



PARENTAL ENGAGEMENT STRATEGIES FOR IMPROVING CHILDREN'S PHYSICAL ACTIVITY AND HYGIENE BEHAVIOURS IN GHANAIAN BASIC SCHOOLS: A NARRATIVE LITERATURE REVIEW

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ABSTRACT: *Children's physical activity and hygiene behaviours are shaped by both school experiences and family support, yet these influences are often addressed separately in research and practice. This narrative literature review examined how parental engagement supports children's movement habits and hygiene behaviours and identified school-based strategies for strengthening parent involvement in school health in Ghanaian basic schools. Relevant peer-reviewed studies published mainly between 2021 and 2026 were identified through PubMed, Scopus, Web of Science, ERIC, and Google Scholar; approximately 35 peer-reviewed studies published mainly from 2021 to 2026 met the inclusion criteria (English-language, peer-reviewed, DOI-indexed, relevant to parental engagement, physical activity, hygiene, or school health in child or school settings). Studies were screened by title and abstract before full-text review, and synthesised thematically. The review found that parental modelling, encouragement, co-participation, home routines, and school-to-home communication are important influences on children's physical activity and hygiene-related behaviours. The literature also suggests that school-based strategies such as parent education, health messages for home reinforcement, family-oriented activities, and stronger school community structures can improve consistency between school expectations and home practice. In Ghana, however, parent participation is often constrained by time, resources, communication gaps, and uneven institutional support. The review contributes to school health scholarship by integrating physical activity, hygiene behaviour, and family-school partnership within one framework and argues that stronger parental engagement is necessary for sustainable school health improvement.*

KEYWORDS: Parental engagement, physical activity, hygiene behaviours, school health, Ghanaian basic schools, family school partnership.



INTRODUCTION

Schools are important settings for shaping children's everyday health behaviours because they organise routines, structure learning, and provide repeated opportunities for socialisation, supervision, and behaviour reinforcement. However, children's physical activity and hygiene habits are not formed at school alone. They are also shaped by what happens at home through parental modelling, encouragement, family routines, material support, and the consistency of messages children receive across school and family contexts. Recent literature on children's active lifestyles shows that parents influence physical activity through direct support, shared participation, and role modelling, and that these forms of support affect both motivation and actual participation in movement-related activity (Vega-Díaz et al., 2023; Hosokawa et al., 2023). A large meta-analysis also found that positive parental influence is significantly associated with children's and adolescents' physical activity levels, while negative influence, such as discouragement or coercion, shows more mixed effects (Su et al., 2022). These findings indicate that children's movement habits are shaped not only by school provision but also by the quality of family involvement around those opportunities.

A similar argument applies to hygiene behaviours. Hygiene knowledge and practice are strongly influenced by repeated instruction, daily routines, environmental reinforcement, and the behaviour of significant adults. Recent school hygiene studies show that children's hygiene practice depends partly on knowledge, school inspection routines, and supportive environments (Golla et al., 2024; Minda et al., 2024). Other recent work argues that hygiene knowledge is often transmitted to children through both parents and schools, which means that hygiene behaviour is best understood as a shared social learning process rather than a purely school-based outcome (Kuandyk et al., 2025). In practical terms, children are more likely to wash hands regularly, use sanitation facilities properly, and sustain other hygiene habits when expectations are reinforced both at school and at home. This suggests that family engagement is likely to matter for hygiene in much the same way that it matters for physical activity, even though the research base is not yet equally developed across the two domains.

Despite this, the literature remains fragmented. Research on parental support and children's physical activity is now relatively strong, especially around modelling, encouragement, logistical support, and co-participation (Su et al., 2022; Vega-Díaz et al., 2023). By contrast, work on school-family collaboration around hygiene behaviour is more dispersed and often focused on school infrastructure, teacher practice, or general knowledge rather than on structured parental engagement. Yet recent evidence from school health promotion makes clear that schools are more effective when families and communities are involved. A scoping review by Michael et al. (2023) identified six recurring family and community engagement strategies in school-based interventions promoting physical activity and nutrition, including communication, parent education, learning at home, decision-making, volunteering, and collaboration with community actors. Likewise, school-based family-oriented interventions for physical activity have generally shown positive or promising effects when they include multicomponent strategies and meaningful family participation (Santos et al., 2023). Together, these studies suggest that family engagement is not an optional addition to school health work. It is an important part of how healthy behaviour is established and sustained.

Recent empirical work further shows that the school-family relationship is not always automatically strong. Amorim et al. (2024), working within a school health promotion context,



found that although parents are primarily responsible for managing children's everyday lifestyles, schools often focus their activities mainly on children, and parent participation in school health activities remains limited. Crone et al. (2021) also showed that family-engagement approaches can improve some health behaviours, but that engaging families consistently is difficult, especially where families face other practical or social demands. These findings are important because they suggest that the effectiveness of parent involvement depends not only on whether parents care, but on how schools structure communication, support, and shared action.

The Ghanaian context gives this issue particular urgency. Recent work shows that school-based health programmes in Ghana face several barriers, including resource constraints, weak parental and community participation, inadequate stakeholder collaboration, and leadership and governance problems (Adomako Gyasi et al., 2024). Research on WASH practices in Ghanaian public basic schools also points to uneven implementation and practical gaps in school hygiene conditions (Duah, 2024). In addition, a study of teachers' handwashing behaviour in Ghana suggests that children learn through observation of important adults, reinforcing the idea that everyday modelling matters for hygiene practice (Gbolu et al., 2023). Beyond school health specifically, research on parental engagement in Ghanaian pre-primary schools shows that parent participation is shaped by context, expectations, time pressures, and communication barriers, which means that effective engagement cannot be assumed but must be deliberately cultivated (Bartoli et al., 2022). Recent work on parent-teacher associations in Ghana also suggests that parent involvement can strengthen school-community development, but only when institutional arrangements actually support participation, trust, and shared responsibility (Agyekum et al., 2025; Ballang & Aboodey, 2023).

