



The Role of Fathers in Early Child Development

KEY POINTS:

- Significant impact of fathers: The involvement of fathers in maternal and newborn health and
 in their children's early years yields substantial benefits, affecting children's health outcomes
 and development.
- Barriers to involvement: Although Singaporean fathers want to be more involved in childcare, they face barriers that prevent them from doing so. Research shows that these barriers include limited paternity leave, work obligations, cultural norms regarding household gender roles, and feeling ignored by healthcare systems.
- Socio-cultural diversity: Cultural, social, and ethnic nuances in Singapore influence paternal beliefs and behaviours, warranting tailored intervention programs and evidence-based policies that can foster fathers' involvement across diverse family contexts.



Introduction

The critical importance of the father's role in early child development is yet to be fully understood and harnessed in both global and local contexts. Historically, the emphasis on maternal influence has inadvertently overshadowed the distinctive contributions of fathers. Yet, with breakthroughs in diverse research areas, from epigenetics to developmental psychology, and significant observational studies-GUSTO, S-PRESTO, and SG-LEADS are prominent examples-our understanding of the impacts and demands of the role of fathers is rapidly expanding. It is therefore imperative to better understand the role of fathers in child development and to pioneer impactful local interventions.

The Evidence of Fathers' Impact on their Children

As the importance of paternal involvement in children's health, socioemotional, and cognitive development gains empirical backing, it is worth noting that the field remains in its nascent stages, particularly in non-Western settings.¹ While Singapore has recently become a focus for research in this area, more comprehensive studies are needed to evaluate the impact of paternal involvement and to identify facilitators, barriers, and effective intervention strategies that are tailored to the unique socio-cultural Singaporean context.



Preconception: Emerging evidence points to the critical role that fathers' preconception health (including physiological and mental health, and biological age) plays in a range of outcomes, from the likelihood of successful conception to the lifelong health of the child.² While epigenetic mechanisms are suspected to be the causal link, the field is still in its infancy, and definitive evidence separating these effects from postnatal and

relational factors is lacking. To date, the GUSTO and S-PRESTO cohort studies have shed more light on the influence of maternal than paternal preconception health in Singapore, such as for obesity risk ^{3,4}, but the focus is shifting.



Antenatal and Postnatal Periods: Globally, studies have pointed out the maternal and newborn health benefits associated with fathers' involvement during pregnancy, birth, and early postpartum.⁵ Fathers can be involved actively from pregnancy till one year post childbirth by participating in antenatal classes, hospital appointments, birth support, shared decision-making, skin-to-skin contact post-birth, and active infant care. Children then benefit either directly as a result of their fathers' parenting behaviours and forming strong father -infant bonds, or indirectly from the increased support of mothers. For instance, a longitudinal study conducted in Singapore found that fathers who were involved in their infant's birth were more actively involved in infant care at 6 months postpartum, highlighting how active participation from the start carries forward to later periods in the child's life.6 Furthermore, global evidence points to the pivotal role of the father in either predicting for or buffering against poor maternal mental health.⁷ Therefore, the involvement of fathers in this period

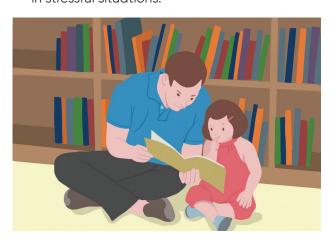
may have a domino effect, since improved maternal mental health leads to better cognitive, language, and social development in their children.8





Throughout Early Childhood: Fathers, through their interactions with their children at different stages of early childhood development, play a critical and unique role in enhancing their socioemotional and cognitive development, and physical health.

