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Physical and Psychological Well-being in Father-Daughter Dyads: A Systematic Scoping Review of Global Interventions

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Abstract

Background. Adolescent girls' physical inactivity and mental health challenges are increasing globally, particularly in contexts where sociocultural barriers restrict girls' mobility. Father-daughter engagement through structured physical activity (PA) and awareness programs has emerged as a promising strategy to address these concerns.

Objective. This systematic scoping review aims to synthesize global evidence on intervention-based programs involving father-daughter dyads and examine their impact on physical and psychological well-being.

Methods. A systematic search was conducted using PubMed and Google Scholar for studies published between January 2014 and May 2025. A total of 36 intervention-based studies meeting predefined inclusion criteria were analysed following PRISMA-ScR guidelines.

Results. Findings indicate that father-daughter co-participation in structured programs significantly improves physical activity levels, reduces sedentary behaviour and enhances psychological outcomes, including emotional resilience, self-esteem, and relational bonding. Interventions such as Dads And Daughters Exercising and Empowered (DADEE), Run Daddy Run and Healthy Youngsters Healthy Dads (HYHD) demonstrated consistent effectiveness. Key mechanisms underpinning these outcomes include emotional regulation, role-modelling and co-parenting dynamics.

Conclusion. Father-inclusive interventions offer a robust and culturally adaptable approach to improving girls' physical and psychological well-being. These programs also contribute to challenging gender norms and strengthening family relationships. The findings provide actionable insights for researchers, educators, and policymakers to design community-based, gender-sensitive interventions.

Keywords: Father-daughter dyads, physical activity, psychological well-being, interventions, empowerment, co-parenting

Introduction

Adolescent girls' physical inactivity and declining mental health represent pressing global public health concerns. Increasing screen time, sedentary lifestyles, and reduced access to safe recreational spaces have contributed to rising levels of anxiety, depression and poor physical health among young people (Vella et al., 2023). These challenges are further exacerbated in gender-conservative societies, such as Pakistan and Bangladesh, where sociocultural norms often restrict girls' mobility and reinforce gendered expectations around space use (Asif, 2024; Ahmed et al., 2023). In such contexts, girls face compounded risks of social isolation and physical decline, necessitating interventions that address both biological and cultural barriers.

Within this landscape, the role of family has gained increasing attention as a critical determinant of adolescent development. While maternal influences have traditionally been the focus of family-based research, a growing body of literature highlights the distinct and complementary role of fathers. Positive father involvement is consistently associated with higher self-esteem and better emotional regulation (Zhu et al., 2024; Juliyanti & Magistarina, 2024; Leppard & Dufur, 2021). Specifically, parental warmth and validation have been linked to improved resilience and lower risks of disordered behaviours (Walsh et al., 2024; Mestermann et al., 2023). Conversely, parental "invalidation" or absence has been shown to correlate with higher rates of disordered eating and emotional instability in daughters (Reim, 2018).

Theoretical frameworks like Social Learning Theory and Attachment Theory explain these outcomes. Fathers serve as primary role models, influencing daughters' attitudes towards physical activity through shared experiences (Schoeppe et al., 2016). Furthermore, secure father-daughter attachment fosters the emotional security required for adaptive stress regulation during the transition to adulthood (Hoegler et al., 2023).

In recent years, structured father-daughter interventions have emerged as potent tools for change. The DADEE program in Australia demonstrated that targeting the father-daughter dyad specifically can improve daughters' fundamental movement skills and social-emotional well-being more effectively than general family programs (Morgan et al., 2019; Young et al., 2019). Similarly, HYHD and "*Run Daddy Run*" programs emphasize that when fathers model healthy lifestyles, daughters are more likely to sustain physical activity levels (Ashton et al., 2024; Latomme et al., 2023).

Beyond Western contexts, emerging research highlights the cultural adaptability of these models. In Canada, community-based initiatives for South Asian immigrant families have focused on using father-daughter bonding to challenge restrictive gender norms (Jamal et al., 2022). In the United States, the "South Asians Active Together" (*SAATH*) protocol illustrates how dyadic physical activity can be used to navigate cultural barriers in minority populations (Kandula et al., 2022). These interventions suggest that when fathers are engaged as "gender-equity advocates," they not only improve their daughters' physical health but also empower them to reclaim public spaces and sports (Pollock et al., 2021).

