

A Process-Oriented Framework of Moral Development in Early Childhood Collaborative Learning: A Structured Literature Review

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ABSTRACT : Moral behaviour in early childhood represents a crucial dimension of holistic development; however, the processes through which it is formed remain insufficiently articulated, particularly in light of children's still-developing capacities for self-regulation and reflection. While collaborative learning is widely acknowledged for enhancing social and cognitive competencies, its contribution to moral development is often taken for granted rather than critically examined. This study seeks to explore how collaborative learning supports the emergence of moral behaviour in early childhood education through a structured literature review guided by PRISMA principles. The findings suggest that moral development does not arise automatically from participation in collaborative activities, but is shaped through three interconnected processes: social interaction, which introduces children to multiple perspectives; negotiation and regulation, which enable them to manage differences and adjust behaviour; and reflective internalisation, through which social experiences are gradually integrated into personal moral understanding. Based on these insights, the study proposes a process-oriented conceptual framework that explains how moral behaviour is constructed within collaborative learning contexts. The study offers a theoretical contribution by questioning assumptions of automatic moral development and by providing a conceptual basis for understanding how moral learning unfolds in socially mediated environments.

Key words: Collaborative Learning, Moral Behavior, Early Childhood Education, Social interaction
reflective internalisation

INTRODUCTION

Moral behaviour in early childhood represents a key dimension of holistic development. During this period, children gradually begin to form an understanding of core values such as fairness, responsibility, empathy, and respect for others. Foundational theoretical perspectives, particularly those advanced by Piaget (1968) and Kohlberg (1982), suggest that moral development unfolds through active participation in social contexts. Within this view, children construct moral understanding through

interaction and lived experiences, rather than through passive reception of rules or instruction.

Despite its importance, moral education in many educational settings continues to rely on traditional approaches that emphasise direct instruction and the transmission of rules, often limiting opportunities for active engagement, dialogue, and moral meaning-making (English, 2016; Hildebrandt, 2014; Othman & Mazlan, 2026; Schuitema et al., 2008) Such approaches tend to position children as passive recipients of moral knowledge, thereby constraining opportunities for meaningful engagement and internalisation. As a result, moral understanding may remain superficial and may not be consistently reflected in children's actual behaviour in social contexts.

To address these limitations, recent perspectives in educational theory place strong emphasis on the role of social interaction in the learning process. From a socio-constructivist standpoint, knowledge is not transmitted directly but is gradually built through dialogue, shared experiences, and engagement with others. Vygotsky(1978a) highlights that learning is fundamentally shaped by socially mediated activity within meaningful contexts, an idea that is further reinforced by sociocultural approaches which stress the importance of participation and guided interaction in shaping understanding (Cong-Lem, 2022; Lai, 2023; Mercer & Howe, 2012; Wheaton et al., 2024). Within this framework, collaborative learning has emerged as a promising pedagogical approach, as it actively engages learners in group processes involving communication, cooperation, and joint problem solving (Jeong & Hmelo-Silver, 2016; Johnson & Johnson, 2009; Wang & Wu, 2022; Zhou & Colomer, 2024). These processes provide opportunities for children to encounter diverse perspectives, negotiate meanings, and develop shared understandings.

A substantial body of literature has highlighted the contribution of collaborative learning to both cognitive growth and social development (Asri et al., 2025; Isohätälä et al., 2020; Kusumaningsih & Sun, 2025; Liu, 2025). In addition to these well-established outcomes, more recent research points to its potential in fostering social and prosocial behaviours through interaction and shared engagement (Daroglou et al., 2026; Killen & Smetana, 2014; León-García et al., 2025; Segundo-Marcos et al., 2022; Van Ryzin et al., 2020). Despite this growing evidence, much of the literature remains oriented toward academic performance, problem-solving abilities, and broad social competencies. In comparison, relatively little attention has been directed toward examining how collaborative learning contributes specifically to the development of moral behaviour, particularly within early childhood education contexts.

Furthermore, collaborative learning is often implicitly assumed to produce positive social and moral outcomes. However, interaction within groups does not

automatically lead to moral behaviour. Empirical studies suggest that, without appropriate structure and facilitation, collaborative settings may give rise to undesirable behaviours such as dominance, exclusion, or unequal participation (Curseu et al., 2017; Iqbal et al., 2016; Le et al., 2018; Strauß & Rummel, 2021; Tolmie et al., 2010). This suggests that the link between collaborative learning and moral development is multifaceted and calls for a more in-depth examination of the processes involved .

