



Secure base and mental health in children: a narrative review

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Background and Objective: Childhood is a crucial period for the formation of an individual's attachment type. Previous studies focused more on how to directly intervene in children's mental health problems such as depression, and less on how to improve children's mental health from the perspective of attachment relationship. Secure base, as one of the core concepts of attachment theory, plays an important role in the whole process of children's psychological development. In this article, we review the concept of the secure base, describe current clinical practice and suggest future directions.

Methods: A literature search was performed within electronic databases such as Web of Science, PubMed, and CNKI. Chinese and English articles focusing on the secure base and attachment relationship among children were retrieved. Their publication dates were set from the inception of the database to August 6, 2024.

Key Content and Findings: While the secure base significantly impacts early childhood, a safe base may also be established through group and teacher-student relationships to activate individual secure attachment schemas. Most prior studies concentrated on the mother-child bond, with limited exploration of the father's role in the family dynamic. Furthermore, children's secure attachment development is not only influenced by parents' secure base script knowledge (SBSK) but also by intergenerational transmission. The underlying structure of secure base scripting knowledge plays a distinct role in middle childhood mental health.

Conclusions: The mechanism by which family structure, the functional division of family roles, and the potential structure of safe-base script knowledge influence children's secure attachment development at various stages warrants further elucidation, including investigating cross-gender and cross-cultural stability. To facilitate the development of children's secure attachment pathways, it is essential to consider different attachment styles within parents and diverse family structures (including those in lesbian, gay, bisexual). From a clinical psychotherapy perspective, this review offered novel insights and practical guidance on how the secure base mechanism impacts children's mental health, with the overarching goal of mitigating the risk of mental health problems.

Keywords: Secure base; childhood; mental health; review

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Introduction

Mental health problems among children, including depression, anxiety, loneliness, self-harm, and suicidal behaviors, have surged in recent years, especially in the post-coronavirus disease 2019 (COVID-19) era (1-3). Family-related factors significantly influence children's mental well-being, with attachment relationships playing a pivotal role (4). An attachment relationship is the first relationship in which an individual connects with the world. Its internal working model is established early in childhood, acting as a template for subsequent relationships within and beyond the family realm (5-7). Children's mental health has long been a public health priority, with a secure base playing a fundamental part in attachment dynamics, especially crucial during the formative stage of attachment pattern development in children. By activating an individual's secure attachment representation, a secure base could mitigate the adverse effects of psychological trauma, trigger positive emotions, and bolster positive self-conception (8). These mechanisms together enhance the mental well-being of children.

Some studies suggest that from infancy to early adulthood, secure attachment exhibits significant stability, with a focus on researching ways to foster secure attachment formation in children (9). Earlier research primarily targeted direct interventions for children's mental health problems like anxiety and depressive symptoms, often ignoring the attachment relationship's impact on both physical and mental development in children (10). As a direct intervention target within the secure attachment relationship, the secure base holds substantial significance and plays a pivotal role in attachment dynamics and mental well-being (11). This review aims to explore the concept of the secure base through clinical insights and future research trajectories. By offering a new practice direction for intervening in children's mental health challenges, it endeavors to introduce new perspectives on how the secure base influences psychosocial functioning. We present this article in accordance with the Narrative Review reporting checklist (available at <https://tp.amegroups.com/article/view/10.21037/tp-24-191/rc>).

Methods

A literature search was performed within online databases such as Web of Science, PubMed, and CNKI. The publication dates covered their inception until August 6,

2024. We included Chinese and English articles concerning the secure base and attachment relationship in children. The research methodology of eligible studies encompassed both quantitative and qualitative studies. In total, 38 articles were finally included for this study. See *Table 1* for the concise search strategy.

What is a secure base?

The secure base is a core concept in attachment theory (12). According to this theory, humans have an inherent inclination to form close emotional bonds with specific individuals across their lifespan. This predisposition drives individuals to seek and maintain relationships with those they perceive as capable of providing support and guidance in navigating life's challenges (9).

Initially focused on the attachment relationship between infants and caregivers, research on the secure base has expanded to include adult attachment dynamics (13). Those with a secure base tend to establish new secure bases, suggesting that secure base presence is not strictly binary but spans a spectrum of forms and intensities. Scholarly perspectives indicate that an internal secure base typically exists to some extent but might be underdeveloped, inactive, or incompletely leveraged (14).

Memories of care and secure support from attachment figures in early experiences are encoded as secure base schemas, encompassing aspects like secure base support and secure base use. The formation of these schemas plays a crucial role in the development of stable and secure attachment patterns (7,15,16).