Against this background, this narrative literature review examines how parental engagement supports children's physical activity and hygiene behaviours and identifies school-based strategies for strengthening parent involvement in school health. It has two objectives. The first is to examine how parental engagement supports children's physical activity and hygiene behaviours. The second is to identify school-based strategies for strengthening parent involvement in school health. The review responds to a gap in scholarship in which children's physical activity, hygiene behaviour, family support, and school health are often discussed in related but separate ways. By bringing these strands together, the article seeks to clarify what the literature collectively shows about the role of parental engagement in improving children's movement habits and hygiene behaviour in Ghanaian basic schools.

The article follows a standard narrative review structure. It first clarifies the major concepts used in the review, then discusses the theoretical perspectives that best explain parental engagement, children's health behaviour, and school-family interaction. It next presents the review method, followed by a thematic review of the literature, a synthesis of the findings, research gaps, implications, and conclusion. This structure follows the narrative review guide you uploaded, which emphasises a clear purpose, transparent search approach, thematic synthesis, and a strong section on overall contribution.



CONCEPTUAL BACKGROUND

Parental engagement

In this review, parental engagement refers to the range of ways in which parents or caregivers participate in their children's health-related learning and behaviour formation through communication, support, shared activity, home routines, school participation, and collaboration with teachers or school structures. The concept is broader than simple attendance at school meetings. Recent literature shows that parental involvement includes both home-based and school-based practices and that these practices are multidimensional rather than singular (Michael et al., 2023; Bartoli et al., 2022). In the Ghanaian context, Bartoli et al. (2022) found that parents' engagement is shaped by how they understand their role in children's development, as well as by contextual barriers such as time, social expectations, and school communication. In school health research, parental engagement is therefore best understood as a pattern of participation that links home life with school expectations.

Children's physical activity and movement habits

The phrase children's physical activity and movement habits refers in this review to children's routine participation in active play, structured exercise, sports, walking, physical education, active transport, and other forms of movement that contribute to health and development. This is broader than participation in formal physical education lessons alone. Vega-Díaz et al. (2023) and Su et al. (2022) both show that children's active lifestyles are shaped by modelling, encouragement, co-participation, and other parental influences. Hosokawa et al. (2023) further show that parental support is positively related to children's physical activities, suggesting that active habits are socially supported behaviours rather than individual choices alone. In this review, therefore, movement habits refer both to the child's behaviour and to the family and school conditions that support or limit that behaviour.

Hygiene behaviours

The term hygiene behaviours refer to everyday practices that protect health by reducing exposure to infection and promoting cleanliness. In school-age children, these behaviours include handwashing with soap, use of sanitation facilities, oral hygiene, personal cleanliness, and related routines that support health and social functioning. Recent research on schoolchildren's hygiene practices shows that knowledge, school inspection, access to facilities, and behaviour reinforcement are important predictors of hygiene practice (Golla et al., 2024; Minda et al., 2024). Kuandyk et al. (2025) also emphasise that hygiene behaviour is influenced by both school and family environments. For this reason, hygiene behaviour in the present review is not treated as a purely individual matter. It is understood as a learned practice shaped through repeated reinforcement, social example, and access to supportive conditions.

School-based strategies for parent involvement in school health

In this review, school-based strategies for parent involvement in school health refer to organised practices that schools use to involve parents in promoting healthy behaviours among children. These may include parent-school communication, health education workshops for parents, take-home activities, behaviour monitoring, school events, family participation in physical activity initiatives, parent-teacher association activity, and collaboration with



community structures. Michael et al. (2023) identified six common categories of family and community engagement strategies in school-based health promotion work, including communication, education and support, reinforcement of health knowledge at home, decision-making, volunteering, and collaboration with community actors. These strategies are especially relevant because they show that parental engagement can be designed rather than left to chance.

Whole school and home-school health partnership

A whole school and home-school health partnership refers to an integrated approach in which children receive consistent support for healthy behaviour across school and home environments. This perspective assumes that schools alone cannot sustain behaviour change if home routines, family example, or parent knowledge pull in a different direction. Recent work on family-school engagement in health promotion shows that parent involvement improves when schools make engagement a clear priority, provide practical tools, and build supportive relationships with families (Michael et al., 2023; Crone et al., 2021). Amorim et al. (2024) similarly show that school health promotion is stronger when schools involve families more meaningfully rather than only sending information to children. In this review, whole school and home-school partnership is used to mean coordinated support across the two main social settings in which children's health habits are formed.

Ghanaian basic school context and scope of the review

The review focuses on Ghanaian basic schools and on how parental engagement can improve children's physical activity and hygiene behaviours in that setting. It does not attempt to review all aspects of child health, nor does it cover tertiary institutions, clinical hygiene practice, or family engagement in academic performance generally, except where those issues directly inform school health engagement. The focus on Ghana is important because recent studies point to the relevance of parent and community participation, school health barriers, WASH implementation gaps, and PTA or school-community structures in shaping school health practice (Adomako Gyasi et al., 2024; Duah, 2024; Agyekum et al., 2025). The scope is therefore intentionally narrow enough to keep the article coherent while broad enough to connect physical activity, hygiene, and school-family partnership within one review. Ghana is a particularly important context for this review for several reasons. First, school-based health programmes in Ghana face documented barriers including resource constraints, weak parental participation, inadequate stakeholder collaboration, and governance challenges (Adomako Gyasi et al., 2024). Second, despite relatively widespread basic school enrolment, hygiene infrastructure and WASH implementation remain uneven across public basic schools (Duah, 2024). Third, evidence from Ghanaian settings shows that parental engagement in school activities is shaped by contextual factors — time pressures, socioeconomic constraints, communication gaps, and variable institutional support — meaning that effective parent involvement cannot be assumed and must be deliberately designed (Bartoli et al., 2022; Agyekum et al., 2025). These conditions make Ghana a setting in which strengthening parental engagement for school health is both particularly necessary and practically complex.