Despite these promising developments, the existing literature remains fragmented. While individual studies provide valuable insights, there is a lack of comprehensive synthesis focusing specifically on father-daughter dyads and the mechanisms through which such interventions influence physical and psychological well-being. Moreover, limited attention has been given to contextual factors such as cultural norms, socioeconomic conditions, and program design features that may shape intervention effectiveness, particularly in underrepresented settings such as South Asia.

Addressing these gaps is both timely and necessary. In contexts like Pakistan, gender norms and structural barriers constrain girls' opportunities for physical activity, father-inclusive approaches may offer a culturally acceptable and impactful pathway for promoting well-being and empowerment. By engaging fathers as active partners in their daughters' lives to improve health outcomes and transform gendered expectations within families and communities.

Therefore, this systematic scoping review aims to synthesize global evidence on structured father-daughter intervention programs and examine their impact on physical and psychological well-being. It further seeks to identify key mechanisms,

program characteristics and contextual factors that contribute to successful outcomes. By integrating findings across the design of culturally adaptable, family-centred interventions that promote health, well-being, and gender equity among adolescent girls.

Objective of the Study

Guided by the PICO framework – Participants (father-daughter dyads), Interventions (Structured physical/awareness programs), Comparison (control groups or baseline data), and Outcomes (physical and psychological health) – the objective of this systematic scoping review is to map the global landscape of father–daughter dyadic interventions and synthesize their impact on physical and psychological health.

Research Questions

RQ1: What types of structured father-daughter intervention programs have been implemented globally, and what are their core components?

RQ2: To what extent do these interventions improve physical and psychological outcomes compared to control groups?

RQ3: What are the underlying mechanisms (e.g., role-modelling, emotional regulation) that explain the success of these dyadic interventions?

RQ4: How do cultural norms and program delivery settings influence the implementation and long-term impact of these interventions?

Method

Given the emerging nature of father-daughter dyadic research in non-Western contexts, the Preferred Reporting Items for Systematic Reviews and Meta-Analysis for Scoping Reviews (PRISMA-ScR) approach was adopted. This allowed for the inclusion of qualitative and descriptive evidence from regions like Pakistan and Bangladesh, providing a more comprehensive global perspective than a traditional meta-analysis.

Search Strategy

An extensive literature search was executed across PubMed and Google Scholar. The search terms were "psychological well-being," "father-daughter dyads," "physical activity," "intervention-based programs," and "co-parenting." Boolean operators (AND/OR) were used to refine the results. The search was limited to English language, peer-reviewed articles published between January 2014 and May 2025.

Inclusion and Exclusion Criteria

Studies were included if they: involved father–daughter dyads (ages 3–25), including fathers or father figures; examined broader family-based contexts where father involvement was explicitly reported; employed structured physical activity, lifestyle, or awareness-based interventions; reported physical (e.g., motor skills, physical activity levels) and/or psychological outcomes (e.g., self-esteem, emotional well-being, bonding); and utilized randomized controlled, observational, or qualitative research designs.

Studies were excluded if they: did not report any form of father involvement; focused exclusively on non-family or peer-based interventions; lacked measurable physical or psychological outcomes; or were editorials, opinion pieces, or non-scholarly sources.

Screening and Selection Process

The initial search yielded 1,114 articles. After removing duplicates, titles and abstracts were screened for relevance, leaving 74 studies for full-text review. Ultimately, 36 articles met our stringent inclusion criteria and were included in the final synthesis (refer Fig. 1).