Based on these considerations, a clear research gap emerges. While collaborative learning has been widely studied, there is still a lack of process-oriented explanations that clarify how specific interactional dynamics within collaborative environments contribute to the development of moral behaviour. In particular, there is limited conceptual integration between collaborative learning processes and key dimensions of moral development in early childhood.

To respond to this gap, this study utilises a structured literature review to explore the mechanisms through which collaborative learning contributes to moral behaviour. The analysis identifies three interconnected processes social interaction, negotiation and regulation, and reflective internalisation as key pathways shaping how children construct, negotiate, and internalise moral values in collaborative settings.

Building on this rationale, the study aims to formulate a conceptual framework that elucidates the processes through which collaborative learning facilitates the development of moral behaviour in early childhood education.

METHOD

This study adopts a structured literature review to explore how collaborative learning relates to the development of moral behaviour in early childhood education, drawing on key principles of the PRISMA framework (Page et al., 2021) to guide the review process. Instead of conducting a fully systematic review, this approach is intended to ensure a clear and traceable procedure for selecting and analysing relevant studies, while retaining flexibility to incorporate both conceptual and empirical contributions.

Relevant studies were identified through a search of major academic databases, including Scopus, Web of Science (WoS), ERIC, and ScienceDirect, to ensure comprehensive coverage across the fields of education, psychology, and early childhood research. The search strategy involved the use of combined keywords such as “collaborative learning,” “cooperative learning,” “moral development,” “prosocial behaviour,” and “early childhood education,” with Boolean operators applied to narrow and refine the results.

To maintain both relevance and academic rigor, only peer-reviewed journal articles published in English within the last ten years were included. In addition, a

number of key foundational studies were incorporated to provide a stronger theoretical basis for the analysis (Snyder, 2019).

The study selection followed a staged filtering process. At the outset, the retrieved records were organised, after which duplicate entries were identified and removed. Next, an initial screening of titles and abstracts was conducted to remove studies that did not address collaborative learning or moral-related dimensions. The remaining articles were then examined in detail through full-text analysis to verify their relevance to the study's focus. Articles that met the preliminary criteria were further evaluated through full-text review, resulting in a final set of studies included in the analysis.

A total of 45 records were identified, with 5 duplicates removed, resulting in 40 studies screened. Of these, 22 articles were assessed in full, and 14 studies were included in the final analysis. The study selection process is depicted in Figure 2 and provides a clear and traceable basis for the inclusion of relevant literature.

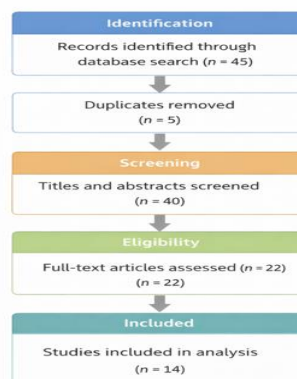


Figure 2. PRISMA-inspired flow diagram of the study selection process

The selected studies were analysed using thematic analysis (Braun & Clarke, 2006), involving iterative stages of coding, categorisation, and theme development. Through this process, three central mechanisms were identified as linking collaborative learning to moral behaviour: social interaction, negotiation and regulation, and reflective internalisation. These themes were subsequently synthesised to develop a conceptual framework explaining how moral behaviour is constructed within collaborative learning contexts.

To support the trustworthiness of the result the review process was conducted systematically using clearly defined selection criteria and multiple data sources. However, as the study does not constitute a fully systematic review, it may not capture all relevant literature. The findings should therefore be understood as providing a theoretically informed and process-oriented perspective rather than a comprehensive empirical generalisation.

RESULTS AND DISCUSSION

The analysis of the selected studies suggests that the relationship between collaborative learning and moral behaviour is more complex than commonly assumed. Rather than emerging directly from participation in group activities, moral development appears to be shaped by specific interactional and regulatory processes within the learning environment. In early childhood contexts, where social and cognitive capacities are still developing, collaborative engagement alone is insufficient to ensure meaningful moral outcomes. Instead, the findings indicate that developmental gains are contingent upon how interaction is structured, supported, and sustained (Gillies, 2016; Järvelä & Hadwin, 2013; Sawyer, 2022b).

