Exploring Factors Contributing to the Decline of Prosocial Behavior in Early Childhood in the Digital Era: A Systematic Literature Review

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ABSTRACT

Declining prosocial behavior among young children (ages 3–6) has become an increasingly significant issue in the digital era and the post–COVID-19 period. This systematic literature review (SLR) synthesizes current evidence on the factors contributing to this decline, focusing on parental phubbing, excessive screen exposure, the impact of the pandemic, parenting patterns, and socio-cultural changes. Following PRISMA 2020 guidelines, literature searches were conducted through Scopus, Web of Science, PubMed, PsycINFO, ERIC, and national repositories (GARUDA, Neliti). Of 346 identified articles, 15 met inclusion criteria after rigorous screening and methodological quality assessment using the Joanna Briggs Institute (JBI) and CASP tools. Thematic narrative synthesis revealed four major clusters of contributing factors: (a) technological distraction and parental phubbing, which weaken emotional bonding; (b) excessive digital media exposure reducing opportunities for social interaction; (c) pandemic-related isolation diminishing natural social learning; and (d) unresponsive parenting and limited social play opportunities in early childhood education settings. These trends appear consistently across global and Indonesian contexts. Findings highlight the need for family- and school-based interventions to strengthen emotional connection, restore peer interaction, and promote digital literacy. Implications for early childhood education, parenting, and policy development are discussed.

Keywords: Prosocial behavior, early childhood, parental phubbing, screen time, COVID-19 pandemic, digital media exposure

INTRODUCTION

Prosocial behavior, defined as voluntary actions intended to benefit others such as helping, sharing, cooperating, and showing empathy, represents a fundamental component of early childhood social–emotional development. These behaviors emerge rapidly between the ages of 3 and 6, laying the groundwork for peer relationships, emotional regulation, moral reasoning, and long-term well-being. During this developmental window, children rely heavily on modeling from caregivers and peers, as well as consistent interaction within their physical and social environments.

In recent years, concerns have grown regarding a visible decline in prosocial behavior among preschool-aged children worldwide. Teachers report increasing tendencies toward individualistic play, difficulty sharing, reduced empathy, lower cooperation, and heightened emotional reactivity in early childhood classrooms. Similar patterns have been reported in Indonesia, where early childhood educators have observed post-pandemic regressions in children's social skills, including reluctance to collaborate, difficulties in turn-taking, and reduced sensitivity to peers' emotions.

Several societal shifts appear to be contributing to these changes. The rapid expansion of digital technology has transformed parenting and childhood landscapes. Parental phubbing, defined as ignoring children due to mobile phone use, has been recognized as a subtle yet significant form of emotional unavailability that disrupts attachment processes. Excessive screen exposure among children has similarly replaced opportunities for

interactive, two-way social engagement with passive, solitary digital consumption. At the same time, the COVID-19 pandemic dramatically reduced children's access to social environments, limiting peer interaction and altering family dynamics through heightened stress, economic strain, and increased reliance on digital devices.

These conditions intersect with broader cultural and structural dynamics. Urbanization, shifts toward nuclear-family living, increasing academic demands in preschool settings, and the diminishing role of traditional communal play have collectively reshaped the social ecosystem in which children develop. As a result, children experience fewer sustained, emotionally rich interactions that support the development of prosocial tendencies.

Given these wide-ranging societal changes, a systematic examination of the contemporary evidence is needed. While individual studies have explored specific factors such as parental phubbing, pandemic effects, or screen time, an integrated synthesis focusing on early childhood prosocial behavior remains limited. This systematic literature review addresses this gap by analyzing current empirical evidence from 2019 to 2025 to identify and categorize the major factors contributing to the decline of prosocial behavior in early childhood.

The review provides a comprehensive synthesis of (a) technological and digital factors, (b) parenting and attachment processes, (c) pandemic-related disruptions, and (d) educational and socio-cultural determinants. It aims to generate a conceptual understanding of how these factors influence prosocial development and to offer evidence-based implications for parents, educators, and policymakers. This is crucial for shaping effective early childhood interventions and for guiding national efforts to strengthen children's social–emotional competencies in an increasingly digital world.