THEORETICAL FOUNDATIONS

The first theoretical lens that informs this review is the idea of overlapping spheres of influence between home, school, and community. Michael et al. (2023) explicitly use this perspective in organising family and community engagement strategies and show that health behaviour support becomes more coherent when these spheres work together rather than separately. This framework is especially useful for the present review because it helps explain why parental engagement matters for school health. Children's physical activity and hygiene behaviours are not produced in only one setting. They emerge from interactions across school and family life.

A second useful lens is social support and social learning. Recent physical activity research consistently shows that children are more active when parents provide encouragement, co-participation, modelling, and logistical support (Su et al., 2022; Vega-Díaz et al., 2023; Hosokawa et al., 2023). Hygiene behaviour research also points to the importance of learning through social example, routine reinforcement, and repeated guidance from adults (Kuandyk et al., 2025; Golla et al., 2024). This makes social support theory useful because it explains how children's health behaviour is shaped by the quality and regularity of adult influence rather than by knowledge alone.

A third helpful perspective is ecological thinking about child behaviour. Vorlíček et al. (2025) show that children's physical activity is influenced by both family dynamics and school conditions, and they argue that integrated family-school strategies are needed to build healthier movement patterns. Likewise, recent school health promotion work highlights that family engagement is stronger when teachers, school leaders, and communities intentionally create structures that support participation (Michael et al., 2023). The ecological value of this perspective lies in showing that children's behaviours are shaped by multiple layers at once, including the child, the family, the school, and the broader community environment.

Together, these perspectives provide a coherent foundation for the review. The overlapping spheres model explains why school and home must be connected. Social support and social learning explain how parental engagement actually shapes behaviour. Ecological thinking explains why successful school health strategies need coordinated action across settings. Combined, these theories suggest that children's physical activity and hygiene behaviours in Ghanaian basic schools are best understood as products of family-school interaction rather than of school provision alone.

REVIEW METHOD

This article adopts a narrative literature review design because the topic is broad, conceptually connected, and draws together literature on parental engagement, children's physical activity, hygiene behaviour, school health promotion, and Ghanaian basic education. Narrative reviews are particularly appropriate where the aim is to build conceptual understanding, compare different strands of evidence, identify patterns across a heterogeneous field, and show what the literature collectively means rather than simply aggregate narrow effect sizes. Recent review method guidance stresses that strong narrative reviews should still be transparent about their search process, inclusion logic, and thematic organisation, even if they are not conducted as full systematic reviews (Chigbu et al., 2023; Kelley & D'Souza, 2025). That principle guided



the present review. Although this review does not follow PRISMA reporting in full (as PRISMA is designed for systematic reviews), the screening and selection process was guided by PRISMA principles of transparency and reproducibility where applicable (Page et al., 2021). Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Gluud, C., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., ... Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, 372, n71. <https://doi.org/10.1136/bmj.n71>

The literature search was conducted mainly through Scopus, Web of Science, PubMed, ERIC, and Google Scholar. These databases were selected because the topic sits across school health, public health, education, physical activity, hygiene, and family-school engagement research. Search terms were developed around the main concepts of the review, including combinations of “parental engagement,” “parental involvement,” “family-school partnership,” “school health,” “physical activity,” “hygiene behaviour,” “WASH,” “children,” “basic schools,” and “Ghana.” Additional combinations such as “parent support physical activity children,” “school-based family-oriented intervention,” “family and community engagement school health,” and “hygiene practices among primary school children” were also used where necessary.

The review prioritised peer-reviewed journal articles written in English and carrying DOI addresses. The DOI requirement was adopted as a practical verifiability threshold, ensuring that all included sources could be independently located, authenticated, and accessed by readers. It was not intended to exclude valid African or regional scholarship on principle; where relevant Ghana-focused studies were identified without a DOI, efforts were made to verify their peer-reviewed status through other means before exclusion. The authors acknowledge that this criterion may have inadvertently under-represented some African journals with uneven indexing, and future reviews in this area should apply a broader verifiability standard. Instructions. Studies published mainly from 2021 to 2026 were given priority, though relevant 2020 or 2021 papers already central to the newer literature were retained where needed for coherence. Included studies had to relate directly to at least one of the following: parental engagement in child health or school health, family influences on child physical activity, school-family strategies for healthy behaviour promotion, hygiene behaviour among school children, school-based family-oriented health interventions, or Ghanaian research on parent participation and school health barriers. Preference was given to studies focused on school-age children, school settings, family-school interaction, and school health or well-being outcomes.

Studies were excluded if they were not peer reviewed, were not in English, lacked DOI or verifiable peer-review indexing details, focused only on adult populations, or had no clear relevance to child physical activity, hygiene, or school-family health engagement. Theses, reports, commentaries, and non-peer-reviewed materials were not used in the article itself, even where they were helpful for orientation during the search process.

Screening proceeded in stages. Titles and abstracts were first read for relevance, followed by full-text reading of conceptually suitable papers. Reference lists of selected studies were also checked to identify additional peer-reviewed articles meeting the criteria. In total, database searches returned approximately 412 records. After duplicate removal, 318 titles and abstracts were screened for relevance. Of these, 74 full-text articles were assessed for eligibility, and approximately 35 studies were ultimately included in the review. The final body of literature



was then read in full and organised into themes relating to parental support, hygiene behaviour, school-based engagement strategies, Ghanaian context, and integrative implications. This thematic organisation follows the narrative review approach recommended in your uploaded guide, which emphasises grouping literature into major themes rather than writing one study after another.

The review has the usual limitations of narrative review work. It does not claim exhaustive reproducibility in the way that a systematic review would, nor does it formally score the risk of bias of each included study. However, the method remains transparent in scope, source selection, and interpretive procedure, which is consistent with current recommendations for producing publishable narrative reviews (Chigbu et al., 2023; Kelley & D'Souza, 2025).

