International Journal of Medical Science and Clinical Research
www.journalofmedical.com
Online-ISSN: 2664-7761
Received: 03-01-2026, Accepted: 04-02-2026, Published: 19-02-2026
Volume 8, Issue 1, 2026, Page No. 41-45

From trans-multiple abilities to transformative praxis: The Meta-Praxis 3 (MP3) model in pediatric therapeutic alliance

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Abstract
This conceptual paper presents the Meta-Praxis 3 (MP3) model as a praxeological extension of the Trans-Multiple Abilities (TMA) meta-theory of learning, situating professional practice of pediatric therapeutic alliance (PTA) within an integrated framework of Diagnostics, Dialogics, and Didactics (Triple-D). Grounded in the educological traditions of Freire, Schön, and Kemmis, the MP3 model conceptualizes praxis as dialogic, reflective, ethically informed, and socially embedded action. While the TMA meta-theory explains learning as a non-linear, recursive, and emergent process grounded in the dynamic interplay of Cognition, Conation, Affect, and Sensation (CCAS), the MP3 model extends this architecture into professional and institutional contexts. It translates cognitive meta-theoretical principles into transformative praxis through a structured assessment-intervention continuum operationalized in the two-level 3-D management system (Define-Develop-Drive; Design-Deploy-Deliver). Applied within PTA and the treatment of learning disabilities (LDs), the MP3 model integrates multidimensional Diagnostics, collaborative Dialogics, and evidence-based Didactics into a coherent, reflective cycle of practice. By unifying learning theory with socio-critical and participatory praxis, the MP3 model advances both clinical rigor and humanistic responsiveness in pediatric therapy settings.

Keywords: Diagnostics, dialogics, didactics, Meta-Praxis 3 (MP3), Trans-Multiple Abilities (TMA)

Introduction

A Brief Introduction to the Meta-Praxis 3 (MP3) Model

The Meta-Praxis 3 (MP3) model is a meta-theoretical framework that integrates Diagnostics, Dialogics, and Didactics (Triple-D for short; Chia & Kee, 2012) [6] into a reflective, ethically grounded, and socially embedded cycle of professional practice in pediatric psychoeducational therapy, for instance (see Figure 1).

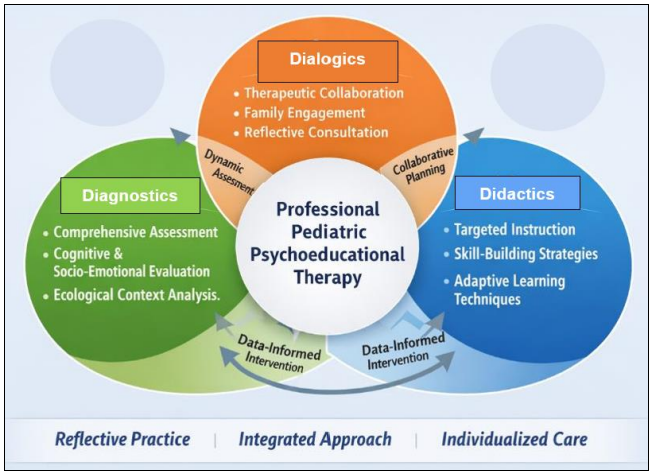

Fig 1: The Meta-Praxis 3 Model in Pediatric Psychoeducational Therapy

In this paper, the MP3 model is applied in the context of pediatric therapeutic alliance (PTA), which is referred to the collaborative and trusting relationship established among healthcare professionals, a child patient, and often their caregivers (parents/guardians), to support proactive engagement and positive outcomes in treatment. This can be achieved by aligning on shared goals and tasks through open communication, mutual respect, and emotional connection. In pediatric therapy clinic/hospital settings, the PTA encompasses the child's bond with the clinician (or therapist) as well as the caregiver-professional relationship and is linked to better engagement, satisfaction, and adherence to care plans (Malhotra & Chauhan, 2020) [22].