METHOD

Design

This study employed a Systematic Literature Review (SLR) approach to synthesize empirical evidence on factors contributing to the decline of prosocial behavior in early childhood. The review followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA 2020) guidelines to ensure methodological rigor, transparency, and replicability.

Search Strategy

A comprehensive search was conducted across six major international databases, Scopus, Web of Science, PubMed, PsycINFO, ERIC, and SpringerLink, and two Indonesian repositories (GARUDA and Neliti). Searches were performed between September and November 2024. Boolean operators, controlled vocabulary (e.g., MeSH terms), and truncation were used to maximize search sensitivity.

Core search keywords included combinations of:

- "Prosocial behavior" OR "prosociality"
- "Early childhood" OR "preschool children" OR "children aged 3–6"
- "Parental phubbing" OR "digital distraction"
- "Screen time" OR "digital media exposure"
- "COVID-19 pandemic" OR "post-pandemic"
- "attachment" OR "parent–child interaction"

An example Boolean string used in PubMed:

("prosocial behavior" AND "early childhood") AND ("phubbing" OR "screen time" OR "digital media" OR "COVID-19").

Manual research was also conducted by screening reference lists of highly relevant articles.

Inclusion and Exclusion Criteria

Articles were included if they met the following criteria:

1. Published between 2019 and 2025.
2. Empirical study (quantitative, qualitative, mixed-methods, or experimental).
3. Focused on children aged 3–6 years.
4. Examined prosocial behavior or closely related constructions (e.g., empathy, helping, sharing, cooperation).
5. Investigated contributing factors such as parental behaviors, pandemic impacts, screen exposure, or classroom environments.
6. Published in peer-reviewed journals in English or Indonesian.

Articles were excluded if they:

1. Focused on children outside the 3–6 age range.
2. It did not include prosocial outcomes.
3. Were review articles, dissertations, theoretical papers, or conference abstracts.
4. Lacked sufficient methodological clarity.

Study Selection Process

The selection followed four PRISMA stages:

1. Identification:

   A total of 346 articles was retrieved from all search sources.

2. Screening:

   After removing duplicates (n = 102), 244 articles remained.

   Titles and abstracts were screened, resulting in exclusion of 181 unrelated or ineligible studies.

3. Eligibility:

   Sixty-three full-text articles were assessed for eligibility.

   Forty-eight were excluded due to age mismatch, irrelevant variables, or insufficient prosocial measures.

4. Inclusion:

   Finally, 15 studies met all criteria and were included for synthesis.

Quality Assessment

Two standardized tools were used to evaluate methodological quality:

- Joanna Briggs Institute (JBI) Critical Appraisal Checklists for cross-sectional, qualitative, and experimental studies.
- Critical Appraisal Skills Programme (CASP) for cohort and mixed-method designs.

All included studies met minimum quality thresholds with clear sampling procedures, well-defined variables, and appropriate analytical approaches. Studies with unclear measures of prosocial behavior were scrutinized but retained if reliability and validity could be established.

Data Extraction and Synthesis

Key information extracted included:

- Author, year, and country
- Research design and sample characteristics
- Type of prosocial behavior measured
- Primary factors investigated
- Main findings
- Relevance to the decline of prosocial behavior

Data were synthesized using a thematic narrative approach, allowing integration across diverse methodologies. Themes were developed iteratively, guided by ecological systems theory and social learning perspectives to interpret patterns and build conceptual connections among findings.

RESULTS

This section presents the synthesized results of the 15 studies included in the review. The findings are organized into key thematic domains describing factors that contribute to the decline of prosocial behavior in early childhood. A summary table of all reviewed studies is provided at the end of this section. Below are Summary of Articles' quality used in this research, Table 1.

Table 1. Summary of Articles' quality used in this research.

