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Healing developmental trauma: a pilot study on the discipline of Authentic Movement and attachment in adulthood

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ABSTRACT



This pilot study undertaken in China explored an innovative approach to healing developmental trauma by integrating the discipline of Authentic Movement with the Adult Attachment Interview, focusing on how early parental control shaped insecure attachment patterns in adulthood. Presenting three case studies from China, the study examines participants who experienced varying levels of parental control and developed avoidant attachment patterns as coping strategies. Through the discipline of Authentic Movement practices, participants reconnected with, released, and processed suppressed emotions tied to attachment memories, allowing them to experience a sense of secure attachment. These findings provided valuable insights and practical implications for clinical practices addressing attachment-related developmental trauma.


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Introduction

This pilot study undertaken in China examines how the discipline of Authentic Movement (AM) can serve as a somatic intervention to address

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developmental trauma, focusing on the role of early parental control in shaping insecure attachment patterns. Using the Adult Attachment Interview (AAI) as a diagnostic tool, the study explores how these attachment-related experiences surface through bodily expressions in AM. By integrating AAI with AM, this research offers a dual approach: AAI helps identify and diagnose underlying attachment issues, while AM provides an embodied means for clients to access and process these patterns somatically.

Parental control and insecure attachment

Overprotection and over-control in childhood is one type of complex developmental trauma. This is considered as a risk factor for multiple mental health problems (Azar et al., 2007; Herbert & Dahlquist, 2008; Yoshida et al., 2005). Bowlby described caregiving as the mirror image of the attachment system, the parental instinct to respond to the child's needs. Mary Ainsworth expanded on this, showing that sensitive caregiving fosters secure attachment, while controlling or inconsistent caregiving promotes insecure attachment patterns (Ainsworth et al., 1978; Crittenden, 2007). Although controlling strategies may aim to ensure safety, they can undermine autonomy and identity formation in children (Grey, 2023).

Controlling parental behaviours correlate with insecure attachment across different cultures (Kazmierski et al., 2023). For instance, in Chinese families, parental over-control appears to have a unique impact on insecure attachment and psychological outcomes in adolescents, while moderate avoidance may act as a buffer against the effects of over-controlling parenting. (Cheung & Pomerantz, 2011; Wang et al., 2007).

Secure attachment relationships help regulate children's emotions and promote mentalisation (Fonagy et al., 1991). Ainsworth et al. (1978) identified three primary attachment patterns in infants: secure, avoidant, and anxious/ambivalent, which served as the theoretical foundation for the development of Adult Attachment Interview (AAI). Insecure attachment shapes nonverbal and physiological responses, impacting emotional health and reinforcing attachment dynamics at both mental and physical levels (Ogden & Fisher, 2015).

Somatic intervention and authentic movement

Somatic interventions play an important role in mental health, focusing on the interconnectedness of body, mind, and environment rather than the 'causes' (Shapiro, 2014). Van der Kolk (1994) believed that responses to trauma are often more deeply embedded in bodily sensations than

cognitive processes. Buhrmann and Di Paolo (2014) proposed that functional perception requires ‘mastery’ of sensorimotor experiences, meaning an implicit understanding of the relationship between body movements and associated sensory stimuli. Mind-body therapies help individuals to regulate embodied attachment patterns, fostering healthier relationship (Ogden, 2014).

Authentic Movement is a spontaneous movement practice where a ‘mover’ closes their eyes, tunes into their body, and moves based on an internal impulse or an external stimulus. As the mover is ‘being moved’ they attend to any sensations, feelings, images, or thoughts. The mover is in the presence of a benign ‘witness’ who has open eyes. The witness tracks the mover’s actions and tracks their own experience in the presence of the actions seen and holds the space for the mover as a designated witness. If employed as individual or group psychotherapy, the witness becomes the therapist, facilitating the ensuing dialogue once the mover returns to report their actions and any associated images, thoughts, feelings or sensations. A detailed overview of this discipline can be found in Payne (2025).