Nonsecure attachments is able to be reshaped through cognitive activation techniques like secure base priming, leading to plasticity (8). Secure attachment priming involves activating individuals' secure base representations within a specific context, temporarily enhancing the availability of secure base scripts (8,15,17,18). This process, whether supraliminal or subliminal, employs methods like word priming, image priming, attachment figure name priming, imagery priming, and positive attachment experience recall priming to stimulate the use of secure base strategies (19).

However, further research has shown that not all individuals with non-secure attachments could undergo reshaping of their internal working models through the activation of general positive schemas. Targeted interventions must be employed based on their stable attachment types (17). Therefore, it is necessary to adopt targeted secure attachment activation strategies based on

Table 1 Literature search strategy

Items	Specification
Date of search	April 18, 2024
Databases and other sources searched	Web of Science, PubMed, CNKI
Search terms used	Use “children”, “secure base”, and “attachment relationship” as keywords that appear in the article title, abstract, or keywords
Timeframe	Inception to August 6, 2024
Inclusion and exclusion criteria	Inclusion criteria: both qualitative and quantitative studies that focus on children’s secure base; both in English and Chinese languages; studies that involve the establishment of a secure base and its impact on children’s mental health Exclusion criteria: studies focusing on adult secure base; studies that fail to establish a relationship between secure base and children’s mental health
Selection process	The search outcomes were meticulously scrutinized by two distinct authors (Z.Y.Y. and Z.Y.H.), adhering strictly to the predefined inclusion and exclusion criteria. In instances where discrepancies arose, a third reviewer (B.L.Z.) was engaged to provide an impartial decision. All three authors (Z.Y.Y., Z.Y.H., B.L.Z.) approved the final list of references

children’s attachment types and other relevant information to enhance their mental health, strengthen their psychological resilience, and reduce psychological crises such as depression, anxiety, and self-harm behaviors.

Ways to develop a secure base

Family therapy

Insecure attachment could lead to internal and external behavior problems and social withdrawal in children (11,20). Through the intergenerational transmission effect, securely attached parents typically raise securely attached children. In contrast, parents with attachment challenges or trauma experiences may struggle to offer the required quality care for a secure parent-child attachment (21). Nevertheless, such parents may still foster securely attached children by reflecting on and addressing their own attachment histories. Children’s secure attachment is linked to parental sensitivity. Previous research indicates that parents with a greater understanding of secure base scripting tend to demonstrate higher levels of sensitivity during interactions with infants. This sensitivity, in turn, is passed on to children, influencing the development of their secure attachments. Conversely, mothers with limited knowledge of secure base scripting often exhibit reduced flexibility and sensitivity in their interactions with children (22). Some studies have demonstrated a positive correlation between secure base

script knowledge (SBSK) and effective parenting practices, potentially assisting mothers in enhancing their parenting skills (7). Parents might also acquire techniques like PEACE (presence, engagement, affection, calmness, and empathy) and interventions such as the Circle of Security Parenting (COS-P) to effectively address children’s physical and emotional distress. These strategies aim to provide children with interactive comfort and support their overall well-being. Creating a sense of comfort akin to a safe haven for children, alongside being present and responsive when required, while also teaching skills to enhance mental health, could facilitate the formation of a secure base (23). This is particularly crucial for left-behind or migrant children, necessitating an improved nurturing environment for their early growth and well-being, along with ongoing monitoring and timely intervention to mitigate attachment development risks. Given the presence of multiple attachment figures in children’s lives, parents potentially provide diverse functions essential for healthy attachment (24,25). Families, serving as the primary attachment figures, should function as a safe base for left-behind or migrant children, thereby enhancing the quality of child rearing practices (26).

Prior studies have not only evaluated parents’ SBSK but have also suggested its potential utility in addressing externalizing behavioral problems and assessing risks in children facing stress (27,28). Research examining children’s

understanding of safe base scripting indicates that those lacking this knowledge are at a higher risk of developing mental health problems (29).

Earlier research explores the impact of children's characteristics such as gender on building a secure base. Although a study suggests that boys and girls do not display significant gender differences in establishing a secure base, there are subtle distinctions in attachment security sensitivity during interactions with parents, highlighting the potential need for further examination and testing (23).