No	Author & Year	Research Design	Assessment Tool	Key Assessed Aspects (summary)	Quality Score (%)	Category
1	Shi et al. (2024)	Cross-sectional	JBI Observational Checklist	Clear objectives, strong statistical analysis, adequate control of moderating variables	92%	High
2	Xu et al. (2023)	Family survey	JBI Observational Checklist	Valid instruments, high reliability, minimal social desirability bias	88%	High
3	Al-Mehmadi et al. (2024)	Descriptive quantitative	JBI Observational Checklist	Clear measurement of child behavior, strong correlational analysis	86%	High
4	Zhao et al. (2022)	Cross-sectional	JBI	Adequate design, limited control of contextual factors	78%	Moderate

5	Oppermann et al. (2024)	Longitudinal	JBI	Strong temporal validity, adequate respondent tracking, sample attrition <10%	95%	High
6	Jing et al. (2024)	Meta-analysis	JBI Review Tool	Systematic literature search, strong heterogeneity analysis	93%	High
7	Carlo et al. (2021)	Cross-sectional	JBI	Well-controlled variables, but not longitudinal	84%	High
8	Rhee et al. (2022)	Quantitative survey	JBI	High instrument reliability, detailed sample description	85%	High
9	Kristiana (2024)	Mixed-method	CASP Qualitative Checklist	Good data triangulation, moderate reflexivity	80%	Moderate
10	Harianti & Kurniawan (2022)	Phenomenological qualitative	CASP	High interview depth, transparent thematic analysis	88%	High
11	Cahyani (2024)	Observational survey	JBI	Moderate measurement reliability, low bias control	76%	Moderate
12	Nawangsih et al. (2023)	Experimental	JBI Experimental Checklist	Clear randomization, significant intervention effects	94%	High
13	Kim & Lee (2023)	Observational	JBI	Valid naturalistic observations, limited generalizability	83%	High
14	Kurnia (2023)	Exploratory qualitative	CASP	In-depth analysis, but small sample size	79%	Moderate
15	Błachnio et al. (2024)	Correlational quantitative	JBI	Strong multivariate analysis, potential self-report bias	82%	High

Overview of Included Studies

The final dataset comprised 15 empirical studies published between 2019 and 2025. These studies were conducted across diverse cultural contexts, including China, South Korea, Germany, Saudi Arabia, Poland, the United States, and Indonesia. Designs included cross-sectional surveys, longitudinal studies, experiments, mixed-method approaches, and one meta-analysis.

Across studies, prosocial outcomes encompassed helping, sharing, empathy, cooperation, kindness, and emotional sensitivity. Most studies used validated observational scales or parent/teacher reports; some incorporated experimental tasks to measure cooperative behavior.

Theme 1: Parental Phubbing and Digital Distraction

Seven studies highlighted parental phubbing, the act of ignoring a child due to mobile phone use, as a significant predictor of reduced prosocial behavior. Research in China and South Korea (e.g., Shi et al., 2024; Xu et al., 2023) showed that parental phubbing disrupts emotional attunement and weakens attachment bonds. Children whose interactions are frequently interrupted by parental device use demonstrated:

- lower empathy,

- increased social withdrawal, and
- lower likelihood of helping or sharing.

These effects were consistent across cultural contexts, including Indonesia (Harianti & Kurniawan, 2022), where parents often underestimated how digital distraction affects emotional availability. Overall, phubbing emerged as one of the strongest predictors of prosocial decline.

Theme 2: Excessive Screen Time and Digital Media Exposure

Five studies reported strong associations between excessive screen exposure and reduced prosocial behavior. Children who spent more than 2 hours per day on passive digital media (Al-Mehmadi et al., 2024; Zhao et al., 2022) showed:

- reduced emotional understanding,
- limited eye-contact engagement,
- decreased cooperative play,
- lower helping and sharing tendencies.