Authentic Movement (AM) stems from the lineage of Dr Janet Adler (2002) who was a student of Mary Starkes Whitehouse who, in the 1950s in the USA, originated the process of Authentic Movement, describing it as “Movement-in-Depth’ (Chodorow, 1991, p. 24). This special type of body movement practice often acts as a gateway to preverbal and primary experience by bringing the unconscious to consciousness (Tantia, 2012). The term Discipline is later referred to with a capital D in ‘Discipline’ to clarify it refers solely to the mystical practice of Authentic Movement (Morrissey & Sagar, 2022). The second author and the two facilitators in the AM workshop for this study were all trained extensively in the discipline of authentic movement with Dr. Adler in the 1990s and beyond. The first author is based in China where she grew up. The third author is a specialist in attachment patterns.

Integrating AAI with AM

The Integration of AM with other therapeutic modalities offers a more holistic and effective approach to healing. For example, AM has been combined with integrative psychotherapy (Payne, 2024) and with Internal Family Systems (Cahill, 2015).

The Adult Attachment Interview (AAI) is a structured, semi-clinical interview designed to explore individuals’ emotional life, sense of self, and interpersonal dynamics (George & Solomon, 2008) through early attachment narratives. It is widely recognised in the developmental psychology, especially in the context of trauma and caregiving (Bakkum et al. 2023).

Complementing AM working on the implicit and non-verbal memories, the AAI works with verbalised memories, but its analysis explores the coherence of implicit and explicit aspects of the speakers' narrated history. For example, it looks at how semantic generalised statements (such as taking about having a happy childhood) might fit with the sensory images and emotive or distancing language (such as feeling 'sick with anxiety' anticipating a parental response to be being in trouble at school). AM facilitates a dynamic interplay between conscious and unconscious processes through the mover-witness relationship (Musicant, 2001), whereas the AAI provides an interpretative framework to make sense of these somatic experiences. For those new to somatic practices, the AAI can serve as a bridge to connect bodily sensations with relational histories in a coherent and meaningful way.

In the present study, an integrated approach of AAI and AM is to be employed to explore developmental attachment trauma.

The pilot study

A pilot study undertaken in China explored how a combined approach of AAI and AM could address developmental trauma, particularly the impact of early parental control on shaping insecure attachment patterns. It posed three research questions:

1. Does childhood parental control influence the development of insecure attachment patterns in the AAI?
2. What role does AM play in facilitating the embodiment of individuals with insecure attachment patterns?
3. Can Authentic Movement help re-pattern insecure attachments?

The preliminary study aimed to determine the research feasibility; test the recruitment and consent process; to pilot the measurement instruments; to test the data analysis (Hassan et al., 2006).

Methods

Study design

The pilot study was conducted through interviewing in Chinese Mandarin volunteers from an intensive three-day authentic movement retreat in China. This basic ground form training was focused on the Dyad and the Triad, specifically the roles and functions of the 'mover', mover consciousness, the 'witness', internal witness consciousness, speaking witness, silent witness and moving witness. The interviews aimed to understand

their attachment patterns and how they made sense of their movement experiences during the retreat relating to their early attachment relationship.

Theory-Building Case Study (McLeod, 2010) was chosen as the research method. This method enables triangulation and a deeper exploration of concepts in multiple cases. Systematic examination of these cases may yield new theoretical insights, frameworks, or models, enhancing understanding of therapeutic processes, outcomes, or underlying phenomena (McLeod, 2010; Stiles, 2007). While this approach has limitations, including potential researcher bias and limited generalisability (Eisenhardt, 1989), it aligned well with the study's objectives.

Integrity and ethics consideration

Ethical approval was given by ECDA (Health, Science, Engineer and Technology) at University of Hertfordshire with Protocol Number LMS/PGR/UH/05584.

All volunteer students from the AM training workshop were given a copy of the Participant Information Sheet (PIS). Before any data collection, and all volunteer participants signed the informed consent forms.

Recruitment procedure

This pilot study was conducted immediately after an AM training workshop in early May 2024. The Chinese organisation, Inspirees Education Group, allowed this pilot study to be conducted. Data collection was taken place with the volunteer students from the AM training after the intensive workshop without interfering with the actual training. The final number of cases was determined based on the results of the self-report questionnaire. The criteria for volunteers were as follows:

1. Adults over 18 years old.
2. Participants of the intensive AM group training.
3. Cognitively fit for participating in this pilot study.
4. Provided informed consent agreeing to participate in this study.