Socioemotional development: A recent review found that fathers play a critical role in the development of a child's emotional regulation (ER) by modelling good ER, supportive emotion-related parenting practices, and a positive father-child emotional climate, with the most prominent role in a child's infancy and toddlerhood.9 This review also indicated that father-child physical play activities uniquely contribute to a child's ER with correlations to reduced externalizing behaviours in preschoolers, especially in boys. Importantly, the inverse is also true: fathers' psychopathology is associated with poorer ER skills in children.9 Although the unique role of fathers independent of mothers is still yet to be fully explored in this field, researchers hypothesize that this could be due to the unique contribution of fathers to encourage their children to take risks and solve problems while mothers provide comfort in stressful situations.¹⁰



• Cognitive development: Numerous reviews have examined the impact of paternal engagement on children's academic outcomes, finding that fathers make unique, direct contributions to their children's literacy and language outcomes through the use of complex language, engagement in achievement-oriented activities (e.g., reading and writing activities), and responsive parenting behaviors. Although the average level of

maternal involvement is generally higher, it has been consistently found that a father's engagement is more strongly correlated with children's academic achievement than is mother's engagement. 12 Importantly, this association holds across diverse ethnic and socio-economic backgrounds. Despite these insights, there is a persisting research gap in unpacking the reasons behind this trend.

• **Physical health:** A comprehensive metaanalysis suggests that a father's level of physical activity uniquely predicts their son's activity levels, unlike mothers whose level of activity does not have a similar impact on their children regardless of sex.¹² However, further work is required to understand the underlying mechanisms that drive this unique paternal influence, as well as to explore the long-term health implications for children of both sexes.¹³

In Singapore, the SG-LEADS cohort study delineated six primary types of interaction between fathers and their preschool-aged children: caregiving, play and companionship activities, social activities, achievement-oriented activities, travel, and all activities combined. 14 This study found that the amount of time fathers spent with their children varied along demographic lines. Specifically, fathers with lower levels of education, of lower socioeconomic status, or with more help in the household spend less time with their children. Given the significant correlation between the amount of time spent by fathers with their children and the children's socioemotional and cognitive development, further research is needed to investigate the demographic nuances of this relationship within the Singaporean context.

Facilitators and Barriers to the Involvement of Fathers in Singapore

Singaporean fathers, like many fathers globally, express the aspiration to be active participants in their children's lives. The factors and reasons that fathers have for active involvement can vary significantly across life stages, as seen in the differences held by the same group of Singaporean fathers interviewed at hospital discharge versus at 6 months postpartum. Several studies indicate that Singaporean fathers both self-identify and are identified as being less actively involved in the care of their children than



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mothers.¹⁷⁻¹⁹ Research has pinpointed several key reasons for this gap: both a pull to return to work as well as a push factor stemming from the cultural expectation of a gender-based division of labour within the household.^{15, 19}

Singaporean fathers cite insufficient paternity leave and work pressures as the foremost hindrances to their involvement. Paid paternity leave was increased to two weeks in 2017 and 4 weeks from January 2024, and fathers are able to share up to four weeks of their spouse's 16 weeks of paid maternity leave.²⁰ However, only 55% of eligible fathers used the 2-week allowance, citing work cultures that implicitly discourage leave, a lack of knowledge of the policy, or traditional gender roles.²¹ Singaporean fathers are not alone in this struggle, as low adoption rates for paternity leave across Asia have been attributed to similar factors such as a work-centered culture and gendered expectations.²²

At the core of these challenges are deep-seated societal expectations and systems that traditionally view women as the default caregivers. Even in local studies conducted amongst families where both parents work, mothers have been found to spend more time with their children, to lead in instructing them, and to discipline them more. 14, 18, 23, 24 Furthermore, a local media study found that, within discussions surrounding fatherhood in Singapore online, fathers were not framed as central to the Singaporean family unit. 25

Moreover, unlike many cosmopolitan contexts across the world, Singaporean families often have a variety of available caregivers beyond the parents of a child, including grandparents, foreign domestic help, and confinement nannies. The rise of the 'Grandparent Caregiver Relief' package,²⁶ as well as the fact that one-third of households with children aged between 0-6 years old have a foreign domestic helper, underscore the support and potential prevalence of these alternative caregiving options.²⁷ However, the presence of

these additional caregivers has been correlated with a decrease in the time fathers spend with their preschool-aged children. Further research is needed to understand how this complex caregiving landscape impacts the familial dynamics, parentchild attachment, and overall child development in Singapore's unique socio-cultural setting.



