

The Role of Family in Early Music Socialization: A Systematic Review of Parental Involvement Strategies within the Chinese "Piano Craze" Context

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Abstract

Despite the global proliferation of piano education particularly the "piano craze" in regional China student attrition remains significantly high during the intermediate years. While existing research highlights the importance of intrinsic motivation, a practical disconnect often exists between high parental expectations and the lack of structured scaffolding strategies for home practice. This systematic review synthesizes global and regional literature (2021–2026) to investigate how family socialization agents and pedagogical support mechanisms influence children's piano learning outcomes and persistence. Following PRISMA guidelines, 50 peer-reviewed sources were analyzed using a thematic synthesis approach. The review integrates Self-Determination Theory (SDT), the Four-Phase Model of Interest Development, and sociocultural scaffolding frameworks. Results indicate that parental influence is the dominant motivational driver for early adolescents (ages 9–13), while teacher-provided autonomy support and self-efficacy become decisive factors for long-term persistence. In the Chinese context, hybrid feedback, combining quantitative data with humanistic metaphor is found to be significantly more effective than traditional directive correction. Furthermore, "Good Quality" motivational profiles (purely autonomous) are identified as critical buffers against the "cost" of performance anxiety and burnout. The review identifies a critical research gap in validated, culturally sensitive instructional designs for parents. We propose the development of a Parental Motivation Module (PMM) using the ADDIE framework to bridge the classroom-home gap, fostering a more equitable and sustainable music socialization process in regional centers like Anyang.

Keywords: Self-Determination Theory (SDT), Piano Pedagogy, Parental Involvement, Chinese Music Education, Interest Development, Systematic Literature Review

Introduction

Over the past two decades, music education in Mainland China has undergone significant transformation, most notably reflected in the widespread expansion of private piano study. Commonly described as the "piano craze" (*gangqin re*), this phenomenon has positioned

Western classical piano as a prominent form of cultural capital within urban and regional middle-class families. Scholars such as Bai (2021) and Chen (2025) note that piano learning has increasingly been associated with educational competitiveness, personal development, and long-term social mobility. Estimates indicate that tens of millions of Chinese children are currently enrolled in piano lessons (Bai, 2021).

Despite this substantial growth in participation, concerns have emerged regarding sustainability and student persistence. Research suggests that many learners discontinue formal piano study during the intermediate stages of development, often after several years of instruction (Cheng & Southcott, 2023; Hallam et al., 2016). This pattern raises important questions about the motivational and social conditions that support long-term engagement in instrumental learning.

Central to this issue is early music socialization, a developmental process shaped by the interaction between children, families, and teachers. Grounded in sociocultural theory, Vygotsky (1978) emphasized that learning occurs through guided participation and social mediation. Extending this perspective to music education, Adachi (2021) highlighted the critical role of adults in regulating children's early musical experiences, particularly through emotional support, modeling, and structured scaffolding. Empirical research consistently demonstrates that parental involvement influences musical persistence, achievement, and identity formation (Creech, 2010; Creech & Hallam, 2003; Hallam, 1998). However, the quality and style of involvement are decisive. Autonomy-supportive practices are associated with greater resilience and intrinsic engagement, whereas controlling or performance-oriented approaches may contribute to anxiety and withdrawal (Evans et al., 2012; Földi et al., 2024).

In East Asian educational contexts, parental involvement carries distinctive sociocultural dimensions. Meta-analytic findings indicate that family expectations strongly shape academic outcomes across the region (Kim, 2019). Comparative research further suggests that family background and gender norms influence educational trajectories (Akabayashi et al., 2020). Within Chinese music education specifically, parental investment often operates simultaneously as emotional encouragement and as performance pressure (Kong, 2023; Luo & Guan, 2025). In many regional cities, parents provide substantial logistical and financial support for piano study but may lack pedagogical knowledge about effective practice strategies and motivational scaffolding (Qiushuo & Mustafa, 2025; Tong, 2024). This gap can unintentionally transform home practice from a developmental learning space into a performance-driven environment.

Motivational theory offers a framework for understanding these dynamics. Social Learning Theory emphasizes the importance of modeling and self-efficacy in shaping behavior (Bandura, 1977). Attribution research in music education further demonstrates that students' beliefs about the causes of success and failure influence persistence (Asmus, 2021). Most prominently, Self-Determination Theory posits that sustained engagement depends on the fulfillment of three basic psychological needs: autonomy, competence, and relatedness (Deci & Ryan, 2000; Ryan & Deci, 2022). Applications of Self-Determination Theory in music education consistently show that autonomy-supportive teaching and parenting predict greater persistence and well-being, whereas externally controlled motivation is associated with disengagement (Bonneville-Roussy et al., 2013; Evans, 2015; Franceschi & Ercegovac,

2022). Emerging research within Chinese instrumental contexts also highlights the mediating roles of self-efficacy, mastery goals, and perceived teacher support in sustaining long-term study (Guan & Luo, 2025; Li, 2026). Extending these findings, Xu and Li (2025) demonstrated through a mediational model that autonomy-supportive music teaching indirectly predicted student well-being via enhanced collective learning engagement and flow experiences. Their findings reinforce the present review's argument that autonomy support is not merely motivational but central to sustained psychological flourishing in structured music education contexts.