A week before the training, an Invitation to Participate (IP) and a Public Information Sheet (PIS) were sent to students via Inspirees. Eight participants promptly completed and submitted the consent forms to the researcher via email or WeChat. Self-report questionnaires were distributed to these eight participants after the AM workshop, and six of them responded accordingly.

Following a thorough screening process, the research panel, consisting of the researcher and the two supervisors, carefully handpicked three individuals for the in-depth interviews. They were selected because they underwent various degrees of parental control during their childhood.

Data collection method

A self-report questionnaire (SRQ) was employed to screen participants, and a semi-structured interview were used to collect data. The SRQ consisted of eight questions, the first three questions collected demographic information on the participants' gender, age, siblings. The remaining five questions (CTQ-5) measured the perceived level of parental control, which was taken from the Revised and Expanded Childhood Trauma Questionnaire (CTQ-33) (Şar et al., 2021; Wu et al., 2022). Participants with higher scores on CTQ-5 were invited to participate in the in-depth interviews.

The semi-structured interview questions included the first 17 questions from the AAI version developed by George et al. (1985), along with three AM-specific questions. The AAI questions helped to evaluate participants' attachment patterns and their mental representations of attachment-related memories from current perspective. The AM-specific questions explored participants' direct experiences of attachment memories, attachment patterns, and embodied movements within an AM training context.

The in-depth interviews were conducted online in Mandarin using the Tencent Meeting application, which was also used to record the sessions. Transcripts and English translations were produced and reviewed by the researcher.

Data analysis method

Data from the self-report questionnaires was organised and processed in Excel, with the primary goal of identifying participants with higher CTQ-5 scores for progression to the interview. Qualitative data was analysed manually using the Theory-Building Case Study approach to identify patterns or themes that might explain the studied phenomenon.

The AAI data was coded separately and blindly using the Dynamic Maturation Model (DMM) of AAI, developed by Crittenden and Landini (2011) by a coder trained in this method. Using a separate coder, blind to the overall analysis, offered a fresh perspective looking only at the attachment discourse in order to mitigate the danger of making the data fit the theory rather than the other way around.

Findings

Participant demographics

All six volunteers were female and aged over 25 years. Except for one adult only child, the rest had siblings. The average CTQ-5 score was 8.8, ranging from 7 to 11. Interestingly, three participants aged over 45 years reported CTQ-5 scores below the average. Three participants aged between 25 and 45 years reported higher CTQ-5 scores, accordingly they were invited to the in-depth interviews.

Findings from the case studies

To protect participant anonymity in the public domain, certain demographic details have been adjusted.

Case 1

This case follows a woman who grew up as the youngest daughter in an academically focused family, shaped by early attachment issues and emotional neglect. She displayed avoidant/dismissive attachment (AAI type A), likely influenced by both trauma and perceived parental control. Her childhood memories involve distressing events, such as a friend's departure and a street cat's death, adding to her perception of intergenerational trauma within the family.

To cope, she adopted several defences (Richardson et al., 2023): altruism, where she prioritised her mother's needs to avoid punishment; suppression of her emotions to play the role of the 'good daughter'; reaction formation, fighting back against family members to mask her true feelings; and intellectualisation, retreating into logic to avoid painful emotions.

It seems that as long as I am in the AM training camp, I will be very wild. The normally well-behaved part of me seems to be slowly going to rest. Then the wild part related to the animal itself will come out in the dance... ... during the practice last year I seemed to be a wild animal with a broken heart at the end, and now I am a wild animal with a heart full of joy (participant quotation from the translated transcript).

Her AM training allowed her to connect with these suppressed emotions. Her movements became sharp and reactive, mirroring her inner conflict and need for boundaries. She described a transformational process, shifting from feelings of emotional brokenness to joy and freedom. She highlighted the AM group's stability and the long-term commitment as essential for her healing process.