Findings suggest that digital content displaces natural social learning opportunities. Emotionally rich, face-to-face interactions, critical for empathy development, are replaced by solitary, fast-paced stimuli. Indonesian data (Kristiana, 2024) indicated similar patterns, with teachers noting increased impatience and difficulty taking turns among children with high screen exposure.

Theme 3: Impact of the COVID-19 Pandemic

Four studies (e.g., Oppermann et al., 2024; Jing et al., 2024) highlighted the lingering effects of the pandemic on preschoolers' social–emotional functioning. Post-pandemic children exhibited:

- delays in sharing,
- reduced cooperation,
- increased shyness and avoidance of peer interaction,
- emotional dysregulation.

Pandemic-related isolation reduced children's access to peer play, which is essential for developing perspective-taking and cooperative behavior. Indonesian educators similarly reported that children returning to school showed increased individualism and weaker social resilience (Cahyani, 2024).

Theme 4: Parenting Patterns and Family Emotional Climate

Several studies emphasized the importance of warm, consistent, and responsive parenting in cultivating prosocial behavior. Parenting styles characterized by warmth and structure (Carlo et al., 2021; Rhee et al., 2022) were associated with higher empathy and cooperative tendencies. Conversely, post-pandemic family stress, parental burnout, and digital overload (Kurnia, 2023) reduced parents' emotional availability.

Children raised in such environments displayed:

- emotional insecurity,
- reduced empathy,

- more reactive behaviors, and
- lower social cooperation.

The findings imply that parenting style alone is insufficient; the quality of emotional presence is crucial.

Theme 5: Educational Environment and Social Play Opportunities

Four studies examined the role of early childhood education settings in supporting prosociality. Evidence from Indonesia and South Korea (Kim & Lee, 2023; Nawangsih et al., 2023) showed that:

- collaborative play,
- role-play scenarios,
- teacher–child responsive interactions, and
- structured storytelling activities

significantly improved helping, sharing, and empathy.

However, increasing academic pressure and reduced free play time limit children's opportunities to practice prosocial behavior naturally. Teachers reported that children with limited social experiences outside school struggled more with cooperative tasks.

Synthesis of Findings

Overall, the results indicate that the decline in prosocial behavior among young children is not attributable to a single cause but emerges from the interaction of multiple environmental and relational factors. The most influential factors across studies include:

1. Disrupted attachment due to parental digital distraction.
2. Reduced real-life social engagement due to excessive screen exposure.
3. Pandemic-induced social isolation and emotional stress.
4. Decreased emotional availability within families.
5. Limited opportunities for social learning in educational settings.

Collectively, these factors weaken the relational and experiential foundations necessary for empathy, cooperation, and social responsibility. Below are Summary of Empirical Studies Included in the Systematic Review (2019–2025), Table 2.

Table 2. Summary of Empirical Studies Included in the Systematic Review (2019–2025)

No.	Author(s) & Year	Country	Design & Sample	Focus of Study	Key Findings	Relevance to Declining Prosocial Behavior
1	Shi et al. (2024)	China	Cross-sectional; 412 children ages 4–6 and parents	Parental phubbing and child prosocial behavior	Phubbing reduced empathy and helped; attachment	Digital parental distraction weakens emotional bonds,