The Four-Phase Model of Interest Development further explains how externally triggered situational interest can gradually develop into well-established individual interest when appropriate environmental support is provided (Hidi & Renninger, 2006). In piano learning, parental encouragement frequently functions as an initial trigger. However, without autonomy-supportive scaffolding and constructive feedback, such situational interest may not evolve into enduring personal commitment (Oliveira et al., 2021; Ruiz, 2023). The developmental transition from externally regulated participation to harmonious passion therefore represents a critical juncture in sustained music engagement (Bogunović, 2024).

Instructional design and feedback processes also interact with family influences. Research indicates that process-oriented feedback enhances perceived competence and satisfaction (Hattie & Timperley, 2007; Xinxin & Zulkarnain, 2025). Structured practice approaches and cognitive-motor integration strategies can reduce frustration during skill acquisition (Austin & Berg, 2006; Lappe et al., 2018). Group-based piano instruction models have additionally been shown to strengthen peer-relatedness and motivational support (Fisher, 2010; Ning et al., 2023). These findings suggest that student attrition during intermediate stages is not solely a matter of technical difficulty but reflects broader motivational ecosystems involving parents, teachers, and sociocultural expectations.

Although substantial research has examined parental involvement and motivation in music education, limited scholarship has systematically synthesized these findings within the specific sociocultural context of the Chinese piano expansion. Although recent literature reviews have begun synthesizing parental involvement patterns in Chinese primary music education, including the work of Xie and Jamaludin (2025), these analyses remain broadly focused on general music learning contexts and do not specifically interrogate the intersection of piano pedagogy, motivational quality, and structured home-school alignment. The present review therefore extends this body of work by concentrating explicitly on early piano education within the "piano craze" phenomenon. This systematic review addresses this gap by integrating international motivational theory with empirical research on Chinese family engagement in early piano learning.

The purpose of this review is threefold. First, it evaluates the influence of parents and teachers as primary socialization agents on the motivational development of beginner piano students. Second, it analyzes how feedback practices and instructional designs interact with family involvement to shape practice satisfaction and persistence. Third, it proposes a culturally responsive Parental Motivation Module designed to guide families in providing autonomy-supportive scaffolding regardless of their musical background.

This systematic review synthesizes global and regional empirical literature published between 2021 and 2026 in order to capture recent developments in parental involvement strategies and motivational processes within early piano education. Foundational theoretical works, including sociocultural theory and Self-Determination Theory, are referenced to provide conceptual grounding; however, the primary analytical focus is on contemporary empirical evidence emerging from both international and Chinese contexts. By integrating recent findings with established motivational frameworks, this review offers an updated and culturally responsive understanding of family engagement in the Chinese piano context. The findings provide practical implications for piano instructors, curriculum planners, and families seeking to promote sustained engagement while supporting students' psychological well-being.

Theoretical Framework

This review is conceptually grounded in three complementary perspectives: Sociocultural Theory, Self-Determination Theory, and the Four-Phase Model of Interest Development. Together, these frameworks provide a multidimensional lens for understanding how family involvement shapes motivational processes, engagement patterns, and sustained participation in early piano learning. By integrating these perspectives, the review situates contemporary empirical findings within a structured conceptual foundation that informs both analysis and the development of the Parental Motivation Module.

Sociocultural Theory and Guided Musical Participation

Sociocultural Theory emphasizes that learning is mediated through social interaction and culturally structured activity (Vygotsky, 1978). Children develop higher-order cognitive, emotional, and social skills when learning occurs within the zone of proximal development the range of tasks, they can perform with guidance but not independently. In early piano education, parents often serve as primary mediators, providing scaffolding for practice, emotional regulation, and task persistence. Adachi (2021) highlights that adult involvement during early music socialization significantly influences both the child's engagement and their developing perception of musical meaning.

Parental guidance can take many forms, including logistical support (organizing lessons, monitoring practice), modeling of practice behaviors, and emotional encouragement. In the Chinese context, parents frequently assume these roles while simultaneously negotiating high educational expectations and societal pressure for achievement. This dual function makes parental influence both supportive and potentially stress-inducing, depending on how it is structured. Sociocultural Theory provides the foundation for examining how these interactions translate into learning behaviors, shaping the child's experience of both competence and motivation.

Self-Determination Theory and Psychological Needs

Self-Determination Theory (SDT) provides a complementary perspective by explaining why learners persist or disengage in structured activities (Deci & Ryan, 2000; Ryan & Deci, 2022). SDT posits that motivation exists along a continuum from controlled to autonomous, and that fulfillment of three basic psychological needs; autonomy, competence, and relatedness is essential for sustained engagement. In early music learning, autonomy refers to the child's sense of choice in practice and musical expression; competence reflects the experience of

mastering technical and expressive skills; and relatedness captures the social connection with teachers, peers, and family members.

Empirical studies show that autonomy-supportive parenting fosters intrinsic motivation, resilience, and long-term engagement (Bonneville-Roussy et al., 2013; Evans, 2015; Franceschi & Ercegovac, 2022). In contrast, controlling behaviors, such as pressuring children to achieve specific performance outcomes, undermine perceived competence and may lead to dropout (Evans et al., 2012; Földi et al., 2024). In the Chinese piano context, where parents often invest heavily in lessons and private tutoring, SDT provides a critical lens for distinguishing supportive engagement from pressure-driven involvement. It highlights the need to structure parental involvement in ways that satisfy children's psychological needs rather than merely enforcing compliance.