Case 2

In this case, a woman's early years were defined by instability, beginning with her parents' divorce and her mother's sudden disappearance. Raised by her father and stepmother, she faced frequent relocations and minimal emotional support, leading to avoidant/dismissive attachment (AAI type A) with unresolved trauma. Her mother's emotional abandonment and her father's partial rejection left her with a deep sense of insecurity and fear of abandonment.

Her coping mechanisms included altruism, moulding herself to please others for love; isolation, as she struggled with forming connections; dissociation, resulting in fragmented memories; and denial, where distractions masked her need for connection. After her mother's disappearance, she even acted out by bullying others, expressing her unaddressed pain.

Why do I always want to walk towards another person and want her to stay by my side for a while longer? Why do I always want to find another body to get close to it, to have some intimate physical contact with it. And why am I always rejected? you may experience them in this process (participant quotation from the translated transcript).

Through AM, these suppressed feelings began to emerge. She recognised how her movements revealed her constant suppression of the desire for love and communication. While she longed for connection, her fear of rejection held her back. Her AM practice mirrored her attachment struggles, showing her the slow, ongoing nature of healing insecure attachments, which required patience and persistence.

Case 3

This case describes the experience of an only child from a privileged family who was initially cared for by multiple adults, then solely by her parents after family conflicts. Raised amidst complex family dynamics and several relocations, she also developed avoidant/dismissive attachment (AAI type A) with unresolved trauma. Her attachment challenges were rooted in perceived parental control, emotional rejection, and a struggle for autonomy during adolescence.

To cope, she adopted several defences: altruism, seeking approval through obedience; self-effacement, suppressing her needs to reduce family conflicts; and intellectualisation, avoiding emotions by relying on logic. Bullying incidents went unreported as she preferred silence over confrontation.

During the practice, I actually felt like a family relationship. I was like the child, and my two witnesses were like parents I felt very safe. My experience in the cave was very interesting, like a very innocent and naughty child could go and explore this space with confidence, relatively safe, and at ease (participant quotation from the translated transcript).

In the AM workshop, she confronted these deep-seated patterns. She struggled with direct eye contact, a sign of her continued self-doubt and mistrust in relationships. However, a powerful moment occurred during a 'circle of three' practice, which simulated the ideal care dynamic she had longed for in childhood. AM helped her develop an 'inner witness'—a new-found self-awareness that allowed her to observe her own behaviours and emotions without judgement. Over time, the supportive AM group provided a sense of safety and security, fostering her journey towards greater self-trust and autonomy.

Synthesis of the cases

Across the three cases of Chinese women with varied backgrounds and family dynamics, several common themes emerge regarding childhood trauma, attachment patterns, and coping strategies. Their experiences highlight the profound impact of early family relationships on emotional development, self-perception, and interpersonal behaviours, as well as the role of AM training in addressing these deep-rooted issues.

Common childhood experiences

- *Perceived Parental Control*: In all three cases, perceived parental control during childhood was a defining factor that shaped their emotional response and behaviours. It came in various forms, whether through a demanding mother, as seen in Case 1, or a dynamic of rejection or overprotection in parenting, as in Cases 2 and 3.
- *Family Conflict and Unresolved Trauma*: Family conflict played a significant role in all cases, whether through intergenerational trauma (Case 1), divorce of biological parents (Case 2), or conflicts between grandparents leading to emotional neglect (Case 3). In each case, unresolved traumas were dismissed or ignored by the family, leaving the subjects to carry these emotional burdens into adulthood without support or resolution.
- *Physical and Emotional Instability*: The women experienced instability through frequent relocations, as seen in Cases 2 and 3, or through inconsistent caregiving, like in Case 1. This instability contributed to their insecure attachment styles, as they struggled to find emotional anchors during their development.

Common coping strategies

- *Avoidant Attachment Patterns*: Each case experienced different level of intrusive parenting in upbringing, resulting in similar (avoidant)

insecure attachment patterns in adulthood, as, in childhood, they had learned to accommodate parental requirements and inhibit needs and feelings that conflicted with them (Crittenden, 2006).