Through thematic analysis, three interrelated mechanisms were identified: social interaction, negotiation and regulation, and reflective internalisation. These mechanisms represent a developmental progression consistent with sociocultural and constructivist perspectives, in which children engage in social experiences, negotiate meanings and norms through peer interaction, and gradually construct internalised moral understanding through reflective processes.

Social Interaction as the Basis for Moral Awareness

Social interaction serves as the initial entry point for moral development in collaborative learning contexts. The reviewed studies consistently show that peer interaction creates opportunities for children to encounter different perspectives, which is essential for developing empathy and perspective-taking (Gillies, 2023; Hennessy et al., 2016, 2018; Howe & Abedin, 2013; Mercer & Littleton, 2007; Piaget, 1968; Vygotsky, 1978b). These early social experiences enable children to recognise that others may think and feel differently, laying the foundation for moral awareness.

However, a closer analysis reveals that not all forms of interaction are equally effective. In early childhood contexts, peer interaction may remain surface-level and focused on task completion or parallel activity rather than meaningful engagement. Studies show that children may display disconnected or disruptive interaction patterns, limiting opportunities for perspective-taking and empathy development (Cohen & Mendez, 2009; Ferreira, 2023; Forget-Dubois et al., 2009; Järvelä et al., 2016). This limits the potential for moral learning. In contrast, intentionally structured interactions, such as guided play, scaffolding, and teacher supported peer engagement, promote deeper interaction, perspective-taking, and prosocial behaviour (Gillies, 2016; Lev Vygotsky, 1978; Rogoff, 1990). Therefore, the quality of interaction rather than mere participation is critical for supporting moral development in early childhood learning environments.

This finding implies that social interaction constitutes a necessary condition, but by itself does not adequately account for moral development in early childhood. In

young children, merely engaging in peer interaction does not automatically lead to meaningful moral learning, as interactions may remain parallel, fragmented, or dominated by certain individuals. The effectiveness of interaction depends largely on its quality, including the extent to which it promotes perspective-taking, empathy, and mutual engagement (Brownell et al., 2013; Denham et al., 2012). Furthermore, research in learning sciences and collaborative learning emphasises that productive interaction requires intentional pedagogical design, such as guided participation, structured roles, and teacher scaffolding (Dillenbourg, 1999; Sawyer, 2022a). In early childhood settings, such support is particularly crucial, as young learners rely on adult mediation to transform social experiences into meaningful moral understanding (Rogoff, 1990).

Negotiation and Regulation as Drivers of Moral Reasoning

The second mechanism highlights the importance of negotiation and regulation in shaping moral behaviour. Collaborative learning frequently involves situations in which differences in opinions, goals, or approaches emerge. These situations require children to negotiate meaning, resolve disagreements, and regulate their behaviour in response to others (Howe & Abedin, 2013; Lev Vygotsky, 1978; Piaget, 1932). From a developmental perspective, these processes are critical, as they create opportunities for the emergence of early moral reasoning. When young children are encouraged to explain their ideas, justify their choices, and consider alternative viewpoints, they begin to move beyond egocentric thinking toward more socially oriented reasoning (Kuhn, 2015; Mercer & Littleton, 2007). At the same time, regulation involves managing emotions and behaviours to maintain positive interaction, which is integral to the development of self-regulation, responsibility, and prosocial behaviour in early childhood. (Denham et al., 2012; Whitebread et al., 2009).

Nevertheless, the findings also reveal a potential limitation. In early childhood collaborative contexts, negotiation processes do not always occur equitably. Young children often display differences in language ability, confidence, and social competence, which can lead to situations in which more assertive children dominate interactions while others remain passive or marginalised (Fantuzzo et al., 2004; Justice et al., 2010; Whitebread et al., 2009). Such imbalances reduce opportunities for shared participation and limit the development of perspective-taking and moral understanding. Empirical research further indicates that without appropriate guidance, peer interaction in early childhood settings may remain unbalanced and fail to support meaningful dialogue or mutual regulation (Gonzalez et al., 2011; Mashburn et al., 2008).

Therefore, the role of structure and facilitation becomes crucial in ensuring that negotiation contributes positively to moral development. Evidence from collaborative learning research in early childhood education indicates that scaffolding provided by

teachers, along with guided interaction and intentionally structured participation, is essential for fostering equitable engagement and productive negotiation (Gillies, 2016; Järvelä & Hadwin, 2013). From a sociocultural perspective, such support aligns with the concept of guided participation, where adult mediation helps children engage more effectively in shared activities and gradually develop the capacity for self-regulation and socially responsible behaviour (Rogoff, 1990).