Fatherhood Interventions in Singapore

Considering the conflict between fathers' aspirations for active involvement and the obstacles they currently face, this section examines interventions that have been implemented or suggested in Singapore to boost fathers' participation. One approach involves app-based perinatal programs in Singapore, which have shown success in boosting parental self-efficacy among other outcomes.^{28,29} Digital interventions are particularly appealing to fathers, who believed that in-person interventions (such as antenatal classes) clash with their busy work schedules. 15 A study focusing on first-time Singaporean fathers found that only three of the 16 fathers attended an antenatal class, highlighting the limitations of traditional supportive programmes for this group. New fathers often hesitate to utilize the available 24-hour helplines due to concerns of inconveniencing the specialists on the other side of the phone.¹⁷ To more effectively address the needs and concerns of new fathers, future parenting interventions could utilize a digital platform.



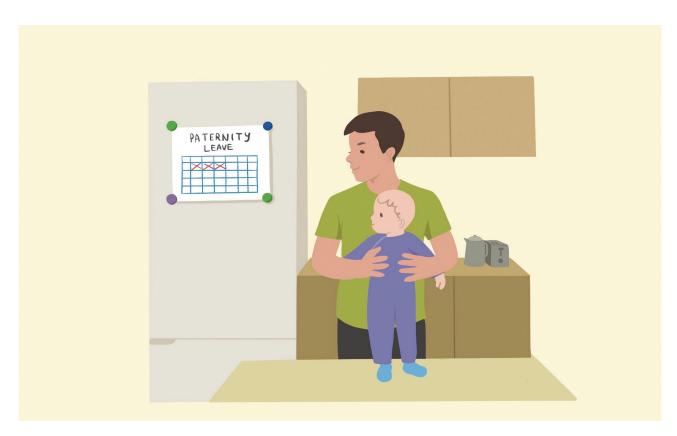
Home visitation programs also offer promise in promoting early child development, especially among lower-income families. Globally, such programs have shown to be effective at targeting increasing paternal engagement, strengthening marital bonds, and helping fathers foster emotional bonds with their newborns.³⁰ Local research corroborates a demand for increased peer support and home visits with fathers in the postnatal period. 15 Currently, the KidSTART initiative provides home visits to low-income families but further research is needed to assess its effectiveness in engaging fathers, as well as the potential to extend their services to a wider group.

Although studies focusing on 'dads only' group-based interventions have yielded mixed results in terms of broad paternal engagement, these programs can be especially beneficial for fathers seeking additional social support.³¹ A local study revealed that fathers whose partners are grappling with perinatal depression expressed a

need for supportive group environments, largely due to isolation caused by the societal stigma associated with mental health.³² In Singapore, the DADs For Life initiative offers a model closest to this, organizing events and workshops for fathers. This platform represents an opportunity to foster dialogue on issues related to paternal mental health.³³ In general, further evidence is required to evaluate the effectiveness of existing interventions aimed at enhancing both the quantity and quality of fathers' interactions and involvement with their children.

Implications for Policy and Practice

The need for further research into both fatherhood and fatherhood-supportive interventions in Singapore is clear. Existing cohort studies are looking primarily at mothers, with only a small subset of participating fathers.³ Also, the unique demographic tapestry of Singapore – characterized by significant variation across racial, religious, and socioeconomic lines –



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requires closer attention. One study that explored conceptions of fatherhood across different Asian subgroups demonstrated that fathers from different racial and religious backgrounds expressed fundamentally different views of the roles and responsibilities of fathers. Additionally, to achieve a comprehensive understanding of family needs in Singapore, research must also encompass different family structures such as single-parent or divorced households.