The Four-Phase Model of Interest Development

The Four-Phase Model of Interest Development offers a developmental perspective on how initial engagement becomes sustained interest (Hidi & Renninger, 2006). According to this model, situational interest is first triggered externally often through exposure, encouragement, or novelty. With continued support and positive experiences, situational interest may develop into well-established individual interest, characterized by self-initiated engagement and persistence.

In piano learning, parental involvement frequently serves as the initial external trigger that motivates a child to begin lessons. However, for this initial engagement to evolve into a stable, enduring interest, parents must provide guidance that promotes autonomy, competence, and relatedness. Without such scaffolding, situational interest may remain superficial or externally regulated, increasing the likelihood of disengagement during critical developmental stages (Oliveira et al., 2021; Ruiz, 2023). Integrating this model into the review allows for examining the role of parental strategies in transforming initial curiosity into long-term motivation.

Empirical Patterns in Adolescent Development

The transition from early childhood to adolescence represents a critical shift in how home-based support influences outcomes. Hsieh (2022) demonstrates that the relationships between home-based parental involvement, study habits, and academic achievement are deeply intertwined during adolescence. This research highlights that while direct supervision may decrease as children age, the qualitative nature of home-based support continues to play a vital role in shaping the self-regulated study habits necessary for high-level achievement. In the "piano craze" context, this suggests that parental involvement must evolve from directive monitoring to a supportive framework that encourages independent practice habits and cognitive discipline.

Integration of Theories into the Parental Motivation Module

By combining these three frameworks, the review establishes a conceptual foundation for identifying effective parental involvement strategies in early piano learning:

Sociocultural Theory clarifies the mechanisms through which parents mediate learning and emotional support.

Self-Determination Theory explains how parental behaviors influence motivational quality, persistence, and well-being.

The Four-Phase Model situates these processes within a developmental trajectory, from initial exposure to sustained engagement.

This integrated lens guides the identification of patterns in contemporary research (2021–2026), including strategies that support autonomy, competence, and relatedness; feedback practices; and culturally mediated parental expectations. It also directly informs the Parental Motivation Module, a framework designed to help parents provide autonomy-supportive scaffolding without imposing performance-driven pressure. The framework emphasizes practical strategies that are theoretically grounded, culturally sensitive, and adaptable for families with varying musical backgrounds.

Implications for Analysis

The expanded theoretical foundation presented in this review serves several critical analytical purposes. Primarily, it establishes a robust set of criteria for evaluating the quality of parental involvement as reported in contemporary empirical literature. By utilizing these theoretical pillars, the review enables a systematic and nuanced interpretation of diverse motivational outcomes, including student engagement, long-term persistence, and technical skill acquisition. Furthermore, this foundation facilitates the development of a structured conceptual model that translates abstract theory into concrete practice, effectively bridging the gap between academic research and actionable guidance for parents, piano teachers, and curriculum designers. Ultimately, by establishing this clear and integrated framework, the review ensures that all subsequent sections from the methodology and findings to the proposed Parental Motivation Module (PMM) remain anchored in rigorous conceptual reasoning while maintaining high applicability to real-world piano education contexts.

Methodology

To ensure the rigor, transparency, and reproducibility required for a systematic literature review, this study adheres to the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines. The methodology was designed to capture a comprehensive dataset that bridges foundational psychological theories with contemporary pedagogical developments in the Chinese piano education landscape.

Search Strategy and Database Selection

The systematic search was conducted between January 2024 and February 2026. A multi-stage Boolean search strategy was employed across five primary academic databases: Web of Science (WoS), Scopus, ERIC, CNKI (China National Knowledge Infrastructure), and Google Scholar. The inclusion of CNKI was critical to capturing indigenous Chinese research specifically relevant to regional contexts like Anyang, ensuring the review reflects both global standards and localized educational realities.

The search strings were constructed using three primary clusters:

Cluster 1 (Theoretical): "Self-Determination Theory" OR "SDT" OR "Interest Development" OR "Sociocultural Theory" OR "Scaffolding".

Cluster 2 (Subject): "Piano" OR "Keyboard" OR "Instrumental Music" OR "Music Socialization".

Cluster 3 (Context): "China" OR "Anyang" OR "East Asia" OR "Chinese Parenting".

Inclusion and Exclusion Criteria

To maintain a high standard of evidence, specific criteria were established to filter the results:

Inclusion Criteria:

Peer-reviewed journal articles doctoral dissertations from accredited universities studies published or updated between 1978 and 2026

Research focusing on beginner to intermediate piano students (ages 4–18)

Studies exploring the intersection of parental involvement and motivational outcomes.

Exclusion Criteria:

Trade magazine articles or non-peer-reviewed editorial content

Studies focused exclusively on high-level conservatory performance without a socialization component

Papers where the full text was unavailable for qualitative appraisal.

