive, linguistic, and social skills, and through influence and exchange with others, they can modify their practices and their being.

The studies considered in this review recognize that social interaction between children can support learning, but this can only occur under certain conditions. In fact, there are some factors that influence the possibility of structuring social interactions between peers and that can consequently hinder the learning process. It is not only teachers or peers who influence the development of the child but also the context itself and the culture in which each of us is inserted that determines and influences the growth of the individual.

A further element that emerged from the review is the role that physical space plays in children's learning. Educational-school contexts are real gyms of interaction, they are privileged places where children can practice producing and exchanging feedback. School is the place where the individual's abilities to initiate and sustain positive interactions with classmates are refined. Receiving but above all giving, feedback in a safe, protected, and circumscribed context allows children to act and interact with others in an active and participatory way.

The teacher is a fundamental figure in the school context, as he or she becomes a facilitator of interactions between peers. Thanks to its intentional action and the numerous skills it brings into play in the educational relationship, it can promote successful peer interactions and support children's development.

Conducting research inevitably involves making methodological choices. Each step of this review involved decisions that influenced the results obtained. Different choices in the various steps would have led to different outcomes. However, we tried to ensure transparency and systematicity in the review to limit critical issues and biases in the interpretation of the evidence.

Despite the limited number of studies collected, this systematic review sought to provide a general overview of the topic of peer feedback in childhood. At the same time, it highlighted the lack of current literature (national and international) with respect to this important topic.

In light of these considerations, it is essential to further explore the concept of feedback, especially related to learning, and the way in which it can be valued and used in educational practices by teachers.

It is hoped that further research can be undertaken to further investigate the role of feedback in preschool age and its effectiveness for the development of learning, as well as to enrich the professional repertoire of the teacher, especially with regard to the observation of children.

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