THEMATIC REVIEW OF THE LITERATURE

Why parental engagement matters for children's physical activity and hygiene behaviours

The strongest message from the reviewed literature is that family support matters because children's health habits are socially shaped rather than individually produced. In relation to physical activity, parents influence what children value, how active they are, what opportunities they receive, and whether healthy movement becomes normal in everyday family life. Vega-Díaz et al. (2023) found in their systematic review that parental involvement affects children's active lifestyles through modelling, joint participation, and parenting style. Su et al. (2022) reached a similar conclusion through meta-analysis, finding that positive parental influence is associated with higher physical activity levels among children and adolescents. Hosokawa et al. (2023) further show that parental support for physical activity is positively associated with children's physical activities. These studies converge on one point: physical activity habits are more likely to develop when parents do more than merely approve of exercise. They must also provide encouragement, example, structure, and participation.

The literature on hygiene behaviour points in a similar direction, even though it is not as fully developed around parental engagement specifically. Recent school hygiene studies show that hygiene practices among children are associated with knowledge, inspection routines, club participation, school environment, and access to facilities (Golla et al., 2024; Minda et al., 2024). Kuandyk et al. (2025) explicitly argue that hygiene knowledge is often transmitted through both parents and schools, suggesting that home and school reinforce one another. This is important because hygiene behaviours, like physical activity, are habits that depend on repeated practice. Children are unlikely to sustain handwashing, cleanliness, and other protective behaviours if those expectations are inconsistent between school and home. Thus, the literature supports the argument that parental engagement matters because it provides continuity across the main environments in which children develop routines.

Forms of parental support that influence children's physical activity

The physical activity literature provides the clearest evidence on specific forms of parental engagement. First, parental modelling matters. Children are more likely to develop active habits when parents themselves value and practise physical activity. Su et al. (2022) note that



positive parental influence includes approval, support, and active participation, while Vega-Díaz et al. (2023) emphasise parental modelling in early childhood and shared participation in physical activity. Vorlíček et al. (2025) also show that parental physical activity and education are associated with children's moderate-to-vigorous physical activity. This suggests that parents influence not only whether children are active, but also how activity is normalised within the family.

Second, direct support and co-participation appear especially important. Hosokawa et al. (2023) found that parental support is positively related to children's physical activities, while Santos et al. (2023) show that school-based, family-oriented interventions often improve physical activity, sedentary behaviour, and physical fitness when they include meaningful family involvement. Crone et al. (2021) also provide evidence that a family-engagement approach can improve physical activity in some families, though effects differ according to family context and readiness. These findings suggest that physical activity is more likely to improve when parents participate actively rather than only expressing general support.

Third, the literature indicates that home structure and routine matter. Vega-Díaz et al. (2023) argue that parenting styles shape motivation and active lifestyle patterns, while family-based studies increasingly show that the consistency of home routines influences children's health behaviour more broadly. Where parents provide transport, equipment, encouragement, time, and shared activity, children are more likely to sustain movement habits. However, where support is irregular, inconsistent, or overshadowed by competing pressures, gains may weaken. This helps explain why evidence is sometimes mixed even when the overall direction remains positive.

Family influence on children's hygiene behaviour

The hygiene literature is less explicit about parental engagement than the physical activity literature, but it still provides strong reasons to view family involvement as important. Golla et al. (2024) found that hygiene practices among primary school children were associated with knowledge, hygiene club membership, school exposure, and setting. Minda et al. (2024) similarly found that knowledge, school hygiene inspection, and facility access were associated with better personal hygiene practice. These findings imply that hygiene is built through repeated instruction and behavioural reinforcement. Because children spend substantial time at home, it is unlikely that school messages alone can produce strong or lasting hygiene habits without complementary reinforcement in the family.

Kuandyk et al. (2025) strengthen this argument by explicitly stating that hygiene knowledge is often transmitted through both parents and schools. This suggests that children's hygiene behaviour is not only a matter of school infrastructure or classroom teaching, but of combined socialisation across home and school. In practice, this means that handwashing, oral hygiene, bathing, clean clothing, and sanitation habits are likely to improve when parents understand and reinforce these practices at home. It also means that school-based hygiene instruction may be weakened where home expectations, knowledge, or materials are inconsistent.

The Ghanaian evidence points in the same general direction. Adomako Gyasi et al. (2024) identified weak parental and community participation as a barrier to school-based health programme implementation in Ghana. Duah (2024) also shows that WASH implementation in Ghanaian basic schools remains uneven. Gbolu et al. (2023) found that teachers' handwashing



behaviour matters because children learn by observing significant adults. Although this study focuses on teachers, the logic clearly extends to parents. If adult example matters for hygiene learning, then parental behaviour and support are likely to matter as well. The main lesson from this literature is that hygiene behaviour should be understood as a shared home-school responsibility, not as a school-only outcome.

School-based strategies for strengthening parent involvement in school health

The literature identifies several strategies schools can use to strengthen parent involvement in healthy behaviour promotion. One important strategy is clear and regular communication. Michael et al. (2023) found that communication with families was among the most common family and community engagement strategies used in school-based interventions to promote healthy behaviours. Communication matters because it helps schools explain expectations, share practical guidance, and keep health messages visible beyond the classroom. Bartoli et al. (2022) also show that parental engagement in Ghana is shaped by how schools communicate with parents and by how parents understand their role in relation to the school.

A second strategy is parent education and practical guidance. Family engagement becomes more meaningful when schools help parents understand what healthy behaviour looks like and how to support it at home. Michael et al. (2023) show that support and education for families are common strategies in health promotion interventions. Amorim et al. (2024) similarly found that schools often focus more on children than on families, even though parents are the main managers of everyday lifestyle behaviour. This suggests that school health promotion can be strengthened when schools provide parents with accessible information, demonstrations, and activities that translate school messages into home practice.