Figure 1

PRISMA Flowchart of the Conducted Search

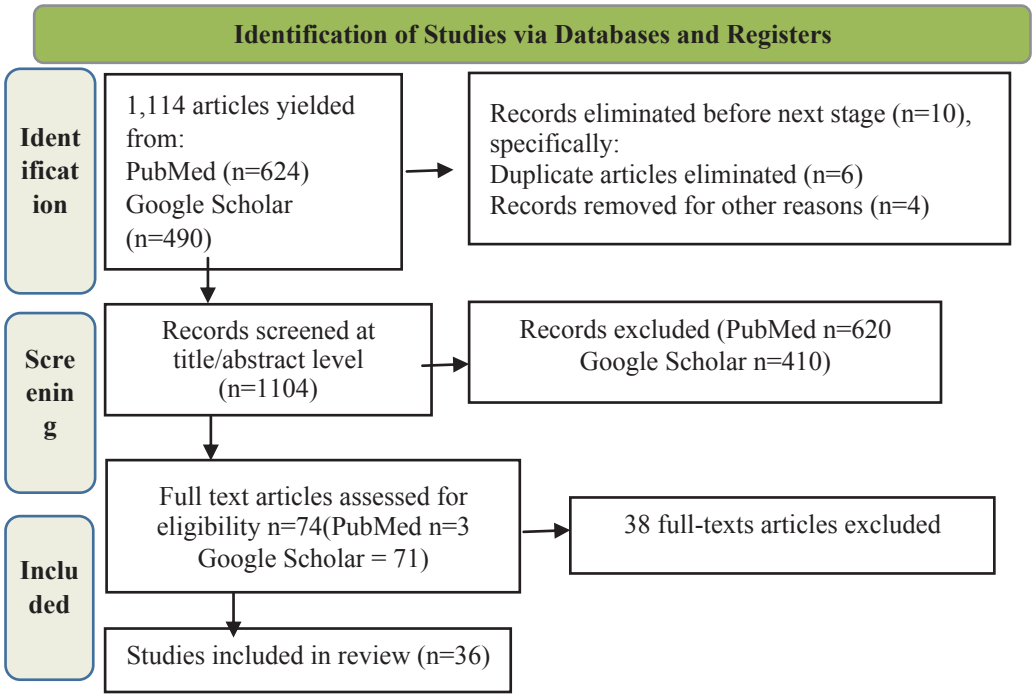

Table 1

Comprehensive Synthesis of Findings (N=36)