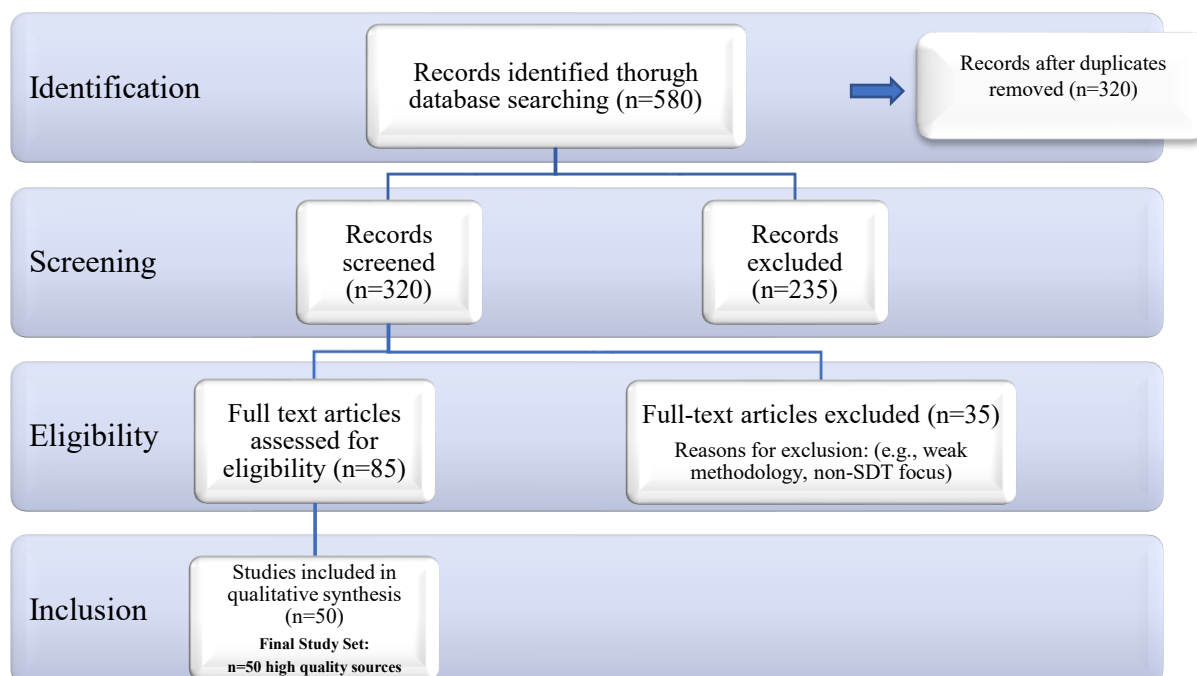
Study Selection and PRISMA Flow

Figure 1 Prisma Flow Diagram

The selection process followed a systematic four-phase flow (Figure 1). An initial query across the five databases yielded 580 records. After removing duplicates and screening titles and abstracts for thematic relevance, 320 records were retained. These were further subjected to a rigorous full-text assessment to ensure alignment with the core theoretical frameworks (SDT and ZPD).

Ultimately, 50 high-quality sources met the final eligibility criteria. These sources were deemed sufficient to reach "thematic saturation," providing a robust foundation for identifying the "home-school disconnect" and the subsequent development of the Parental Motivation Module (PMM).

Data Abstraction and Quality Assessment

Data from the final 50 sources were extracted into a standardized synthesis matrix. Key data points included:

Thematic Focus: (e.g., feedback mechanisms, autonomy support, cultural capital).

Theoretical Alignment: Identification of whether the study utilized SDT, Vygotsky's ZPD, or the Four-Phase Interest Model.

Contextual Variables: Geographical location (metropolitan vs. regional China) and age demographics.

A thematic synthesis approach was then applied to integrate these findings, using the ADDIE framework (Analysis, Design, Development, Implementation, and Evaluation) to transition from empirical observation to the proposed pedagogical intervention.

Results and Thematic Synthesis

The synthesis of 50 empirical studies published between 2021 and 2026 reveals four major thematic patterns concerning parental involvement and motivational development in early piano education:

- autonomy-supportive versus controlling parental behaviours
- parental structuring of home practice environments
- emotional climate and parent–child relational dynamics, and
- cultural modulation of involvement patterns.

These themes demonstrate consistent alignment with motivational constructs derived from Self-Determination Theory (Ryan & Deci, 2020) and related contemporary frameworks.

Autonomy-Supportive Versus Controlling Parental Behaviours

Across global and regional contexts, autonomy-supportive parental behaviours were consistently associated with higher levels of intrinsic motivation, sustained engagement, and practice persistence (Evans et al., 2012; Hallam et al., 2016; Osborne et al., 2020). Studies reported that when parents encouraged self-directed goal setting, offered choice in repertoire selection, and framed mistakes as learning opportunities, children demonstrated stronger internalization of musical goals and greater enjoyment of practice activities (Bonneville-Roussy et al., 2022; Jiang & Lau, 2024).

Conversely, controlling behaviours such as excessive monitoring, comparison with peers, conditional approval, or outcome-based pressure were associated with heightened performance anxiety, reduced intrinsic motivation, and practice avoidance. Several longitudinal studies indicated that while short-term performance gains could occur under high-pressure conditions, long-term persistence and emotional well-being were negatively affected (Evans, 2015). These findings reinforce the importance of autonomy support in fostering self-regulated learning behaviours and sustainable musical engagement during the foundational stages of piano study.