A third strategy is home reinforcement of school health messages. Michael et al. (2023) emphasise reinforcement of health knowledge and practices in the home and community environment as one of the key family engagement strategies. In practical terms, this may involve take-home activities, family challenges, parent-child assignments, monitoring cards, simple routine checklists, or short activity prompts that children complete with family members. Crone et al. (2021) showed that a family-engagement tool can improve some health behaviours, though its effects depend on whether goals are actually set and used within the family. This suggests that home reinforcement works best when it is specific, simple, and linked to real routines rather than presented as general advice only.

A fourth strategy is shared participation and family-oriented activities. The physical activity literature suggests that co-participation is especially valuable. Santos et al. (2023) found that family-oriented school interventions often use multicomponent designs, while Michael et al. (2023) note that multicomponent interventions with multiple family engagement strategies appear promising. For children's physical activity, schools can therefore strengthen parent involvement through family sports days, walking challenges, take-home activity tasks, or school-community activity events. For hygiene, shared participation may take the form of parent-child sanitation days, home hygiene checklists, or joint health education activities. The literature suggests that engagement becomes stronger when parents are invited to act, not only informed.

A fifth strategy is using school-community structures such as PTAs and community partnerships. Recent Ghanaian studies are particularly useful here. Agyekum et al. (2025) show



that PTAs can support school-community development, improve local capacity, and strengthen school relationships with families. Ballang and Aboodey (2023) similarly show that PTA policy arrangements affect school infrastructure support in Ghanaian rural schools. These findings suggest that parental engagement in school health can be strengthened when schools use existing collective structures rather than relying only on individual parent contact. In the Ghanaian context, this is especially relevant because community participation and PTA activity are already familiar parts of school life, even if they are not always mobilised for health behaviour promotion specifically.

Ghanaian enablers and barriers to parental engagement in school health

The Ghanaian literature suggests that parent involvement in school health is both promising and constrained. On the enabling side, Ghanaian schools already have recognised school-community structures, including PTAs, and there is evidence that parental engagement exists and can be strengthened. Bartoli et al. (2022) found that Ghanaian parents do engage in children's early education, although the forms and intensity of that engagement are shaped by local context. Agyekum et al. (2025) also show that PTAs can improve school-community development and strengthen social connections and local capacity. These studies suggest that the issue in Ghana is not the complete absence of parental engagement, but uneven structure, inconsistency, and limited use of existing parent-school platforms for health-related goals.

At the same time, there are major barriers. Adomako Gyasi et al. (2024) show that weak parental and community participation is itself a recognised challenge in school-based health programmes in Ghana. Duah (2024) points to uneven WASH implementation in public basic schools, which suggests that even where parents are willing, the school environment may not always support strong hygiene practices. Ballang and Aboodey (2023) further show that policy arrangements can affect parents' willingness to support schools materially. These studies indicate that parental engagement is shaped by trust, communication, resources, school leadership, and wider institutional arrangements. In practical terms, parents are less likely to participate consistently where schools do not clearly value their contribution, where structures for engagement are weak, or where resource pressures make health routines difficult to sustain.

Toward an integrated family-school engagement framework

When the reviewed evidence is brought together, it points to an integrated framework in which parental engagement improves children's physical activity and hygiene behaviours through five linked processes. The first is communication, where schools and families exchange clear health messages. The second is parent education and guidance, where parents are supported to understand how to reinforce healthy routines. The third is shared activity and modelling, where parents participate directly in movement and hygiene reinforcement. The fourth is home reinforcement and monitoring, where family routines support what children learn in school. The fifth is school-community partnership, where PTAs, teachers, and community actors strengthen the wider support system around child health behaviour. This framework is not taken from one single study. It is a synthesis of recurring patterns across the literature on parental support, school-family health promotion, hygiene behaviour, and Ghanaian school-community engagement.



Synthesis of Literature Findings

Taken together, the reviewed literature suggests that parental engagement is a central but unevenly structured influence on children's physical activity and hygiene behaviours. Across the studies, the clearest overall pattern is that children benefit when health expectations are consistent between school and home. In the physical activity literature, this consistency appears through modelling, encouragement, co-participation, logistical support, and routine reinforcement (Su et al., 2022; Vega-Díaz et al., 2023; Hosokawa et al., 2023). In the hygiene literature, the same logic appears through knowledge transmission, repeated practice, adult example, school inspection, and supportive conditions (Golla et al., 2024; Minda et al., 2024; Kuandyk et al., 2025). Although the two literatures differ in depth and emphasis, they converge on one important point: children's behaviour is more likely to improve when schools and families work together rather than separately.

A second major pattern is that parental engagement works best when it is active, practical, and structured, rather than vague or symbolic. The physical activity studies consistently show that the strongest forms of parent influence are not passive approval, but concrete support. Vega-Díaz et al. (2023) highlight parental modelling and co-participation, while Hosokawa et al. (2023) show the positive relationship between parental support and children's activity. Su et al. (2022) similarly demonstrate that positive parental influence is associated with higher activity levels. These studies suggest that effective engagement involves real behavioural input from parents. The same principle appears in school-family intervention literature. Santos et al. (2023) report that many school-based family-oriented interventions improve physical activity and related outcomes when family involvement is built into multicomponent intervention design. Crone et al. (2021) likewise show that family engagement can improve health-related behaviour, though implementation varies. The broader interpretation is that parental engagement is not effective simply because parents are present. It is effective when schools create practical avenues for parents to act.