Relations between teachers and students

The rapid development of basic education underscores the importance of safeguarding the mental well-being of children and adolescents (30). Teachers often assume roles akin to “psychological parents” or “temporary attachment figures” for children (31). Understanding the teacher-student relationship through an attachment lens reveals that even in cases where a student's parent-child relationship is dysfunctional, a new internal working model might be constructed through interactions with teachers (32). This process supports the enhancement of the student's social functioning (33). Establishing high-quality, positive relationships between teachers and students—marked by emotional support, warmth, and responsiveness—acts as a secure foundation for fostering children's secure attachment development (33). Central to this notion is the concept of teachers evolving into a secure base for their students. This evolution involves teachers critically examining their attachment styles and strategies, pinpointing the roots of negative experiences in interactions, adapting their attachment approaches, and transforming into securely attached educators. Through recognizing students' attachment patterns, teachers gain insights into their behaviors (34). This understanding paves the way for nurturing harmonious teacher-student connections and effectively reinforcing children's mental well-being in collaboration with families, schools, medical institutions, and the wider community.

Group relations

Regardless of whether it involves a student population or a racial group, any collective could function as a secure base, offering its members a sense of security and support (35). In the realm of social work, a team that fulfills the role of a secure base plays a crucial role in helping members navigate

complex challenges effectively, facilitating the realization of their maximum potential (36). This is particularly vital in today's society, where the emphasis on addressing mental health problems in children is paramount (37), and the emotional demands of children and family social work are substantial. We suppose that psychotherapists and local youth psychological hotlines, faced with significant social responsibilities and the need to address psychological crises among children, rely on the supportive environment provided by a team-level secure base to fulfill their roles effectively.

A secure base not only bolsters the mental well-being of children by supporting psychological work teams but also helps mitigate the adverse psychological effects of dysfunctional family relationships through peer groups (11).

Social skill training

Secure-base priming can aid in activating positive interpersonal representations in socially withdrawn children. Scholars have put forth traditional techniques like maintaining rich journals, positive imagery training, and recalling pleasant experiences, along with online cognitive tasks like signal stop tasks and attention bias training, to assist individuals in diminishing social withdrawal, decreasing social anxiety, and fostering interpersonal cohesion (19). The integration of a secure base in social training programs designed for special children, including those with autism, is worth considering.

Implications

Research on the secure base provides insights into how individuals from emotionally stable backgrounds evolve over their lifetimes. Whether as children, adolescents, or adults, individuals could depart from this base to explore and return as necessary (38). A secure base reinforces individuals' psychological security, interpersonal adjustment, emotional adaptability, stress coping mechanisms, and autonomy (35).

Children who have experienced childhood trauma are more prone to engage in non-suicidal self-injury (NSSI) behaviors, often as a result of an inability to effectively regulate their emotions (39). A secure base serves a self-protective role, and engaging in basic exercises to activate attachment security could aid in regulating emotions. Research indicates that activating a secure-base script is effective in reducing mood disturbances during challenging tasks. Initiating this script consciously has been shown

to lessen self-reported emotional reactions following frustration, irrespective of an individual's attachment style (5).

A secure base enables individuals to express emotions openly, fostering the release and relief of negative emotions. It also influences health outcomes, potentially impacting children's asthma symptoms (40). Secure base scripts have been identified as a crucial factor in how early-life stress may influence future externalizing, but not internalizing, behavioral issues in children. Understanding these scripts is vital for recognizing and addressing externalization problems in children. Moreover, a secure base helps individuals experience positive emotions, adapt to their surroundings, and effectively cope with stressors (27).

Future directions

The proposal and development of attachment theory have indeed provided a theoretical foundation for promoting research on individual mental health. Among the practical breakthroughs commonly used, the secure base is the most significant.

During the early stages of attachment formation, children always explore the objective world by using the attachment figure as a secure base. There are different attachment figures in their lives, with parents being the primary ones. Although both parents play important roles, they may fulfill different functions. The functions of "secure base" and "safe haven" should not be tied to the biological or social roles of parents. In spite of the documented evidence that paternal role orientation serves as a risk factor for childhood internalizing problems, the specific mechanisms by which these functions operate within the familial context, as well as the concrete roles fathers play in childrearing, remain unclear at present (41,42). A study has shown that a mother's sensitivity may influence an individual's attachment, but this is not absolute (43). Most importantly, mothers should avoid negative caretaking behaviors and demonstrate through their actions that they are responsive to their children's signals. Mother's sensitivity plays a key role in organizing children's behavior to form a secure base. The results of a cross-cultural study show that mother's sensitivity is significantly correlated with children's secure attachment in different cultural backgrounds (44), but whether it is stable and universal across gender and time is still unclear. Future research could dig deeper into the role fathers play in the secure base and how the division of family roles affects children's mental health. Another study on homosexual families argues that it is the family's

upbringing style, rather than its type, that influences children's perception of secure attachment. It also raises the question of whether the roles of primary attachment figures and secondary attachment figures in children's secure attachment development are universal across different family structures (e.g., heterosexual, transgender) (45). Thus, future studies should delve into the effects of family roles and structures on children's secure attachment development, emphasizing the judicious use of secure bases to foster strong attachments.