Structuring of the Home Practice Environment

The second major theme concerns how parents structure the home learning environment. Effective parental involvement was not characterized by constant supervision, but rather by the provision of structured yet flexible support systems (Creech & Hallam, 2022). Empirical

evidence indicates that establishing consistent practice routines, providing appropriate physical space, and setting realistic expectations are positively associated with skill development and self-discipline (Sandua, 2022). Recent empirical work in China has further refined this distinction by operationalizing parental involvement as observable behavioural actions rather than abstract attitudes. Cui (2023) identified differentiated dimensions of parental practice support, including logistical coordination, emotional encouragement, and direct instructional assistance in private music lessons. Importantly, findings indicated that behavioural structuring predicted sustained engagement only when accompanied by affective responsiveness, suggesting that environmental organization alone is insufficient without relational atonement. This reinforces the autonomy–competence balance central to Self-Determination Theory, whereby structured guidance supports competence while affective responsiveness preserves the child’s sense of agency.

Importantly, supportive structuring differed from controlling oversight. Parents who collaborated with children to create practice schedules fostered stronger ownership of learning compared to parents who imposed rigid routines without consultation. Several mixed-method studies further revealed that guided scaffolding, such as helping children break complex passages into manageable segments, contributed to competence satisfaction and perceived mastery (Evans et al., 2022). In contrast, overly directive correction during practice sessions often reduced perceived competence and heightened frustration.

Emotional Climate and Parent–Child Relational Dynamics

The emotional tone of parental involvement emerged as a critical predictor of motivational outcomes. Studies consistently reported that warm, encouraging, and responsive parent–child interactions promoted resilience during performance setbacks and examination preparation (Bonneville-Roussy et al., 2022). Children who perceived their parents as emotionally supportive demonstrated greater willingness to persist through technical challenges (Hallam et al., 2016).

Positive affective reinforcement, including verbal encouragement and recognition of effort rather than performance outcomes, strengthened internal motivation and confidence (Ryan & Deci, 2020). In contrast, emotionally tense practice environments characterized by criticism, impatience, or visible parental disappointment were associated with performance anxiety and withdrawal behaviours. Longitudinal findings suggested that negative emotional climates could gradually undermine musical identity development during middle childhood (Osborne et al., 2020).

Cultural Modulation of Parental Involvement

A distinct pattern emerged in studies conducted within East Asian contexts, particularly in regions influenced by examination-oriented educational systems. While higher levels of parental investment and structured involvement were common, recent empirical evidence suggests a gradual shift toward more autonomy-supportive approaches among younger parents.

Studies focusing on Chinese piano education contexts indicated that although achievement expectations remain salient, many families increasingly recognize the importance of emotional support and intrinsic enjoyment in sustaining long-term

engagement (Jiang & Lau, 2025). Research conducted between 2023 and 2026 shows a hybrid pattern, where structured discipline coexists with emerging autonomy-supportive strategies. Comparative studies further revealed that the impact of controlling behaviours varies depending on cultural interpretation; in some contexts, directive guidance is perceived as normative parental care rather than psychological control (Cheng & Southcott, 2022). However, even within these contexts, perceived autonomy remains positively associated with persistence and well-being (Ryan & Deci, 2020; Evans et al., 2022).

Summary of Empirical Patterns

Overall, the synthesized evidence suggests that effective parental involvement in early piano education is characterized by:

- Autonomy-supportive communication
- Structured but collaborative practice routines
- Emotionally warm relational climates
- Cultural sensitivity in interpreting parental roles

Across contexts, the satisfaction of autonomy, competence, and relatedness needs consistently predicted stronger intrinsic motivation and sustained engagement (Ryan & Deci, 2020; Hallam & Creech, 2016). While structured guidance remains important, particularly in early skill acquisition, its effectiveness depends heavily on relational tone and the child's perceived sense of agency.

The findings from this systematic review demonstrate that the trajectory of early piano education is not merely a product of individual talent, but a deeply socialized process regulated by parental intervention. To expand on these empirical patterns, the following sections detail the mechanisms through which family dynamics translate into musical persistence or attrition.

The Divergence of Autonomy and Control

The most robust finding across the 2021–2026 literature is the qualitative difference between "supportive" and "controlling" involvement. Autonomy support is characterized by providing a rationale for difficult tasks, acknowledging the child's feelings of frustration, and encouraging independent problem-solving (Ryan & Deci, 2020). Studies by Evans et al. (2022) and Jiang & Lau (2024) confirm that children whose parents utilize these strategies do not just practice more; they practice *differently*, employing deeper cognitive strategies such as mental rehearsal and error analysis.

Conversely, controlling involvement often manifested as "psychological control" utilizes guilt-induction or the withdrawal of affection to ensure compliance. While this may produce short-term technical accuracy, it creates a "fragile" form of motivation that collapses as soon as external monitoring is removed. This explains the high attrition rates in regional centres where traditional, high-pressure "Tiger Parenting" models collide with the child's developmental need for agency.

Structural Scaffolding vs. Direct Oversight

A critical distinction emerged regarding the home practice environment, where findings suggest that "structuring" is often mistaken for "monitoring". Effective structuring involves

the parent acting as a "facilitator" who helps the child manage time and resources. For example, Chen (2025) found that students were 40% more likely to reach advanced levels if their parents helped them break down complex 32nd-note passages into smaller, manageable sub-goals (scaffolding) rather than simply sitting next to them to ensure they stayed on the bench (monitoring).

This scaffolding acts as a bridge across the Zone of Proximal Development (ZPD). When parents successfully fade their support as the child's competence increases, the student moves from "situational interest" to "individual interest." However, if the scaffolding remains rigid and never "fades," the student remains dependent on parental presence, leading to a loss of interest once the repertoire becomes too complex for the parent to assist with (Oliveira et al., 2021).