Author (Year)	Study Type	Country	Key Finding (Physical & Psychological)	Mechanism / Contextual Factor
Ahmed et al. (2023)	Cluster RCT	Bangladesh	Significant reduction in depression; improved life satisfaction.	School-based multicomponent delivery.
Andrieieva et al. (2022)	Correlational	Ukraine	Positive link between recreational PA and family well-being.	Family unit cohesion.
Asare & Danquah (2015)	Cross-sectional	Ghana	High sedentary behavior linked to poor mental health in girls.	Socioeconomic/African adolescent context.
Ashton et al. (2024)	Longitudinal	Australia	Sustainable impact on nutrition and activity levels (HYHD).	Long-term replicability & father modeling.
Ashton et al. (2023)	Qualitative	Australia	Strengthened family bonding and paternal engagement.	Lived experience/Father-child perspective.
Asif (2024)	Descriptive	Pakistan	"Women on Wheels" boosted mobility and independence.	Challenging gender-conservative norms.
Blackshear (2022)	Cross-sectional	USA	Strong association between father involvement and girl's PA.	Paternal support in undergraduate years.
Blackshear (2019)	Review	USA	Fathers are an "untapped resource" for African American girls.	Cultural relevance for minority groups.
Brady & O'Connor (2014)	Theoretical	USA	Community organizing leads to sustainable social change.	Social Change Theory.
Day (2025)	Qualitative	UK	PA facilitates "reciprocal disclosure" and intimacy.	Conduit for emotional closeness.
Dechrai et al. (2022)	Correlational	Australia	Father's gender-equity beliefs predict daughter's motor skills.	Impact of paternal gender stereotypes.
Demirci (2024)	Cross-sectional	Turkey	Family interaction quality determines adolescent mental health.	Reconstituted family dynamics.
Formagini et al. (2025)	Cross-sectional	USA	Paternal support directly correlates to Latina pre-teen PA.	Cultural context of Hispanic families.
Guagliano et al. (2019)	Feasibility Trial	UK	Family-based step tracking (FRESH) is feasible and engaging.	Child-led/Digital delivery format.
Ha et al. (2019)	RCT Protocol	Hong Kong	Multi-component family PA improves MVPA and parenting.	School-to-home transition.
Hoegler et al. (2023)	RCT	USA	Reduced emotional insecurity and improved father attachment.	IPOD technique/Emotional regulation.
Jamal et al. (2022)	Community	Canada	Nurturing bonds in immigrant families improves well-being.	Challenging patriarchal gender norms.
Juliyanti & Magistarina. (2024)	Correlational	Indonesia	Father involvement predicts better adolescent emotion regulation.	Paternal presence and regulation.
Kandula et al. (2022)	RCT Protocol	USA	Multi-level intervention for S. Asian mother-daughter dyads.	Cultural adaptation for South Asians.
Latomme et al. (2023)	RCT	Belgium	"Run Daddy Run" increased co-PA and lifestyle health.	Co-creation and SMART goal setting.
Latomme et al. (2021)	Protocol	Belgium	Use of co-creation to design father-child interventions.	Bottom-up design approach.
Leppard & Dufur (2021)	Correlational	USA	Sports participation mediates paternal closeness.	Gendered associations in adolescence.
Lisinskienė & Loch. (2019)	Qualitative	Lithuania	Parental involvement in sports improves child attachment.	Sport as a relationship builder.
Lloyd et al. (2015)	RCT	Australia	Parenting practices mediate dietary and PA behavior change.	HYHD: Behavioral mediation.
McClendon et al. (2021)	Qualitative	USA	Paternal responsibilities influence Mexican-heritage PA.	Cultural duty/Paternal role.
Mestermann et al. (2023)	Correlational	Germany	Paternal psychopathology impacts child well-being.	Negative outcome mechanism.
Moodley & Lesch (2024)	Qualitative	S. Africa	Emotional closeness is central to the F-D relationship.	Socio-cultural barriers in South Africa.
Morgan et al. (2021)	RCT	Australia	DADEE effectively improved FMS and girls' self-esteem.	Gender-equity and rough-and-tumble play.
Morgan et al. (2023)	Feasibility	Australia	"Daughters and Dads Cricket" improved cricket-specific skills.	Sport-specific engagement.
Morgan et al. (2019a)	RCT	Australia	Primary DADEE findings: improved physical and social outcomes.	Original DADEE evidence base.
Morgan et al. (2019b)	Dissemination	Australia	Local facilitators can successfully deliver HYHD programs.	Scalability to underserved areas.
Mundra et al. (2025)	Review	India	Summary of physical health and well-being in children.	Comprehensive review of child health.
O'Connor et al. (2020a)	Cultural Adapt.	USA	Ecological validity model used to adapt HYHD for Hispanics.	Cultural/Ecological validity.
O'Connor et al. (2020b)	Feasibility	USA	Targeting Hispanic fathers for obesity prevention is feasible.	"Papás Saludables" feasibility.
Pollock et al. (2023)	RCT	Australia	Significant improvement in girls' social-emotional well-being.	Peer-facilitated community delivery.
Pollock et al. (2021)	Qualitative	Australia	Fathers perceive F-D programs as transformative for bonding.	Narrative feedback on DADEE.

Data Extraction and Analysis

Data was extracted on intervention type, target population, delivery format, outcomes (physical and psychological), program duration, and cultural context. Interventions were categorised by setting (school-based, home-based and community-based) and by outcome type. Both quantitative and qualitative findings were analysed to synthesize the effectiveness and scope of each program. Additionally, a thematic synthesis was conducted to identify the underlying mechanisms – such as role-modelling and emotional regulation – that drove intervention success. Tables were created to summarize study characteristics, key interventions, and their outcomes (refer to Table 2, 3 and 4).

Table 2

Summary of Study Characteristics to Identify and Categorize the Global Landscape

Author (Year)	Study Design	Country	Dyad Type (Age)	Sample Size (*N*)	Intervention Focus
Ahmed et al. (2023)	Cluster RCT	Bangladesh	Adolescents (13-15y)	320 students	School-based PA & Mental Health
Ashton et al. (2024)	Evaluation	Australia	F/D Pre-schoolers	281 total	HYHD Program: Replicability
Blackshear (2022)	Qualitative	USA	African American F/D	Undergrads	Paternal involvement in PA
Day (2025)	Qualitative	UK	F/D (Adolescent)	15 dyads	Reciprocal disclosure & intimacy
Ha et al. (2019)	RCT Protocol	Hong Kong	Children (8-11y)	204 families	"Active 1+ FUN" family-based PA
Jamal et al. (2022)	CBR/Qualitative	Canada	South Asian Immigrants	65 participants	Community-based bonding
Kandula et al. (2022)	RCT Protocol	USA	Latina/S. Asian	160 dyads	SAATH: Culturally adapted MVPA
Latomme et al. (2023)	RCT	Belgium	F/C (6-8y)	98 dyads	"Run Daddy Run" lifestyle change
Morgan et al. (2019a)	RCT	Australia	F/D (4-12y)	268 total	DADEE: Primary trial (PA/FMS)
Pollock et al. (2023)	RCT	Australia	F/D (4-12y)	351 total	Social-emotional well-being