Reflective Internalisation and the Consolidation of Moral Values

Reflective internalisation is the stage at which external social experiences are gradually transformed into internal moral understanding, particularly in early childhood. While interaction and negotiation occur at the interpersonal level, reflection enables young children to interpret these experiences, make sense of social situations, and connect them to emerging moral values (Rogoff, 1990; Vygotsky, 1978b). In early childhood, this process is often supported through guided reflection, such as teacher questioning, discussion, and shared meaning-making activities.

The analysis indicates that reflection plays a decisive role in determining whether collaborative experiences lead to genuine moral development or remain at the level of behavioural compliance. Without opportunities for reflection, young children may follow rules or conform to group norms without fully understanding their moral significance (Diamond, 2013; Whitebread et al., 2009). In contrast, reflective processes encourage children to evaluate their actions, consider consequences, and progressively strengthen their sense of responsibility and ability to self-regulate (Denham et al., 2012; Díez-Palomar et al., 2021).

Importantly, reflective processes in early childhood do not always occur spontaneously. Young children often lack the cognitive and metacognitive capacity to independently reflect on their experiences and therefore require intentional support to engage in meaningful reflection. Such support may take the form of guided questioning, teacher feedback, and structured dialogue that helps children articulate their thoughts and consider the perspectives of others (Denham et al., 2012; Whitebread et al., 2009). From a sociocultural perspective, reflection is mediated through social interaction, in which more knowledgeable others play a crucial role in scaffolding children's understanding and helping them connect experiences to underlying moral meanings (Rogoff, 1990; Vygotsky, 1978b). This highlights that reflective internalisation is not merely an individual cognitive process, but is also shaped by the design of the learning environment. Research in learning sciences further emphasises that structured learning environments characterised by intentional pedagogical design, guided interaction, and opportunities for reflection are essential for supporting deeper understanding and the consolidation of moral values (Díez-Palomar et al., 2021; Sawyer, 2022b).

Integrated Discussion: Beyond the Assumption of “Automatic Morality”

Overall, the findings indicate that the relationship between collaborative learning and moral development in early childhood is shaped by mediating processes and contextual factors, rather than following a simple or deterministic pattern. In young children, collaborative activities do not automatically result in positive moral outcomes, as their participation is shaped by emerging social, emotional, and regulatory capacities. Collectively, the findings point to a complex and context-sensitive relationship between collaborative learning and moral development in early childhood, characterised by mediated processes rather than linear causality. This interpretation aligns with research in the learning sciences, which emphasises that collaborative learning operates through complex processes of interaction, shared regulation, and emotional engagement that influence developmental outcomes (Järvelä & Hadwin, 2013; Sawyer, 2022b). This perspective challenges the dominant assumption that collaborative learning inherently promotes prosocial and moral behaviour. Instead, empirical studies in early childhood contexts indicate that such outcomes depend on the quality of interaction, the presence of guided and shared regulation, and the intentional design of learning environments (Denham et al., 2012; Gillies, 2016). Without these supports, interaction may remain superficial, unbalanced, or task-oriented, limiting opportunities for empathy, perspective-taking, and moral meaning-making (Justice et al., 2010; Mashburn et al., 2008).

From this perspective, the mechanism of social interaction highlighted in this study may be interpreted as a developmental foundation for socio-emotional competencies in early childhood. When interaction is meaningful, reciprocal, and supported by adult mediation, collaborative contexts can foster empathy, the capacity to engage with and understand diverse perspectives, and prosocial understanding (Denham et al., 2012; Forget-Dubois et al., 2009). However, when interaction is superficial or dominated by a few individuals, its contribution to moral development is limited, reinforcing the importance of structured facilitation and pedagogical support (Gillies, 2023; Rogoff, 1990).