A third synthesis point is that hygiene behaviour appears to depend on the same broad logic of consistency, modelling, and reinforcement, even though the parental engagement literature is less explicit here than in physical activity research. Children's hygiene behaviours improve where knowledge is stronger, inspection is present, facilities are usable, and reinforcement is repeated (Golla et al., 2024; Minda et al., 2024). Kuandyk et al. (2025) add an important integrative insight by suggesting that hygiene knowledge is transmitted through both families and schools. When this is read alongside the Ghanaian evidence on teacher handwashing behaviour and school health implementation, it becomes clear that hygiene practice is best understood as a home-school behaviour system rather than a school-only outcome (Gbolu et al., 2023; Adomako Gyasi et al., 2024). This means that school health practice may remain fragile when hygiene messages are not carried into the home environment.

The literature also shows broad agreement that school-based parental engagement must be deliberately organised. Michael et al. (2023) found that successful school and out-of-school interventions promoting healthy behaviours commonly use strategies such as communicating with families, educating and supporting parents, reinforcing health messages in the home, and collaborating with communities. Importantly, this review did not present family engagement as a single technique, but as a set of linked approaches that schools can combine. This is highly relevant for the present study because it suggests that schools have practical options for



strengthening parent involvement. Bartoli et al. (2022) and Amorim et al. (2024) also help explain why deliberate structure matters. Both studies show that parents do not always participate consistently unless schools provide clear roles, meaningful invitations, and supportive forms of communication. Thus, family engagement is not a natural by-product of school health activity. It is an organisational achievement.

At the same time, the literature reveals notable variation and limitations. One source of variation concerns the strength of evidence across behaviour domains. Physical activity studies offer clearer and more numerous findings on parental support than hygiene studies. Hygiene research is growing, but much of it still focuses on school conditions, child knowledge, or teacher behaviour rather than on structured family-school partnership. This does not mean parents are unimportant for hygiene. Rather, it shows that the field has not yet examined parental engagement as directly or systematically in hygiene as it has in physical activity. A second source of variation concerns implementation. Even where school-family strategies exist, participation is not always deep or sustained. Crone et al. (2021) found that family-engagement approaches can be difficult to implement consistently, especially when families face competing pressures. Michael et al. (2023) similarly note that many interventions are multicomponent, which makes it difficult to isolate the effect of specific family engagement strategies. This means the literature is stronger in showing that parental engagement matters than in proving exactly which single engagement mechanism is always best.

The Ghanaian evidence adds an important contextual layer to this synthesis. It suggests that parental engagement in school health is shaped by both opportunity and constraint. On the one hand, Ghanaian schools already have school-community structures such as PTAs and parent-school relationships that can support health promotion (Bartoli et al., 2022; Agyekum et al., 2025). On the other hand, the literature also shows barriers related to parental and community participation, resource shortages, WASH gaps, and weak coordination in school health implementation (Adomako Gyasi et al., 2024; Duah, 2024). Ballang and Aboodey (2023) further show that policy arrangements can influence parents' willingness to support schools. This means that parental engagement in Ghana cannot be treated simply as an issue of parent attitude. It must be understood through communication, trust, institutional support, time pressures, and school-community structures.

Another important synthesis point is that the most useful way to understand parental engagement is not as a single variable, but as a bridge process between school health intentions and children's everyday practice. Schools may teach health messages and organise activities, but those efforts become stronger when parents reinforce them at home. Likewise, parents may care about their children's well-being, but their support becomes more effective when schools provide clear guidance, practical ideas, and opportunities for collaboration. Vorlíček et al. (2025) capture this logic well by showing that family and school are both important arenas for shaping children's physical activity and by arguing for integrated family-school strategies. This same interpretation fits the hygiene literature, where repeated reinforcement across contexts appears crucial for sustained behaviour.

Overall, the broader meaning of the reviewed literature is that parental engagement is a necessary but insufficient condition for improving children's physical activity and hygiene behaviours. It is necessary because children's health habits are shaped across school and home, and the evidence consistently supports the importance of parental example, support, and



reinforcement. It is insufficient because parental engagement alone cannot overcome weak communication, poor implementation, inadequate facilities, or fragile institutional structures. What matters most is the quality of the school-family partnership through which engagement is organised. That is why the central conclusion of this review is not simply that parents matter, but that schools need deliberate parental engagement strategies if they want children's movement habits and hygiene behaviours to improve in sustained ways.

The synthesis of the reviewed literature therefore suggests that parental engagement acts as the central connecting mechanism through which school messages about physical activity and hygiene can be reinforced, practised, and sustained in family life, as illustrated in Figure 1.

Figure 1. Conceptual framework for parental engagement strategies that support children's physical activity and hygiene behaviours in Ghanaian basic schools.