Note: Certain mother-daughter protocols were included as comparative frameworks for culturally adapting dyadic interventions to South Asian contexts

Table 3

Intervention Delivery, Mechanism of Change and Core Components

Program Name	Core Components	Delivery Setting	Theoretical Framework	Key Mechanism
DADEE	Rough-and-tumble play; Gender-equity education.	Community/ School	Social Cognitive Theory	Role-modelling & Paternal Support
HYHD	Healthy lifestyle modelling; Nutrition	Community-based	Self-Determination Theory	Paternal Closeness
Run Daddy Run	Co-creation of activities; SMART goals	Mixed (Online/Face)	Co-creation Model	Autonomy Support
Active 1 + FUN	Multi-component school/home PA	School-based	Socio-Ecological	Family Engagement
SAATH	Cultural adaptation; Multilevel PA	Home-based	Cultural Adaptation	Culturally tailored bonding
FCP	Attachment coaching; Communication	Clinic-based	Attachment Theory	Emotional Insecurity Reduction

Table 4

Synthesis of Physical and Psychological Outcomes (Effectiveness of Interventions)

Outcome Domain	Findings from Key Studies	Overall Impact	Strength of Evidence
Physical Activity	Significant increase in MVPA (Morgan et al., 2019a; Latomme, 2023)	**Positive**	High
Motor Skills	Improved Fundamental Movement Skills (FMS) (Morgan et al., 2019a)	**Positive**	High
Emotional Regulation	Enhanced resilience and coping (Ahmed, 2023; Pollock et al., 2023)	**Positive**	Moderate
Self-Esteem	Higher self-worth in girls (Pollock et al., 2021; Blackshear, 2022)	**Positive**	Moderate
Bonding/Attachment	Improved paternal warmth and relational security (Hoegler, 2023; Day, 2025)	**Positive**	High
Gender Norms	Challenging stereotypes in sports (Asif, 2024; Pollock et al., 2021)	**Positive**	Emerging

Results

A total of 36 sources of evidence were included, representing a diverse global geographical spread across Australia, North America (USA, Canada), Europe (UK, Belgium, Germany, Ukraine), and Asia/Africa (Pakistan, Bangladesh, Ghana, South Africa, Hong Kong, Indonesia). Sample sizes ranged from small qualitative cohorts (n=10) to large-scale cross-sectional surveys (n=1,228).

The literature was categorized by study design to map the current research landscape. Quantitative researches (n=22) dominated by Randomized Controlled Trials (RCTs) and quasi-experimental designs evaluating programs such as DADEE (Morgan et al., 2019a), HYHD (Ashton et al., 2024), and *Run Daddy Run* (Latomme et al., 2023). Whereas Qualitative Research (n=14) focused on the lived experiences of dyads, particularly in gender-conservative or immigrant contexts (Jamal et al., 2022; Asif, 2024; Day, 2025).

Physical Well-being Outcomes

Evidence indicates a strong positive correlation between structured father-daughter co-participation and improved physical health.

Increased Physical Activity and Motor Skills

Studies consistently demonstrate that dyadic participation leads to significant increases in Moderate-to-Vigorous Physical Activity (MVPA). Participants in the DADEE program saw average daily step count increases of 1,638 for fathers and 1,023 for daughters (Morgan et al., 2019a). Similarly, the *Run Daddy Run* intervention reported increased Moderate Physical Activity (MPA) in fathers and light physical activity in children (Latomme et al., 2023). Beyond activity levels, 4 studies identified paternal support as a critical predictor of Fundamental Movement Skills (FMS), with DADEE reporting effect sizes for FMS proficiency ranging from d = 0.42 to 1.2 (Morgan et al., 2021; Dechrai et al., 2022).