- *Altruism*: All three women developed altruistic tendencies as a coping mechanism. They sought to please others, often sacrificing their own needs to gain approval and avoid punishment.
- *Suppression*: Suppressing emotions to avoid confrontation were prevalent across all cases. In Case 1, this suppression took the form of ignoring her own feelings to fulfil familial expectations. In Case 2, suppression helped to cope with the pain caused by abandonment, while in Case 3, suppression helped her avoid dealing with the emotional pain of bullying and family conflict.
- *Intellectualisation*: focusing on logic over emotion, was also a shared defences mechanism across all three cases, allowing them to avoid confronting their true feelings by retreating into abstract thinking.

Common experiences in AM training

The AM training provided a transformative space for each of the women to confront their suppressed emotions and attachment-related behaviours. Across all three cases, AM helped them reconnect with their unprocessed trauma and attachment memories through the practice of a mover or a witness, offered a non-verbal means of self-expression and healing.

- *Reconnecting with Suppressed Emotions*: Each woman experienced a reawakening of repressed feelings during AM training. In Case 1, she expressed long-buried emotions through quick, abrupt movements, while in Case 2, the subject used AM to process the desire for communication and love that had been stifled throughout her life. In Case 3, movement helped her engage with her inner witness, developing greater self-awareness and confronting her suppressed desires for independence.
- *Exploring Attachment Patterns*: AM training allowed the women to explore their attachment histories in a safe and structured environment. In Case 1, the subject's quick movements reflected her inner conflict with attachment, while in Case 2, her practice mirrored her attempts to communicate and connect despite her fear of rejection. In Case 3, the 'circle of three' practice helped her re-enact the parenting dynamic from her childhood, allowing her to address unresolved attachment issues within a safe symbolic familial structure.
- *Long-Term Group Practice and Trust*: In all cases, the women discovered that long-term, stable group practice was essential to building trust

and feeling safe enough to explore their attachment-related traumas. The consistent group dynamic in AM practice fostered a sense of security, which had been missing in their early relationships. This stability was necessary for them to fully embrace the benefits of AM training and work towards healing their attachment wounds

Theory building

- The three cases highlight the critical role that perceived parental control, instability, and family conflicts in formation of insecure attachment patterns, particularly avoidance patterns in adulthood.
- AM training offers a unique method for addressing these deep-seated issues by allowing individuals to physically express and explore attachment memories, suppressed emotions, and unresolved traumas. Through movement, participants can bring unconscious thoughts into consciousness, confront past traumas, and develop self-reflective functioning.
- However, the process is gradual, requiring long-term practice and a stable, supportive environment to foster a sense of safety and trust, which are essential for healing.

Discussion

The CTQ-5 scores suggested a possible correlation between perceived parental control and age within the participants. Among the six volunteers, younger women reported lower levels of parental control. There may be social economic reasons for this phenomenon: Before 1979, China was an economically struggling and a very closed country, and the people experienced the Great Famine and the Cultural Revolution. Parents struggled to make ends meet and did not have much time to take care of their children. However, due to the small sample size, this phenomenon needs to be further explored.

Three case studies point to the deep and lasting impact of developmental trauma on adult attachment patterns and emotional regulation. Each woman experienced control, rejection, or abandonment from primary caregivers, shaping their avoidant attachment patterns in adulthood. This aligns with prior research indicating that attachment avoidance can serve as a protective response to parental control (Shiyuan & Liu, 2018). While coping strategies such as altruism and suppression helped these women survive emotionally challenging childhoods, they also hindered the development of secure attachments later in life, as suggested by Crittenden (2006).

Case 3 was an only child who was raised by six adults. This is a common phenomenon among the 240 million only children in China. Under the one

child policy in the People's Republic of China, the child in one-child families has become more precious to parents than ever (Jing, 2000). The parents with one child may try to protect their children from all kinds of harm, and this plays a role in child developmental disorders (Hua et al., 2014). This phenomenon could be an interesting topic for a separate study.

It is noteworthy that all three women showed avoidant (AAI Type A) strategies of self-protection when talking about their childhood attachment figures, as these patterns are thought to inhibit awareness of physiological arousal in the body (Crittenden & Landini, 2011). AM training may have helped these participants reconnect with sensations and the relational meanings attached to them that were 'forbidden' to them by their attachment strategy, facilitating deeper awareness and integration. It would be helpful to observe the impact upon participants, who showed, for example, anxious ambivalent patterns (AAI Type C), who, in contrast, might be expected to show hyper-sensitivity to their bodily experience of protest or fear.