					mediated the effect.	lowering prosociality.
2	Xu et al. (2023)	South Korea	Survey; 320 preschool families	Phubbing, attachment, and social functioning	Phubbing predicted lower attachment security and higher social withdrawal.	Emotional detachment contributes to reduced prosocial behavior.
3	Al-Mehmadi et al. (2024)	Saudi Arabia	Quantitative; 250 children ages 3–6	Screen time and socio-emotional behavior	>2 hrs/day screen time linked to reduced empathy and helping.	Excessive screen exposure replaces social learning contexts.
4	Zhao et al. (2022)	China	Cross-sectional; 385 children	Digital media use and emotional development	Passive digital viewing impaired empathy and social sensitivity.	Media overuse reduces opportunities for real interaction.
5	Oppermann et al. (2024)	Germany	Longitudinal; 187 preschoolers	COVID-19 impact on prosocial behavior	Post-pandemic children showed delays in sharing and cooperation.	Social isolation disrupts natural prosocial development.
6	Jing et al. (2024)	Multiple (18 countries)	Meta-analysis	Global pandemic effects	Pandemic decreased global socio-emotional functioning.	Confirms widespread post-pandemic prosocial decline.
7	Carlo et al. (2021)	United States	Cross-sectional; 268 preschoolers	Parenting styles and prosociality	Warm, structured parenting increased empathy and helping.	Parental emotional quality strongly predicts prosociality.
8	Rhee et al. (2022)	South Korea	Quantitative survey	Parenting, emotion regulation, and prosocial behavior	Responsive parenting improved emotional regulation and prosocial actions.	Emotion regulation mediates prosocial development.
9	Kristiana (2024)	Indonesia	Mixed methods; 72 children across six preschools	Play versus digital media habits	Active play improved sharing and cooperation.	Emphasizes value of social play in prosocial development.
10	Harianti & Kurniawan (2022)	Indonesia	Qualitative; 12 parents	Parental phubbing in Indonesian households	Parents are unaware of phubbing's emotional impact.	Digital neglect reduces emotional presence for children.

11	Cahyani (2024)	Indonesia	Teacher survey; 80 PAUD teachers	Post-pandemic behavior changes	Increased individualism and reduced cooperation observed.	Post-pandemic regression in social functioning.
12	Nawangsih et al. (2023)	Indonesia	Experimental; 45 children	Collaborative play intervention	Role-play and storytelling increased helping behaviors.	Structured social activities strengthen prosociality.
13	Kim & Lee (2023)	South Korea	Observational	Teacher–child interaction quality	Responsive teachers enhanced empathy and cooperation.	Classroom relational climate affects prosocial growth.
14	Kurnia (2023)	Indonesia	Qualitative interviews	Parenting challenges post-COVID-19	Stress and digital overload reduced parental warmth.	Lower parental warmth predicts lower child prosociality.
15	Błachnio et al. (2024)	Poland	Quantitative	Digital media and empathy	Higher media use correlated with lower prosocial behavior.	Digital immersion weakens social sensitivity.

DISCUSSION

The purpose of this systematic review was to synthesize contemporary empirical evidence on the factors contributing to the decline of prosocial behavior among children aged 3–6 years in the digital era. Across fifteen studies conducted between 2019 and 2025, a consistent pattern emerged: prosocial behavior is declining not because of a single cause, but because of intersecting technological, familial, educational, and socio-cultural disruptions. This discussion integrates findings across these domains and offers a conceptual interpretation of how these forces collectively shape early prosocial development.

Disrupted Parent–Child Interaction in the Digital Environment

The most prominent theme across the reviewed literature is the disruption of parent–child interaction due to digital device use, particularly parental phubbing. Studies from China, South Korea, and Indonesia consistently demonstrated that parental phubbing undermines children's attachment security, emotional attunement, and opportunities to observe prosocial models. These findings align with attachment theory, which emphasizes the importance of sensitive, responsive caregiving as a foundation for empathy and social behaviors.

Digital distraction creates an interactional void during critical developmental windows. Although parents may be physically present, their emotional presence is fragmented. This leads to subtle forms of emotional neglect, reducing opportunities for children to practice sharing, responding to emotions, and receiving immediate feedback about social cues. The evidence suggests that the digital environment does not merely compete with children's attention; it competes with parental attention, creating a relational deficit that directly influences prosocial behavior.

Excessive Digital Media Exposure and Reduced Social Learning

Digital media exposure emerged as a strong predictor of reduced prosociality. Studies showed that extended screen time, particularly passive, fast-paced digital consumption, displaces the social interactions essential for

developing empathy, cooperation, and perspective-taking. For young children, learning prosocial behavior is inherently experiential; it requires real-time feedback, negotiation, turn-taking, and shared attention.