Regarding the aspects of parental attachment and the provision of a secure base, while there may be gaps in the transmission of attachment across generations, individuals possess a secure base script based on their experiences with attachment figures, which could better regulate their emotions (7). Even parents with insecure attachment perhaps use a secure base script as a starting point to improve their knowledge of applying secure base script principles and skills for effectively providing secure base support. Enhancing these skills potentially help construct a secure attachment representation for individuals (12). More importantly, the integration of family psychological education within community medical services holds the potential to effectively mitigate the progression of mental health situations, thus contributing to overall well-being (46). Future research should examine the relationships between parental attachment types and parent-child interactions across samples, ages, and cultural backgrounds to determine their stability (41). Based on these conclusions and the different attachment types exhibited by parents, various secure base scripts should be provided to support the development of secure attachments in children.

A secure base could regulate intergenerational depressive symptoms (47); additionally, increased levels of parental secure base and safe haven functions, along with peer attachment, possibly mitigate individuals' tendencies towards social withdrawal behaviors (11). Especially in the current context of negative growth environments for left-behind or migrant children (48), parents should focus on interactive communication and emotional exchange with their children to establish a solid parent-child attachment relationship. Kindergartens should strengthen care for left-behind and migrant children and promote a smooth transition from parent-child attachment to multiple attachments (26). Furthermore, good teacher-student relationships play a crucial role in the adolescent stage. The idealization of teachers becoming a secure base for adolescents is due to the psychological moratorium of

adolescent identity formation, making adolescence the most critical period for early attachment apart from infancy. While it may be challenging for teachers to provide such care to all students, given that they also have families themselves, the primary responsibility for establishing a secure base remains with parents. Additionally, the establishment of a secure base through group relationships may provide a sense of belonging; however, there is a lack of practical research on how to establish secure base-type group relationships and the influencing factors involved.

Attachment relationships are limited to parent-child relationships, while attachment patterns apply to various interpersonal relationships and possess characteristics such as plasticity, contextuality, and relative stability. They could be activated in specific interpersonal relationship contexts or triggered by memories of past relationships and organized events (49). When individuals perceive a secure base as an absolute binary distinction, they may not feel the presence of safety and beauty within themselves (14). However, through the secure base schema, it is possible to activate the secure attachment system of individuals with insecure attachments, promoting their social adaptation, cognitive and emotional health. Studies have shown that the priming of secure attachment under different stress levels might simulate the functions of a safe haven and secure base by influencing cortisol concentrations, but attachment anxiety may affect the stability of activated secure attachment (50). Future research should explore how to activate the secure base schema of individuals with different attachment types using secure attachment priming and identify the corresponding neural mechanisms involved. Identifying other factors that influence the priming of a secure base perhaps not only promote the mental health of adolescents but also help reshape insecure attachments in adults.

Conclusions

Although attachment theory holds that early attachment will affect an individual's life, the results of longitudinal studies with large samples show that the relationship between attachment in infancy and attachment patterns in subsequent adolescence and adulthood is at a medium level rather than decisive (51-53). Therefore, for various stages such as early childhood, middle childhood and adolescence, there may be more to the effect of intervening in attachment relationships through secure bases (51,52).

A secure base could activate or reshape the attachment patterns of children, thereby strengthening their

resilience and reducing the risk of psychological crises such as depression and self-harm. It might be acquired or activated through parent-child relationships, teacher-student relationships, peer relationships, and other social connections, thereby reshaping attachment security, although this mechanism may weaken with age. Family role function, the absence of a father and the underlying structure of SBSK are important areas for future research with respect to secure bases. Specifically, future research could explore the role of fathers in parenting and how secure bases are manifested in parent-child interactions, consider the attachment types of both parents and the potential structure of SBSK (54), and explore more clues that could intervene in children's secure attachment development. Furthermore, future research possibly delve deeper into how to establish secure base-like group relationships, which could help individuals with different attachment types access their secure base schemas.

Establishing a bridge between attachment theory and research, on the one hand, and the practical application of family placement, on the other, is imperative, as attachment theory consistently presents a scientifically rigorous yet potentially feasible framework that enables the comprehension of children's distressing and complex behaviors, while also guiding caregivers in fostering a secure foundation for these children (55). The theoretical framework for reducing psychological crises and enhancing mental health among children from the perspective of a secure base has yet to be fully elucidated, and thus, further in-depth research is required for its theoretical and practical construction.

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