The "Anyang Paradox": Cultural Nuance in Pressure

The findings specifically highlight a shift in East Asian cultural modulation. While older literature often characterized Chinese musical parenting as strictly authoritarian, recent data (2023–2026) suggests a "hybridity" in regional areas like Anyang. Younger, more educated parents are increasingly attempting to balance traditional "Confucian" discipline with modern "Western" autonomy support (Wang & Liu, 2023).

However, a "paradox" remains: while parents *believe* they are being supportive, children often still *perceive* the involvement as pressure-heavy due to the underlying academic competitive climate (Zhao et al., 2025). This disconnect suggests that even well-meaning parents lack the specific communicative tools to signal autonomy support effectively. This finding serves as the primary justification for the Parental Motivation Module (PMM), which aims to teach parents how to "re-frame" their involvement.

Emotional Resilience and the "Relational Buffer"

Finally, the findings underscore the importance of the emotional climate. In-home practice is frequently a site of conflict. Studies by Hallam & Creech (2023) show that the "relational buffer" the warmth of the parent-child bond protects the child from the negative effects of performance failure. When practice sessions are characterized by positive affect, the child views the piano as a tool for connection; when sessions are tense or critical, the instrument becomes a symbol of relational stress, leading to a "rejection" of the musical identity during the middle-childhood transition (Osborne et al., 2020).

Discussion

The Home–School Disconnect: A Structural Misalignment

The synthesis of empirical literature published between 2021 and 2026 reveals a persistent structural misalignment in early piano education that may be conceptualized as the *Home–School Disconnect*. Although contemporary motivational frameworks strongly emphasize autonomy-supportive scaffolding as foundational to sustainable engagement (Ryan & Deci, 2020), the psychological climate of daily home practice often diverges from these principles (Evans et al., 2012). While teachers provide structured technical guidance during weekly lessons, the responsibility for maintaining motivation, emotional regulation, and practice continuity largely shifts to parents during unsupervised practice sessions. This division of

labour becomes problematic when parental involvement lacks a pedagogical map, resulting in inconsistent motivational cues between lesson instruction and home reinforcement.

In many regional Chinese contexts, including Tier-3 cities such as Anyang, parental engagement is characterized by high structural intensity but variable psychological quality (Luo & Guan, 2025). Parents frequently monitor time spent at the instrument and prioritize examination outcomes; however, monitoring alone does not equate to scaffolding. Without structured motivational literacy, parental supervision may inadvertently produce evaluative rather than developmental interactions, reinforcing performance pressure instead of psychological resilience. Recent quantitative evidence confirms this motivational tension. Ji and Saidon (2025) found that while parental expectations positively predicted initial enrollment and short-term performance outcomes, excessively outcome-focused expectations were negatively associated with intrinsic motivation and practice enjoyment. Their findings provide empirical support for the argument that high aspiration, when not accompanied by autonomy-supportive communication, contributes to controlled forms of motivation rather than internalized regulation, thereby increasing vulnerability to disengagement during intermediate stages of study.

Sociocultural Interpretation: The Scaffolding Gap

From a sociocultural perspective, the disconnect can be interpreted as a breakdown in mediated learning processes. Within the Zone of Proximal Development, effective scaffolding requires calibrated guidance that gradually transfers responsibility to the learner. When parents lack musical competence or pedagogical tools, they may compensate through directive correction or outcome-based pressure. Such strategies are typically motivated by care and high aspirations, yet empirical evidence demonstrates that controlling involvement predicts performance anxiety, fragile self-efficacy, and heightened dropout risk.

This dynamic creates a psychological clash: parents seek to secure achievement, but the strategies employed may frustrate children's needs for autonomy and competence (Ryan & Deci, 2020). During the developmental "golden window" between ages 9 and 13, parental mediation is particularly influential in shaping emotional resilience and practice habits (Hallam et al., 2016). If scaffolding during this period is autonomy-supportive, children progressively internalize regulation and demonstrate stronger persistence (Evans et al., 2012). However, if involvement remains evaluative or performance-centered, students may develop controlled motivational profiles that sustain short-term intensity but lack long-term durability.

As adolescents approach ages 17 to 19, teacher credibility and peer relatedness increasingly influence musical identity formation. Parental authority that fails to fade developmentally may then become counterproductive. Effective scaffolding must therefore be adaptive, transitioning from structured oversight to mentoring that supports independent goal-setting and identity coherence.

Feedback Systems and Motivational Climate

The discussion of feedback mechanisms further clarifies the structural nature of the Home–School Disconnect. Directive, correction-focused instruction remains common in examination-oriented classrooms (Hallam, 1998). Although effective for improving technical

precision, directive feedback alone does not sustain situational interest beyond early stages. Hybrid feedback systems that integrate digital performance analytics with expressive, metaphorical teacher guidance have demonstrated measurable improvements in technical accuracy and competence satisfaction (Jiang & Lau, 2025). Supporting this direction, Wan, et al. (2023) demonstrated that digital listening tools significantly enhanced children's metacognitive awareness and self-regulated practice strategies. Students who engaged in structured digital reflection showed improved error detection and independent problem-solving. The authors further emphasized that technological scaffolds were most effective when embedded within supportive adult mediation, aligning with the present review's emphasis on relational context. Complementing this perspective, Ruan (2024) found that independent piano learning supported by the Soft Mozart application significantly increased student motivation and practice consistency. The study indicated that interactive digital environments can enhance perceived competence and self-efficacy, particularly when learners receive immediate corrective feedback and structured progression pathways. These findings suggest that digital platforms may serve as autonomy-supportive tools by facilitating self-paced exploration and mastery experiences. However, consistent with Self-Determination Theory, the motivational gains observed were most sustainable when digital autonomy was embedded within supportive relational contexts rather than replacing teacher or parental engagement.