Excessive screen use interrupts this learning process in several ways. First, digital content offers unilateral stimulation without reciprocity. Second, high-frequency exposure to rapid visual stimuli reduces patience and increases impulsivity, which are counterproductive for cooperative play. Third, children accustomed to solitary, digital engagement may lack opportunities to practice conflict resolution or emotional sensitivity in social contexts. Findings from Indonesia reinforce these global trends, with teachers reporting increased difficulty in children's ability to wait, share, and collaborate.

Lingering Effects of the COVID-19 Pandemic

Another key factor contributing to declining prosocial behavior is the disruption caused by the COVID-19 pandemic. Global and local studies show that prolonged isolation, reduced peer interaction, and heightened family stress weakened the environmental support necessary for prosocial development. During lockdowns, children experienced fewer opportunities for social negotiation, shared play, and collaborative problem-solving, contexts that typically scaffold prosocial skills.

The pandemic also amplified digital reliance within families, further diminishing face-to-face interactions. When children returned to school, many exhibited reduced cooperation, avoidance of peer interaction, and difficulty adapting to group norms. These findings highlight that prosocial deficits are not merely temporary behavioral adjustments but may reflect deeper developmental gaps resulting from environmental deprivation during formative years.

Emotional Climate of the Family and Parenting Patterns

Parenting patterns continue to be a central determinant of prosocial behavior. Studies demonstrate that warm, consistent, and responsive parenting increases empathy and cooperative tendencies. However, the digital era presents new challenges. Parents report stress, economic pressures, and multitasking demands that decrease their emotional availability. Post-pandemic fatigue and pervasive digital engagement further reduce opportunities for emotionally rich interactions.

This underscores a critical distinction: prosocial behavior does not grow solely from parental intentions but from the quality of moment-to-moment interactions. When parental warmth is compromised, whether due to stress, distraction, or burnout, children's emotional regulation and prosocial tendencies weaken. Thus, effective parenting in the digital era requires not only using positive strategies but also managing personal and environmental stressors that interfere with emotional presence.

Educational Settings and Reduced Opportunities for Social Play

Schools serve as secondary but powerful environments for prosocial development. Collaborative play, responsive teacher–child interactions, and structured storytelling have been shown to strengthen children's helping, sharing, and empathy. However, educational systems in many countries, including Indonesia, are increasingly shifting toward academic preparation at the expense of unstructured social play. This reduces opportunities for children to engage in natural prosocial learning.

Teachers also face increased responsibilities and limited time to facilitate social–emotional activities. The reduction in traditional communal play, which historically supported cooperative norms, reflects a broader cultural shift toward individualism in childhood contexts. Without deliberate support from educational environments, children's prosocial tendencies may continue to decline.

Integrated Conceptual Model of Prosocial Decline

Synthesizing the findings, the evidence supports a multi-factor developmental pathway:

digital distraction → reduced parental emotional availability → weakened attachment → diminished empathy → lower prosocial behavior.

This pathway is further amplified by:

- excessive screen exposure,
- loss of peer socialization during the pandemic,
- parental stress and burnout,
- declining opportunities for social play,
- shifting socio-cultural norms in early childhood.

Prosocial behavior is therefore best understood as an emergent property of children's relational ecosystems. When these ecosystems are disrupted, prosocial development weakens.

Broader Socio-Cultural Implications

Although the decline in prosocial behavior is global, the Indonesian context shows unique implications. Traditional values of communal cooperation (gotong royong) historically strengthened children's prosocial foundations. As digital lifestyles and urbanization reshape family dynamics, these communal values may be diminishing, leading to fewer natural opportunities for cooperative play and community involvement.

This suggests that the decline in prosocial behavior is not solely an individual developmental issue, but a reflection of broader cultural transitions in modern childhood.

CONCLUSION

This systematic review examined contemporary empirical findings on the decline of prosocial behavior among children aged 3–6 years in the digital era. Across fifteen studies conducted in various cultural contexts, a clear pattern emerged: prosocial behavior is weakening due to converging shifts in technological engagement, family dynamics, educational environments, and socio-cultural structures.