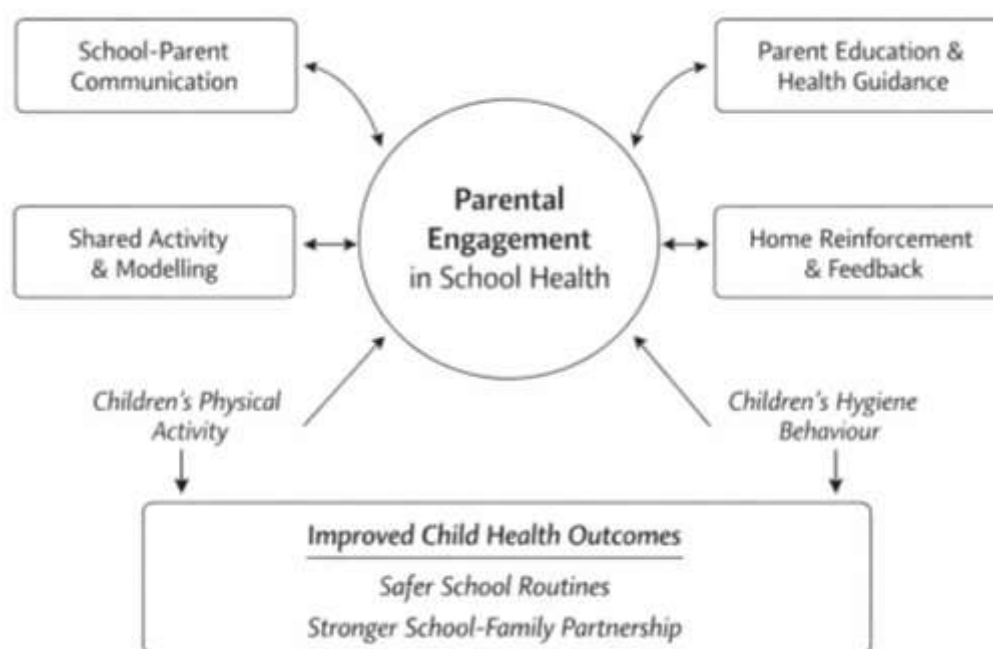


Figure 1 presents a conceptual framework derived from the synthesis of the reviewed literature. The framework positions parental engagement in school health as the central mechanism linking school-based strategies to children's health behaviour outcomes. It identifies four core strategy areas: school-parent communication, parent education and health guidance, shared activity and modelling, and home reinforcement and feedback. These strategies strengthen parent knowledge, confidence, and participation, help align health messages across school and home, and improve support and monitoring around behaviour. The framework further shows that when these processes are active, they can improve children's movement habits and hygiene behaviours and contribute to safer school routines and stronger school-family partnerships. The model is situated within the Ghanaian basic school context, where family engagement is shaped by PTA structures, school health conditions, and the wider relationship between schools and communities.



Research Gaps and Future Research Directions

Important gaps remain in the literature. Conceptually, physical activity and hygiene behaviours are still too often studied as separate school health issues, even though they share common behaviour pathways involving reinforcement, modelling, and home-school consistency. The literature lacks a stronger integrated model explaining how parental engagement can influence multiple child health behaviours at once in school-age populations.

Theoretical gaps are also evident. Recent studies support family-school partnership, social support, and ecological interpretations of child health behaviour, yet these ideas are not always brought together within one coherent framework. Future studies should more deliberately combine overlapping spheres, social support, and ecological perspectives in order to explain how engagement operates across school and home.

Methodologically, the field still relies heavily on cross-sectional studies, qualitative accounts, and multicomponent interventions where the specific effect of parent engagement is difficult to isolate. More longitudinal and mixed-methods research is needed to examine how parental engagement changes over time and which engagement strategies have the strongest and most sustainable effects.

Contextually, there is a clear need for more Ghana-focused research on school-family partnership in child health. Existing Ghanaian studies highlight barriers, school-community structures, and school health implementation problems, but they still provide limited direct evidence on parental engagement strategies specifically for physical activity and hygiene behaviour in basic schools. Future research should therefore test school-based family engagement models in Ghanaian basic school settings, including rural-urban comparison and stronger attention to practical implementation.

Theoretical Implications

This review makes a first theoretical contribution by showing that children's physical activity and hygiene behaviours should not be treated as outcomes of school provision alone. Instead, the literature points toward a relational model in which behaviour is shaped across home and school through repeated support, example, and reinforcement. In this sense, the review shifts the discussion from a school-centred understanding of child health behaviour to a more interactional understanding of school-family health formation. This is important because many school health discussions still begin from the assumption that school lessons, school infrastructure, or school programmes are the main levers of change. The present review suggests that these levers are necessary but incomplete unless they are connected to family practice.

A second theoretical implication is that parental engagement should be understood as a multidimensional rather than singular construct. The reviewed literature does not support a narrow definition of parental involvement as attending meetings or responding to school notices. Instead, it shows that engagement includes modelling, co-participation, encouragement, communication, home reinforcement, support for routines, and participation in wider school-community structures. This broader interpretation helps clarify why some school-family relationships appear stronger than others. It is not only the presence of parents



that matters, but the form and quality of their engagement. Theoretically, this strengthens the usefulness of family-school partnership models by making them more behaviour-specific.

A third contribution is that the review extends the value of the overlapping spheres perspective. Recent school-family health studies show that children's behaviour improves when home and school send consistent messages and reinforce one another. This implies that the concept of overlapping spheres is not only useful for academic outcomes, but also for school health behaviour, especially where routines and social examples matter. The review, therefore, broadens the application of this framework by showing that it can help explain movement habits and hygiene behaviour, not just school participation in the narrow educational sense.

A fourth implication is that the review supports the relevance of social support and social learning theory for school health scholarship. The physical activity evidence is especially strong on this point. Parents influence children not merely by giving instructions, but by approving, participating, encouraging, and modelling behaviour. The hygiene literature points in the same general direction, even where the family element is less explicitly theorised. This suggests that healthy behaviour is sustained less through information alone and more through patterned social reinforcement. The review therefore, contributes by clarifying that parental engagement is not simply a contextual variable around child health. It is a behavioural mechanism.

The review also contributes theoretically by bringing together literatures that are too often fragmented. Parental support for physical activity, school-family partnership, hygiene behaviour, and Ghanaian school-community engagement are usually studied as related but separate issues. By integrating them, the review offers a more coherent account of how schools and families jointly shape child health practice. This is theoretically useful because it allows school health scholarship to move beyond issue-specific silos and toward a more unified explanation of behaviour formation in school-age children.

Finally, the Ghanaian context gives the review a context-sensitive theoretical contribution. The evidence shows that family engagement does not occur in a social vacuum. It is shaped by time constraints, school communication, PTA structures, trust, resources, and school health conditions. This means that theories of parental engagement must account not only for motivation and support, but also for context and institutional possibility. The review, therefore, suggests that parental engagement in Ghanaian basic schools should be understood as both a social and institutional process, shaped by the interaction of families, schools, and local school-community structures.

Practical Implications

The practical implications of this review are significant for schools, teachers, parents, and education actors in Ghana. The first implication is that schools should stop treating physical activity and hygiene behaviour as matters that can be solved through pupil instruction alone. The literature suggests that children are more likely to sustain healthy movement and hygiene routines when these are reinforced at home. This means that schools need to design parent engagement into their school health practice from the start, rather than add it later as an optional extra.