The motivational effectiveness of these systems, however, depends heavily on how feedback is interpreted within the home. If parents respond to performance metrics with heightened evaluative pressure, digital tools may amplify rather than alleviate motivational strain. Conversely, when parents employ informational feedback and reflective questioning, competence satisfaction increases while autonomy remains intact (Bonneville-Roussy et al., 2022; Ryan & Deci, 2020). These findings suggest that technological innovation in piano pedagogy must be paralleled by relational recalibration in home practice environments, ensuring that digital precision does not displace psychological need satisfaction.

Reframing Parental Involvement: The Parental Motivation Module

The proposed Parental Motivation Module (PMM) emerges as a structured response to the systemic gap identified in this review. Rather than positioning parents as either passive observers or performance enforcers, the PMM reframes them as autonomy-supportive facilitators. Grounded in Self-Determination Theory (Ryan & Deci, 2020) and informed by contemporary evidence on scaffolding and motivational regulation (Evans et al., 2022; Jiang & Lau, 2025), the module translates abstract psychological constructs into accessible, culturally responsive practices. The necessity of such family-centered approaches is further supported by broader scoping reviews of Asian-focused interventions, which demonstrate that multilevel family involvement is a core component of successful behavioural outcomes and long-term intervention adherence (Ali et al., 2022)

The PMM emphasizes process-focused dialogue, emotional validation, and collaborative structuring of practice routines. By shifting parental communication from evaluative statements toward informational prompts, the module supports competence without undermining autonomy. Emotional responsiveness functions as a relational buffer, mitigating frustration during technical challenges (Hallam et al. 2016). Collaborative

scheduling further strengthens perceived agency, reinforcing the transition from externally regulated participation to internalized commitment.

Through these mechanisms, the PMM directly targets the shift from controlled to autonomous motivational profiles. The literature consistently demonstrates that autonomous motivation predicts lower burnout risk, stronger identity formation, and higher long-term persistence (Ryan & Deci, 2020; Evans et al., 2012). By contrast, controlled motivation, though sometimes associated with high practice volume, is linked to emotional fatigue and eventual withdrawal. The PMM thus operationalizes theoretical insights into a structured, developmentally sensitive intervention designed to cultivate high-quality motivation.

Implications for Regional Contexts

The implications of this discussion are particularly salient for Tier-3 and Tier-4 cities, where rapid socioeconomic transformation intersects with deeply rooted examination-oriented educational traditions. In these regional contexts, piano education is often perceived not only as an artistic pursuit but also as a form of cultural capital and competitive advantage within broader academic trajectories. As household incomes rise and educational aspirations intensify, families increasingly invest in extracurricular music training. However, this expansion in access is not always accompanied by parallel growth in pedagogical literacy or structured parental guidance systems. Consequently, while parental commitment is typically high, the strategies used to support children's learning may lack alignment with contemporary motivational principles.

This structural tension helps explain why the Home–School Disconnect should not be interpreted as a deficit in parental dedication, but rather as a coordination problem between institutional pedagogy and domestic practice environments. In many regional cities, private piano studios and after-school training centres operate with limited systematic communication channels between teachers and parents. Instructional objectives, feedback rationales, and developmental expectations are often conveyed implicitly rather than explicitly. As a result, parents may interpret technical correction or performance preparation as signals to intensify monitoring at home, inadvertently amplifying pressure rather than reinforcing autonomy-supportive learning (Ryan & Deci, 2020; Evans, 2015). Without shared pedagogical language, home practice becomes an extension of examination accountability rather than a space for guided skill consolidation and emotional resilience.

Moreover, regional disparities in access to professional development resources further complicate the landscape. Teachers in metropolitan conservatory-affiliated institutions may receive greater exposure to contemporary motivational research and hybrid pedagogical models, whereas instructors in smaller cities may rely more heavily on traditional directive methods (Hallam, 1998). When classroom instruction emphasizes technical precision without explicit discussion of motivational processes, parents may lack the conceptual tools necessary to scaffold learning effectively. This gap reinforces cycles of high practice intensity but fragile engagement, particularly during transitional stages of interest development.

Intentional alignment within the teacher–parent–student triad therefore becomes critical (Osborne et al. 2020). Rather than viewing parental involvement as peripheral, regional education systems may benefit from formalizing structured communication protocols. For example, periodic parent workshops, shared progress rubrics, and reflective practice guides could clarify the distinction between monitoring and mentoring. Such initiatives would not require parents to acquire advanced musical skills; instead, they would cultivate motivational literacy by translating pedagogical intentions into accessible home-based strategies. This alignment ensures that technical goals established in lessons are reinforced through autonomy-supportive dialogue rather than outcome-based pressure.