The evidence consistently shows that digital distractions, especially parental phubbing, disrupt the emotional availability essential for secure attachment and early empathy development. Excessive screen exposure further reduces opportunities for real-life social learning, replacing reciprocal interactions with passive digital consumption. The COVID-19 pandemic magnified these disruptions, limiting children's exposure to peer play and increasing parental stress, which further weakened the emotional climate at home.

Parenting factors, particularly emotional warmth and consistency, remain central to prosocial development. However, these parenting strengths are increasingly challenged by digital overload, work demands, and lingering post-pandemic fatigue. In educational settings, the reduction of free play and the rise of academic expectations limit opportunities for collaborative activities that naturally foster prosocial behaviors such as sharing, helping, and cooperating.

Taken together, these findings demonstrate that the decline in prosocial behavior is not the result of individual deficits but is shaped by broader relational, environmental, and cultural transformations. Prosociality grows through sustained, emotionally rich, and socially interactive experiences, conditions that are increasingly compromised in modern childhood. Addressing this decline requires intentional efforts across family, school, and policy systems to restore children's opportunities for meaningful connection, empathetic engagement, and collaborative play.

Practical Implications

The findings of this review highlight the need for coordinated interventions across families, schools, and policy environments to support the development of prosocial behavior in early childhood. The decline in prosociality is rooted not only in individual behavior but in the shifting relational and technological landscapes that shape children's daily experiences. The following implications aim to inform us about practice and guide strategic decision-making.

Implications for Parents

Prosocial development begins in the home, where children first learn emotional regulation, empathy, and cooperative behavior through responsive interactions. The evidence suggests that parents can take several corrective steps to counteract the effects of digital disruption:

1. Prioritize emotional availability.

Reducing parental phubbing by setting device-free periods, such as during meals, playtime, or bedtime, can restore consistent, attuned interactions.

2. Rebuild daily relational routines.

Activities such as shared storytelling, reflective conversations, and cooperative play can strengthen emotional connection and model prosocial behavior.

3. Manage children's screen exposure.

Establishing limits on passive screen time and encouraging interactive, relational activities support social learning and emotional attunement.

4. Strengthen emotion coaching.

Helping children label, express, and understand emotions fosters empathy and improves conflict resolution.

Parents play a foundational role in shaping children's early prosocial tendencies. Strengthening the quality of family interactions is essential to reversing the observed decline.

Implications for Early Childhood Educators

Schools provide structured environments where prosocial behavior can be modeled, practiced, and reinforced. The reviewed studies suggest several actionable strategies:

1. Increase collaborative play opportunities.

Role-play, cooperative games, block-building, and group problem-solving activities support cooperation, turn-taking, and empathy.

2. Embed social–emotional learning (SEL) in daily routines.

Teachers can incorporate simple SEL practices, such as morning check-ins, emotion recognition tasks, or empathy-focused discussions, to reinforce prosocial skills.

3. Enhance teacher responsivity.

Warm, sensitive teacher–child interactions are correlated with greater empathy, helping behavior, and moral reasoning.

4. Balance academic expectations with social development.

Overemphasis on early academics reduces natural opportunities for peer interaction. Integrating play-based and inquiry-based learning can restore these opportunities.

Educators are positioned to counterbalance the effects of home and societal disruptions by intentionally cultivating relational and cooperative experiences.

Implications for Policymakers

The decline in prosocial behavior has long-term implications for community well-being, social cohesion, and national development. Policy-level responses can play a critical role in mitigating this trend.

1. Promote digital hygiene guidelines for families.

National campaigns can raise awareness about the impact of parental phubbing, excessive screen exposure, and the importance of device-free interactions.

2. Strengthen early childhood education standards.

Policies should emphasize social–emotional development alongside academic goals, ensuring that schools allocate sufficient time for collaborative play.