A second implication is that communication should become more purposeful. Schools often communicate with parents about fees, attendance, or academic issues, but far less consistently about health behaviours. The reviewed evidence suggests that regular, practical, and simple communication is one of the most effective ways of bringing parents into school health. In practical terms, schools can send home short health guidance messages, organise periodic parent briefings, include child health behaviour topics in PTA discussions, and provide take-home prompts that help parents reinforce what children are learning. The key point is that communication should be concrete and actionable.

A third practical implication concerns parent education. Parents may support school health more effectively when they understand why physical activity and hygiene matter and how they can reinforce them in everyday family life. Schools, therefore, need to move beyond one-way information sharing and create brief parent learning opportunities. These do not have to be complicated. They can include short sessions during PTA meetings, demonstration activities, simple hygiene or activity checklists, or visual health messages sent to pupils. What matters is that parents receive guidance that is realistic for their daily conditions.

Another practical implication is the importance of shared participation. The physical activity literature is especially clear that co-participation and modelling are powerful forms of support. This means that schools should design more opportunities for parents and children to act together. Family sports days, walking challenges, parent-child exercise tasks, and active homework are possible examples. For hygiene behaviour, shared participation may include parent-child sanitation routines, handwashing reinforcement charts, or simple home hygiene pledges. When schools invite parents to take part in action rather than only receive information, engagement is likely to become stronger and more memorable.

The review also implies that teachers need support to work effectively with parents. In many schools, parent engagement depends on the initiative of individual teachers rather than on a clear school approach. This creates inconsistency. School leaders should therefore help teachers understand that engaging parents in school health is part of the work of improving child wellbeing, not an additional burden unrelated to teaching. Internal planning, role clarity, and simple tools for school-home communication can make this more manageable.

A further practical implication is the need to use existing school-community structures better. In Ghanaian basic schools, PTAs and related community arrangements already exist as recognised structures for parent participation. The literature suggests that these structures can support wider school-community development and strengthen family-school links. Schools should therefore use PTA meetings and similar forums not only for administrative or financial matters, but also for school health discussions, child wellbeing issues, and practical parent support around health behaviour. This would help make parental engagement in health more routine and institutionally grounded.

The review also suggests that school leaders should pay closer attention to consistency between school expectations and home realities. Some parents may face time pressures, economic difficulty, low confidence, or uncertainty about how to support their children. This means that schools should avoid assuming that all parents can engage in the same way. Instead, they should offer flexible forms of participation. Some parents may respond best to home-based tasks, others to short face-to-face meetings, and others through community-based structures. Practical engagement strategies should therefore be realistic, inclusive, and adapted to the context.



In relation to hygiene specifically, the review implies that schools should pair health education with reinforcement. Where hygiene facilities are weak or school routines are inconsistent, parent engagement alone will not be enough. Schools should therefore improve the usability and visibility of hygiene practices within school life while also encouraging parents to reinforce those same habits at home. In practice, this means combining school checks, hygiene reminders, parent messages, and child participation in routine formation. The same logic applies to physical activity. Encouraging parents to support movement is more effective when schools also provide regular opportunities for active participation during the school day.

For district and system actors, the review suggests that parental engagement in school health should be treated as a legitimate part of school improvement rather than left entirely to local improvisation. Guidance materials, school health planning templates, and supervisory tools should include expectations around school-family engagement. Where education authorities want stronger school health outcomes, they should support schools with examples of workable parent engagement strategies rather than focusing only on policy statements.

The review also has implications for school monitoring. Schools should track not only whether children receive school health messages, but also whether parent engagement strategies are being used and whether those strategies are influencing routines. This does not require complicated evaluation systems. It may involve simple tracking of parent attendance at health sessions, completion of take-home activities, teacher reports on school-home communication, or short reflections from parents and pupils. The point is to make engagement visible enough to improve.

Finally, the review suggests that sustainable child health improvement in Ghanaian basic schools depends on seeing families as partners rather than spectators. Schools should not assume that parents will automatically support school health simply because they care about their children. Engagement becomes stronger when schools deliberately invite, guide, respect, and organise parent participation. The practical lesson is therefore clear: stronger school health outcomes will require a stronger home-school partnership. If schools want children to move more and practise better hygiene, they must create the conditions that help parents support those same behaviours beyond the school gate.

CONCLUSION

This narrative literature review examined how parental engagement supports children's physical activity and hygiene behaviours and identified school-based strategies for strengthening parent involvement in school health in Ghanaian basic schools. The review showed that children's movement habits and hygiene behaviours are shaped not only by what schools provide, but also by the quality of support, modelling, and reinforcement they receive at home. Across the literature, several recurring themes emerged: parental encouragement and co-participation matter for physical activity, hygiene behaviours depend on repeated home-school reinforcement, and school-based parent engagement strategies are more effective when they are practical, structured, and sustained.

The main contribution of the review lies in bringing together physical activity, hygiene, and school-family partnership within one interpretive framework. By integrating these bodies of



literature, the article shows that parental engagement is best understood as a bridge between school health intentions and children's everyday practice. The Ghanaian evidence strengthens this conclusion by showing that parental and community participation remains uneven, even though schools already have recognised structures through which engagement can be organised.

Although the literature points clearly toward the value of stronger parent involvement, important gaps remain. Research is still stronger on parental support for physical activity than on parental engagement in children's hygiene behaviour, and Ghana-specific evidence remains limited. Future studies should therefore move beyond isolated and descriptive approaches and pay greater attention to integrated, context-sensitive, and school-based models of parental engagement in Ghanaian basic schools. Overall, the field now points to a simple but important conclusion: healthier child behaviour is more likely when schools and families work together intentionally rather than separately.

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