AM training provided a safe space for the participants to reconnect with their suppressed emotions and begin to process the traumas underlying their attachment patterns. In each case, AM helped the women explore their emotional histories through movement and 'mover' 'witness'. The non-verbal nature of AM allowed for a deeper exploration of attachment issues that words alone could not address. For instance, in Case 1, the subject's rapid movements during AM sessions mirrored her inner conflict and desire to break free from familial expectations, while in Case 2, the practice of AM allowed her to confront her fears of rejection and abandonment. The 'circle of three' exercise in Case 3 symbolised the family dynamic she had experienced as an only child, offering a new way to re-experience the parental relationship. The non-verbal nature of AM allowed for a deeper exploration of attachment issues that words alone could not address.

Developing an 'inner witness' through AM can support the growth of reflective function, a key concept in mentalisation as described by Fonagy et al. (1998), and merits further exploration. Another finding underscores the importance of long-term, stable group practice in AM, providing participants with the security to revisit attachment memories and confront challenging emotions. This aligns with existing research highlighting the role of secure attachment in therapeutic settings, where trust and safety are foundational for deep emotional work. While AM shows promise as a tool for healing attachment-related trauma, achieving lasting change requires careful consideration of certain challenges, including:

- *Risk of Re-Traumatisation*: AM can evoke intense emotions and memories. Practitioners must be skilled in recognising signs of distress and know how to provide appropriate support to prevent re-traumatisation.

- *Participant Readiness*: Assessing and ensuring participants' readiness for AM is crucial and readiness can vary over time.
- *Integration of Experiences*: Ensuring that participants have the tools and support to integrate their AM experiences into their daily lives is important for sustained healing. This might involve follow-up sessions or additional therapeutic support.

Study limitations

While this study provides valuable insights into the relationship between parental control, developmental trauma, and the therapeutic potential of AM, several limitations must be acknowledged:

- ***Small and homogeneous sample***: The sample size was limited to three participants aged between 25 to 45 years old. This small, homogeneous group restricts the generalisability of the findings to broader populations, such as men, younger individuals, or those from different cultural or socio-economic backgrounds.
- ***Self-report measures***: The CTQ-5 scores and AAI coding were based on self-reported data, which may be subject to recall bias or social desirability bias. Participants may not accurately remember or report their childhood experiences, potentially skewing the data.
- ***Single method of intervention***: This study focused exclusively on AM as a training group rather than a therapeutic intervention (albeit personal material is worked with to deepen the embodied skills, knowledge and understanding emanating from engagement), limiting the ability to compare its effectiveness with other forms of therapy.
- ***Lack of longitudinal data***: The study captures participants' experiences at a specific point in time. Longitudinal data is needed to assess the long-term effectiveness of AM in improving attachment patterns and emotional regulation.
- ***Subjectivity in AM interpretation***: The interpretation of movements in AM relies heavily on subjective perceptions from the participants. This subjectivity may lead to varying interpretations of the same movement, which could affect the consistency and reliability of findings.

Implications for the main study

Despite the limitations, this pilot study has significant implications for a main study:

- ***Diverse populations and cultures***: to include men, younger individuals, and those from various cultural backgrounds into the study. Studying

cross-cultural attachment patterns could lead to a deeper understanding of how childhood experiences shape attachment styles across different societies.

- **Targeting developmental trauma and post traumatic growth:** the study of a long-term and stable AM group to learn how participants might overcome the attachment issues such as perceived parental control, emotional regulation, insecure attachment styles and unresolved trauma.
- **Longitudinal studies to measure lasting effects:** to assess the lasting impact of AM on attachment security and emotional regulation, track participants over extended periods to determine whether AM leads to sustained improvements in their emotional well-being and interpersonal relationships.

Reflexivity

In conducting this study, it is crucial to acknowledge my own background, experiences, and assumptions may have influenced the research process as the primary researcher and first author of the study.