Singaporean fathers often express a sense of inadequacy in knowledge and guidance. Those who attended antenatal classes mentioned that the curriculum primarily focused on mothers' tasks like breastfeeding and bodily changes. Fathers felt as though topics they would have wanted more information on – such as infant behaviour, feeding, and how to support their wives through birth and postpartum – were sidestepped. Digital health interventions appear to be the preferred medium for these fathers, providing accessible and flexible options for postnatal care engagement that align with their desire for credible online resources. Is, IT Importantly, interventions aimed at increasing fathers' participation should optimally

start from preconception as part of a familycentered model of perinatal care.

On a broader scale, the role of paternity leave in Singapore merits further discussions. When paternity leave was first implemented in Singapore in May 2013, eligible fathers were granted a week's paid leave, in addition to a shared parental leave week drawn from the mother's 16-week maternity leave.³⁴ Since 01 January 2024 eligible fathers have access to two weeks of obligatory government-paid paternity leave paired with a voluntary two-week extension.^{20,35} A study in Singapore has demonstrated the positive effects of at least two weeks of paternity leave in Singapore, linking longer paternity leaves to strengthened family bonds, reduced parenting stress, and children's socio-emotional wellbeing.¹⁹ Such findings underscore the pressing importance of taking paternity leave and building a society-wide culture that encourages fathers to do so. Continued research is essential during the roll-out of this policy change to understand the challenges, barriers, and supports that may affect fathers' ability to take four weeks of paternity leave.

RECOMMENDATIONS:

- Primary healthcare providers should equip men intending to become fathers with tangible support
 and guidance concerning paternal preconception care and involvement, emphasizing areas like
 weight management, smoking cessation, and mental health to provide best start to the children.
- Antenatal programmes should include tailored elements that help prepare fathers for postpartum challenges, including ways in which they can support infant feeding, care, and support for their partners. Home-visitation programmes could encourage and stimulate the active participation of fathers in childcare. Support for fathers can be provided through digital platforms, customized to meet the informational, emotional, and support needs of fathers, and can provide them with readily accessible and credible information on topics ranging from pregnancy and childbirth to childcare.
- Given the barriers fathers face to achieving their goal of active parenting, there exists a notable gap in the literature concerning paternal mental health in Singapore. Links have been found between poor paternal mental health and behavioural and mood-related issues in young children, as well as negative effects on the father's relationship with the mother.³⁶ Further research is necessary to understand both the prevalence of poor mental health amongst fathers in Singapore, which some international studies suggest is as high as 13%, as well as the interplay between societal expectations and their desires and needs. This research can inform the creation of targeted resources that are urgently needed to fill this gap in service provision for fathers.

EVIDENCE INSIGHT | E1007 / APR 2024



- Although there is some international and local research that focuses on fathers and their role in
 early child development, more in-depth research is needed into the complex interplay of social,
 cultural, and ethnic factors that shape fathers' attitudes and behaviours, especially in Singapore's
 multicultural setting. Such an understanding is essential for designing intervention programs and
 for formulating data-driven social policies that encourage paternal involvement across diverse
 demographic groups.
- Policymaking should adopt a family-centred model of perinatal care, moving away from a
 gendered view of caregiving culture. Public health and educational campaigns can leverage
 on this shift to spotlight the pivotal role of fathers and to emphasize parenthood as a shared
 transition with shared responsibilities.
- Although fathers in Singapore will be entitled to a total of 4 weeks of parental leave in 2024, the uptake of parental leave provisions is not widespread. This is likely due to a constellation of factors, including organisational, economic and cultural. More exploration is needed into the barriers faced by fathers in taking the full leave entitlement. Policymakers should engage with employers and new (and potential) fathers to implement approaches to remove these barriers and encourage all fathers to take their full entitlement of paternity leave.

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EVIDENCE INSIGHT | APR 2024



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Contributors:

Adj A/Prof Chong Shang Chee, Prof Chong Yap Seng, Dr Gayatri Kembhavi-Tam, Prof Lee Yung Seng, Dr Keri McCrickerd, A/Prof Robyn Mildon, Dr Cheryl Seah, Prof Nick Sevdalis and A/Prof Shefaly Shorey.

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