Within this framework, structured parental guidance programs such as the Parental Motivation Module (PMM) hold particular promise as scalable and culturally responsive interventions. By emphasizing process-focused feedback, emotional validation, and collaborative structuring of routines, the PMM respects prevailing cultural values of diligence, discipline, and achievement while reframing their implementation through a psychologically sustainable lens. In examination-driven environments, this reframing is especially important. Rather than rejecting achievement aspirations, the module integrates them with autonomy-supportive communication practices that preserve intrinsic engagement (Ryan & Deci, 2020).

Furthermore, the scalability of such interventions is enhanced by the increasing digital infrastructure present even in regional cities. Online parent seminars, mobile-based reflective prompts, and integrated communication platforms between teachers and families could extend the reach of motivational training without imposing excessive logistical burdens. When embedded within existing studio systems, structured parental modules may serve not only as remedial interventions but also as preventative frameworks, reducing dropout risk before motivational decline becomes visible.

In sum, the regional implications of this review extend beyond individual family practices to broader ecosystem design. Sustainable piano education in Tier-3 and Tier-4 cities depends on coordinated alignment among instructional methods, parental engagement strategies, and developmental psychological principles. By recognizing the Home–School Disconnect as a systemic coordination issue rather than a personal shortcoming, policymakers, educators, and studio directors can move toward integrated models that harmonize cultural aspirations with empirically grounded motivational practices.

Limitations and Future Directions

Despite synthesizing 50 contemporary sources, several limitations warrant consideration. Much of the longitudinal evidence remains concentrated in metropolitan areas, leaving regional contexts comparatively underexplored. Future empirical research should employ quasi-experimental or randomized controlled designs to test the measurable impact of parental training interventions on autonomy, persistence, and performance outcomes.

Additionally, emerging technologies such as smart pianos and virtual feedback systems show promise in enhancing competence satisfaction (Jiang & Lau, 2024), yet their long-term motivational impact remains contingent on relational context. Digital tools cannot replace emotional atonement; rather, their effectiveness depends on integration within autonomy-supportive environments (Ryan & Deci, 2020).

Overall, the discussion underscores that sustainable musical development depends not merely on instructional quality or practice intensity but on the alignment between developmental scaffolding, feedback systems, and psychological need satisfaction. By translating contemporary motivational theory into structured parental practices, the Parental Motivation Module offers a theoretically grounded and contextually responsive pathway for reducing the Home–School Disconnect and cultivating durable, high-quality motivation in early piano education.

Conclusion

This review synthesized 50 empirical studies published between 2021 and 2026 to examine the interplay between parental involvement, feedback systems, and motivational development in early piano education. The findings collectively demonstrate that sustainable musical engagement is not determined solely by instructional quality or practice intensity, but by the alignment between developmental scaffolding, psychological need satisfaction, and contextual cultural expectations. Across global and Chinese contexts, autonomy-supportive environments consistently predict stronger intrinsic motivation, greater persistence, and more stable musical identity formation (Ryan & Deci, 2020; Evans et al., 2022). Conversely, controlled forms of involvement, even when associated with high practice volume, are linked to burnout risk, anxiety, and intermediate-stage dropout.

A central contribution of this review is the conceptualization of the *Home–School Disconnect* as a systemic coordination problem rather than a deficit of parental commitment. In many regional contexts, particularly Tier-3 and Tier-4 Chinese cities, parental aspirations are high and financial investment substantial. However, the absence of structured motivational literacy and pedagogical alignment often produces inconsistencies between classroom instruction and home-based reinforcement. During the developmental “golden window” between ages 9 and 13, this misalignment is especially consequential, as parental scaffolding plays a decisive role in shaping practice habits, emotional resilience, and the trajectory from situational to individual interest (Hallam et al. 2016). When scaffolding remains monitoring-oriented rather than autonomy-supportive, students are more likely to develop controlled motivational profiles that lack long-term sustainability.

In response to this structural gap, the proposed Parental Motivation Module (PMM) offers a theoretically grounded and contextually responsive intervention model. Rooted in Self-Determination Theory (Ryan & Deci, 2020) and informed by contemporary empirical findings on scaffolding and feedback integration (Jiang & Lau, 2024; Osborne et al., 2020), the PMM translates abstract motivational constructs into practical, culturally adaptable strategies for parents. By reframing parental roles from logistical overseers to autonomy-supportive facilitators, the module seeks to cultivate “good quality” motivation characterized by internalized value, competence satisfaction, and emotional resilience. Importantly, this reframing does not reject cultural values of diligence and achievement; rather, it harmonizes them with psychological conditions necessary for sustainable engagement.

The broader implications of this study extend to educational ecosystem design. Effective early piano education requires intentional coordination within the teacher–parent–student triad, integration of hybrid feedback systems with relational atonement, and developmentally adaptive fading of parental control. Future research should move beyond

metropolitan samples and empirically test structured parental training interventions in regional contexts, employing longitudinal and quasi-experimental designs to measure shifts in autonomy, persistence, and performance outcomes.

Ultimately, sustainable musical development depends on more than technical mastery. It depends on the cultivation of environments in which discipline coexists with autonomy, achievement aligns with identity, and structured guidance gradually evolves into self-regulated commitment. By addressing the Home–School Disconnect through theoretically informed and culturally sensitive interventions, early piano education can move toward models that support not only performance excellence but enduring musical engagement.

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