Moreover, negotiation and regulation within early childhood collaborative learning can be conceptualised in terms of co-regulation and socially shared regulation of learning. Given that young children’s regulatory capacities are still emerging, these processes often rely on external support to help them manage emotions, coordinate perspectives, and establish shared goals. Empirical studies highlight that these forms of regulation are central to how children engage in collaborative activity, navigate conflict, and co-construct meaning (Järvelä & Hadwin, 2013; Winne, 2006). Without such regulatory support, collaborative interaction in early childhood may result in unequal participation,

dominance, or passive compliance rather than meaningful moral reasoning (Gillies, 2016; Justice et al., 2010). The importance of reflective internalisation also resonates with contemporary research highlighting the role of reflection and emerging metacognition in early moral and character development. In early childhood, reflective processes are often scaffolded through adult mediation, dialogue, and guided questioning, which help children interpret their social experiences and connect them to broader moral meanings (Diamond, 2013; Justice et al., 2010) Through such processes, children gradually transform external social interactions into internalised values, bridging the gap between observable behaviour and underlying moral understanding (Lev Vygotsky, 1978; Rogoff, 1990).

By integrating these perspectives, this study advances a process-oriented framework that connects collaborative learning with moral development through interaction, regulation, and reflection. This contribution extends existing research by not only identifying the potential benefits of collaborative learning but also explaining the mechanisms through which moral behaviour is constructed in early childhood contexts. Importantly, the findings highlight that collaborative learning is not inherently moral. Its effectiveness depends on intentional instructional design that supports meaningful interaction, equitable participation, and reflective engagement. This reinforces the need for educators in early childhood settings to move beyond simply implementing group work toward designing structured collaborative environments that explicitly foster moral development (Gillies, 2016; Sawyer, 2022b).

Based on these findings, a conceptual framework is proposed to conceptualise the relationship between collaborative learning and the development of children’s moral behaviour, as illustrated in Figure 3.



Figure 3. Conceptual framework of moral behaviour development through collaborative learning

The proposed framework conceptualises moral development in early childhood as a dynamic and mediated process shaped by interconnected mechanisms. It progresses from social interaction, where children encounter diverse perspectives, to

negotiation and regulation, where differences are managed through co-regulation and shared regulation, and culminates in reflective internalisation, through which social experiences are transformed into moral understanding. These processes occur within collaborative learning environments and are influenced by interaction quality, scaffolding, and instructional design. Given children's still-developing regulatory and reflective capacities, adult mediation plays a crucial role in supporting meaningful engagement and moral meaning-making (Rogoff, 1990; Vygotsky, 1978b). Accordingly, moral development is not an automatic outcome of collaboration, but an emergent process dependent on structured interaction, guided regulation, and supported reflection, underscoring the importance of intentional pedagogical design.

CONCLUSION

This study repositions collaborative learning not as an inherently moral pedagogical approach, but as a context within which moral development may or may not emerge, depending on how interaction is structured and supported. In early childhood settings, where children's capacities for self-regulation and reflection are still evolving, moral development is better understood as a mediated, situated, and developmentally contingent process rather than a direct consequence of participation in group activities.

The analysis highlights three interdependent mechanisms social interaction, negotiation and regulation, and reflective internalisation as a developmental pathway through which moral understanding is gradually constructed. Interaction introduces children to multiple perspectives and initiates early moral awareness, while negotiation and regulation support the coordination of viewpoints and behavioural adjustment within shared activity. Reflective internalisation, in turn, enables children to transform these social experiences into personally meaningful moral understandings, moving beyond surface-level compliance toward deeper value formation.

Theoretically, this study advances a process-oriented conceptualisation that shifts attention from assumed outcomes to the underlying dynamics through which moral behaviour is formed in collaborative contexts. Rather than treating collaborative learning as intrinsically beneficial, the proposed framework underscores its conditional nature, emphasising that moral development depends on the quality of interaction, the presence of guided regulation, and opportunities for supported reflection. As such, the study contributes a conceptual foundation that invites further empirical investigation into the mechanisms of moral learning in early childhood.

From a pedagogical standpoint, the findings call for a more deliberate approach to instructional design. Educators should move beyond the assumption

that group work alone fosters moral development, and instead create learning environments that intentionally promote meaningful interaction, balanced participation, and reflective engagement. In early childhood education, where learners rely heavily on adult guidance, the role of scaffolding becomes central in transforming social experiences into morally significant learning.

Future research should extend this work by empirically examining the proposed framework across diverse contexts, including longitudinal and intervention-based studies that capture developmental change over time. In addition, further inquiry is needed to explore how cultural, contextual, and instructional variations shape the relationship between collaborative learning and moral development.

In sum, moral development in early childhood collaborative learning should not be viewed as an incidental outcome of participation, but as an emergent product of carefully designed, socially mediated, and developmentally responsive learning processes.

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