Sedentary Behaviour and Body Composition

Interventions such as DADEE and HYHD found substantial decreases in screen time for both dyads, with medium to large effect sizes (Ashton et al., 2024). Regarding weight status, while results were mixed, the HYHD program observed significant improvements in children's Body Mass Index (BMI) z-scores and overall fitness (Ashton et al., 2024; Lloyd et al., 2015), suggesting that while physical activity levels improve rapidly, weight-related outcomes may require longer-term engagement.

Psychological Well-being Outcomes

Psychological findings were characterized by improved emotional resilience and relational security.

Emotional Resilience and Regulation

Participants showed significant gains in emotional regulation and self-awareness. DADEE demonstrated a 24.9-point gain in the Devereux

Students Strengths Assessment (DESSA), highlighting improved social-emotional competence (Young et al., 2019). Furthermore, father involvement was found to uniquely contribute to adolescent perseverance and happiness (Leppard & Dufur, 2021).

Relational Bonding and Attachment

A consistent finding across 36 papers was the strengthening of the father-daughter bond. Qualitative data from the UK and South Africa highlighted that shared physical activity serves as a "conduit for intimacy," facilitating reciprocal disclosure (Day, 2025; Moodley & Lesch, 2024). Additionally, interventions targeting inter-parental conflict resolution led to significant decreases in adolescent emotional insecurity through improved father-daughter attachment (Hoegler et al., 2023).

Mechanisms of Intervention Effectiveness

Synthesis of the data suggests three primary mechanisms driving success across the 36 studies: role modelling, emotional security and gender norm transformation. Fathers modelling healthy behaviours directly influences daughters' long-term lifestyle choices (Schoeppe et al., 2016). Secure paternal attachments act as a buffer against anxiety and disordered eating (Hoegler et al., 2023; Reim, 2018). In contexts like Pakistan and Bangladesh, dyadic programs successfully challenged sociocultural restrictions on female mobility and sports participation (Asif, 2024; Ahmed et al., 2023).

Intervention Design, Delivery, and Context

Setting and Adaptability

The review identified three primary delivery modes: School-Based, Home-Based, and Community-Oriented. School-based programs like *Girls Leading Outward (GLO)* provide safe environments for at-risk girls to develop leadership and regulation skills (Stepney et al., 2014; Ahmed et al., 2023). Home-based interventions foster co-parenting dynamics and family-level benefits through joint exercises (Pollock et al., 2023). Community-oriented programs like *Honouring Fathers and Daughters* utilize culturally relevant activities to engage immigrant or minority populations (Jamal et al., 2022).

Sustainability and Comparison

Follow-up assessments (e.g., *HYHD*) revealed sustained effects on physical activity and parenting practices at 6–12 months (Ashton et al., 2024). In contrast, control groups typically showed no significant progress in physical exercise or emotional well-being, highlighting that the benefits are specifically tied to the active, dyadic nature of these interventions (Morgan et al., 2019a; Young et al., 2019) (Refer Table 5).

Table 5

Summary of Key Interventions Models

Program	Core Focus	Primary Outcomes
DADEE	Physical Activity & Empowerment	↑ Step counts (Daughter +1,023); ↑ Social-emotional well-being.
HYHD	Lifestyle & Parenting	↑ FMS; ↓BMI z-scores; Sustained impact at 12 months.
Run Daddy Run	Lifestyle & Co-creation	↑ Father MPA; ↓Sedentary behaviour; ↑Relationship closeness.
GLO	Leadership & Regulation	↑ Self-efficacy; ↑ Resilience in at-risk adolescent girls.
Honouring F-D	Cultural Bonding	↑ Family cohesion; ↑ Cultural engagement in immigrant dyads.

Discussion

This systematic scoping review synthesized evidence from 36 studies examining the impact of father–daughter co-participation in structured physical activity and related interventions on physical and psychological well-being. The findings demonstrate consistent benefits across multiple domains, particularly in enhancing physical activity levels, improving social-emotional well-being, and strengthening father–daughter relationships. These outcomes align with the growing body of literature emphasizing the importance of family-based and gender-sensitive interventions in promoting adolescent health.