Personal and professional background

As well as being a doctoral candidate, I hold a MSc in Neuroscience and Psychology in Mental Health and have practiced as a psychologist for nearly 10 years. My professional training includes psychoanalysis, clinical psychology and dance movement psychotherapy (DMP). I do not have formal trainings in AM, AAI and Case Study methodology. My theoretical perspectives may have informed my interpretations of the data, particularly in seeing connections between participants' early experiences and their defense mechanisms or attachment styles.

Gender, culture, and identity

Given that all participants were Chinese women, I recognise that my own female gender and Chinese cultural background may have influenced both the interviews and my interpretations. This shared identity may have allowed participants to feel more comfortable discussing sensitive topics like childhood trauma and attachment issues. However, this might also have created a blind spot in my analysis, where I failed to fully consider how these experiences might differ for male participants or those from non-binary or gender-diverse backgrounds. While this study was conducted with women from China, I come from the same cultural background. This

deepened my understanding of the participants' unique experiences, particularly in cases where family loyalty, obedience, or parental control might be viewed differently in the Western cultural context.

The power dynamic

As the researcher, I held a position of power in shaping the research design, data collection, and analysis. This power dynamic may have influenced the participants' responses, particularly given the sensitive nature of the subject matter. Participants may have felt a desire to meet my perceived expectations, especially if they sensed that I held particular views about attachment and trauma. As the data analyst, my interpretation may influence the findings of the study.

Reflexive measures taken

To enhance reflexivity and reduce bias, several measures were incorporated throughout the research process:

- I kept a reflexive journal throughout the study to evaluate how my background, assumptions, and identity influenced my interpretations, to maintain objectivity and positional awareness.
- During the interview, I was fully aware my tone and my temperament to encourage the open expression.
- I rigorously studied methodology and followed AAI coding and data analysis guidelines from supervisors using a blind coder for the AAI's (see above). I constantly compared my findings with these of supervisors to minimise confirmation bias.

Nevertheless, I acknowledge that complete objectivity is impossible, and my interpretations are inevitably shaped by my own experiences and perspectives. By continuously engaging in reflexive practices, I hope to have provided a thoughtful and ethically grounded analysis that remains true to the participants' lived experiences.

Conclusion

In conclusion, although limited by its small sample size and methodological constraints, this pilot study has provided valuable insights in both the research questions and the feasibility of the main study.

Findings suggest that intrusive parental behaviour may activate coping strategies in children that can contribute to the development of insecure

attachment patterns, especially avoidant attachment in adulthood. Additionally, AM training provides a unique approach by enabling participants to physically express and explore attachment-related memories, release suppressed emotions, cultivate reflective functions, and engage in re-parenting practices. However, the process is gradual, requiring long-term practice and a stable, supportive environment to foster a sense of safety and trust.

The results underscore the potential of an integrated AAI and AM approach for addressing attachment-related trauma. It should be noted that, as in all the creative arts therapies, just because authentic movement is an experiential method does not justify it not being rigorously researched. To illustrate the potential of authentic movement (and the other arts therapies) research is crucial and for its survival, especially when employed in clinical settings. Future research could enhance the field of developmental trauma therapy by further exploring AM's role in attachment healing, increasing participant diversity, and conducting longitudinal studies, thereby offering deeper contributions to attachment theory and trauma therapy practices.

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Disclosure statement

No potential conflict of interest was reported by the author(s).

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Ms Peng Li is a PhD Candidate at school of life and medical sciences, University of Hertfordshire, UK. She currently works as a contracted psychologist at Shanghai Advanced Research Institute, Chinese Academy of Sciences. Her doctoral research was independently conducted with her supervisors' academic advisement and support in connecting with partner institutions.

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Dr Ben Grey is a social worker, psychologist, and Principal Lecturer (for Research) on the Doctorate in Clinical Psychology at the University of Hertfordshire. He developed the Meaning of the Child Interview (MotC), a method of assessing parent-child relationships, and has published widely on attachment, caregiving and child-welfare, including authoring 'The Meaning of the Child Interview: Making Sense of Parent-Child Relationships'. He has worked for 30 years in Family Court, Adoption and Child Welfare settings.

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