3. Support post-pandemic recovery programs.

Programs designed to rebuild children's social skills, such as peer play initiatives, community-based family activities, and teacher training, can accelerate socio-emotional recovery.

4. Integrate family digital literacy into PAUD curricula.

Supporting parents with guidelines, workshops, and practical strategies helps reduce digital overuse and strengthen parent–child relationships.

Policy interventions that address both environmental conditions and parental practices can help create a supportive ecosystem for prosocial development.

Implications for Future Community and Cultural Efforts

The decline of prosociality reflects broader cultural shifts, including growing individualism and digital immersion. Community-based efforts may help revive collective values such as empathy and cooperation by:

- encouraging traditional games and communal activities,
- promoting parent–child involvement in social and religious events,
- fostering neighborhood cohesion through playgroups and local initiatives.

These community-driven practices can help restore shared social spaces where children naturally develop prosocial habits.

Limitations And Future Directions

Limitations

Although this review provides a comprehensive synthesis of contemporary evidence on the decline of prosocial behavior in early childhood, several limitations should be acknowledged.

1. Predominance of Cross-Sectional Designs

Most included studies used cross-sectional methodologies, which limit the ability to infer causal relationships. While consistent associations were found between parental phubbing, screen exposure, and reduced prosociality, the directionality of these effects cannot be conclusively established. Longitudinal studies are needed to clarify how early experiences shape prosocial trajectories over time.

2. Variation in Measurement of Prosocial Behavior

The reviewed studies used diverse instruments and operationalizations of prosociality, ranging from parent-reported questionnaires to teacher observations and experimental tasks. This heterogeneity may affect comparability across findings and may obscure subtle variations in specific prosocial components such as empathy, sharing, or cooperation.

3. Limited Representation from Certain Cultural Contexts

While the review includes studies from Asia, Europe, the Middle East, and Indonesia, there remains a lack of representation from other regions, such as Africa and South America. Prosocial behavior is culturally embedded, and global patterns may vary depending on community norms, parenting traditions, and socio-economic conditions.

4. Incomplete Exploration of Digital Content Quality

Most studies focused on the quantity of screen time rather than the quality of content. Different types of digital media, educational, interactive, violent, or fast-paced, likely exert distinct influences on social development. Without examining content characteristics, interpretations of screen effects remain limited.

5. Indonesian Research Still Developing

Indonesian studies in this area remain relatively few and often rely on small samples or qualitative designs. Larger-scale, nationally representative research is needed to accurately map the state of prosocial development across diverse regions of the country.

Future Directions

To advance understanding and inform intervention strategies, future research should consider the following priorities:

1. Longitudinal and Experimental Studies

Longitudinal designs are necessary to establish causal links between early experiences, such as parental phubbing or digital exposure, and later prosocial outcomes. Experimental or quasi-experimental interventions can test the efficacy of specific strategies for improving prosocial behavior.

2. Neural and Cognitive Mechanisms

Future studies could explore the neurocognitive pathways through which digital media and disrupted attachment affect empathy, emotion regulation, and social cognition. Integrating developmental psychology with neuroscience would provide deeper insight into the mechanisms underlying prosocial decline.

3. Detailed Analysis of Digital Media Content

Research should distinguish between interactive, educational, and passive content, as each likely influences prosocial behavior differently. Understanding which types of digital experiences are beneficial or harmful will allow for more precise recommendations.

4. Family-Level Interventions

Intervention studies are needed to test whether reducing parental phubbing, improving emotional communication, or teaching digital hygiene can enhance prosocial behavior. Such studies would bridge the gap between theory and practical application.

5. School-Based Social–Emotional Programs

Future work should evaluate the impact of structured social–emotional learning (SEL) curricula, collaborative play models, and teacher training on prosocial development in early education settings.

6. Culturally Grounded Research

Cultural norms strongly influence prosocial expectations and practices. More cross-cultural and locally grounded studies, particularly within diverse Indonesian contexts, are needed to better understand how socio-cultural transitions affect children's social development.

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