Effectiveness of Father–Daughter Interventions

A key finding of this review is the strong

effectiveness of structured interventions such as DADEE, HYHD, and Run Daddy Run. These programs consistently demonstrated improvements in MVPA and reductions in sedentary behaviour. Importantly, the involvement of fathers as primary co-participants appears to be a critical factor in enhancing engagement and adherence.

These findings support ecological and social learning perspectives, which posit that behaviour is shaped through observation and interaction within close social environments. Fathers, when actively engaged, serve as salient role models, reinforcing positive health behaviours and creating supportive contexts for sustained participation. The consistency of these findings across randomized controlled trials strengthens the evidence base for father-inclusive intervention models.

Psychological and Relational Outcomes

Beyond physical health, the reviewed studies highlight substantial psychological benefits. Improvements in emotional resilience, self-esteem, and social-emotional functioning were evident across multiple interventions. Notably, the strengthening of father–daughter relationships emerged as one of the most consistent outcomes.

Qualitative evidence provides deeper insight into these findings, suggesting that shared physical activities create opportunities for communication, trust-building, and emotional bonding. These relational improvements may act as mediating mechanisms through which psychological benefits are achieved. This aligns with attachment theory, which emphasizes the role of secure parental relationships in fostering emotional stability and resilience during adolescence.

Mechanisms Underpinning Intervention Success

The synthesis of findings suggests three key mechanisms driving the effectiveness of these interventions. Firstly, fathers modelling active lifestyles appear to influence daughters' physical activity behaviours directly. Observational learning plays a significant role in shaping health-related habits. Secondly, interventions that promote positive father–daughter interactions contribute to emotional security, which is associated with improved mental health outcomes. Thirdly, the structured nature of interventions, including scheduled sessions and home-based tasks, enhances consistency and long-term adherence.

These mechanisms highlight that the success of interventions is not solely dependent on physical activity components but also on relational and contextual factors.

Cultural and Contextual Considerations

An important contribution of this review is the inclusion of studies from diverse cultural contexts, including Pakistan and other collectivist societies. Findings suggest that father–daughter interventions may have additional significance in contexts where gender norms restrict female mobility and participation in physical activities.

In such settings, fathers can act as facilitators of change by legitimizing daughters' participation in public and recreational spaces. Community-based and culturally adapted programs demonstrated higher engagement and acceptability, underscoring the importance of context-sensitive intervention design.

Comparison with Non-Participants

Studies including control or comparison groups consistently reported minimal changes in physical and psychological outcomes among non-participants. This contrast reinforces the effectiveness of structured interventions and highlights the limitations of relying solely on natural developmental changes or unstructured activity.

Implications for Practice and Policy

The findings of this review have several practical implications. Firstly, schools and community organizations can serve as effective platforms for implementing father–daughter interventions. Secondly, policymakers should consider promoting father-inclusive health programs as part of broader adolescent well-being strategies. Moreover, the success of interventions highlights the importance of trained facilitators in ensuring program quality and sustainability.

Strengths and Limitations of the Review

This review provides a comprehensive synthesis of diverse study designs, including

experimental, observational, and qualitative research, offering a holistic understanding of father–daughter interventions. The inclusion of global studies enhances the generalizability of findings.

However, several limitations should be acknowledged. First, variability in outcome measures and intervention designs limited direct comparability across studies. Second, some studies lacked rigorous methodological reporting, including sample size and effect size data. Third, the inclusion of non-experimental studies may introduce bias in interpreting causal relationships.

Future Research Directions

Future research should focus on: conducting more randomized controlled trials in underrepresented regions, particularly in South Asia; standardizing outcome measures to improve comparability across studies; exploring long-term impacts of interventions through longitudinal designs; examining the differential effects of father involvement across age groups and socio-cultural contexts.

Conclusion of Discussion

Overall, the evidence suggests that father–daughter co-participation in structured interventions is an effective approach for improving both physical and psychological outcomes among adolescent girls. These interventions not only promote healthier lifestyles but also strengthen relational bonds and contribute to emotional well-being. Expanding such models, particularly in culturally diverse settings, holds significant potential for advancing adolescent health and gender equity.

Declaration

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Availability of Data and Materials. The information about data and analyses for the present study is available from the corresponding author.

Competing Interest. The authors have no competing interest to declare

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