The MP3 model has never been attributed to a single author or moment of origin. Rather, it emerged through adaptation from late twentieth- and early twenty-first-century praxis scholarship, particularly the work of three influential scholars, who study education as a holistic system integrating theory, research, and practice relevant to the field of educology (credited to Lowry Harding as the earliest person to use and introduce the term in academic discourse in 1951): Paulo Freire (b.1921-d.1997), Donald Schön (b.1930-d.1997), and Stephen Kemmis (b.1946). Educology is the systematic study of education (any branch, e.g., health education, medical education or social education) as a holistic field, examining the theory, practice, and social context of teaching, learning, and educational institutions (Harding, 1951 [17], 1964 [18]).

Educologially speaking, Freire (1970/2005) [14] advanced critical pedagogy, emphasizing dialogue and conscientization as foundations for transformative action and arguing that education should empower individuals to critically understand and transform their social conditions. Next, Schön (1992/2017) [25] introduced the concept of reflective practice, framing professional learning as "knowing-in-action" rather than the mere application of technical rules. Lastly, Kemmis with his colleague Smith (Kemmis & Smith, 2008) [20] further developed praxis as

ethically informed action shaped by social, cultural, and institutional contexts.

Collectively, the three respective theoretical concepts have reconceptualized praxis as dialogic, reflexive, and socially embedded. The MP3 model can, therefore, be understood as a meta-theoretical synthesis of these traditions. It provides an integrative framework widely applied in education, healthcare, and social services to guide models, such as the Triple-D framework (Chia & Kee, 2012) [6] and the two-level 3-D (i.e., Level 1 Define-Develop-Drive, and Level 2 Design-Deploy-Deliver) management system, where assessment, consultation, and intervention are unified within a reflective, dialogic, and ethically accountable cycle of practice (see Figure 2).

Fig 2: The 2-Level 3-D Model for Pediatric Therapeutic Alliance

Shared Meta-Theoretical Foundations: Learning as Non-Linear, Reflexive, and Emergent

The MP3 model is best understood as a praxeological bridge between critical social theory and a meta-theory of learning (MTL) grounded in trans-multiple abilities (TMA) (Chia & Kee, 2013) [7]. At a foundational level, both MP3 model and the TMA cognitive meta-theory reject linear, input-output models of learning process in favor of a non-linear, recursive, and emergent conception. Learning should be understood as grounded in lived experience and emerging from the dynamic interplay of cognition, conation, affect, and sensation (CCAS), which constitute the four pillars of behavioral potential (Chia, 2010 [3]; Poland, 1974 [24]), operating across both conscious and subconscious levels. Hence, any challenges in the learning process encountered by children and adolescents could be the results of impairments or developmental delays in CCAS. For instance, Chia (2010) [3] explained that impairments in Cognition can be the result of either neurological impairments (e.g., alexia, acalculia, apraxia and agnosia) or developmental delays (e.g., dyslexia, dyscalculia, dyspraxia and dysgnosia). Hence, the TMA model conceptualizes learning as a trans-multi-faceted process in which cognition, conation, and affect are dynamically linked through sensation and distributed across episodic, semantic, and procedural memory systems (also see Chia, 2010) [3]. The MP3 model adopts this epistemological stance but extends it beyond intrapsychic processes to encompass professional and social action. In this sense, the TMA model explains how learning occurs within the mind (Chia, 2012 [6]; Chia & Chua, 2014 [5]), whereas the MP3 model explains how such learning is enacted, critically examined, and transformed in practice.

Freire and the Gnostic Dimension: Critical Consciousness as CCAS Integration

The relationship between Freire's notion of conscientização and the TMA framework further clarifies this alignment. Freire (1970/2005) [14] conceptualizes critical consciousness as an active, reflective awareness of social, political, and economic contradictions, coupled with action against oppressive elements of reality. Within the TMA model, the gnostic dimension, i.e., comprising autognosis (knowing self) and ecognosis (knowing the world), parallels this movement toward critical awareness (Kondrat, 1999 [21]; Urdang, 2010 [27]). This is especially crucial for parents of children with special needs. In clinical settings, parents do more than wait outside while their child attends therapy. Instead, they participate in psychoeducation sessions with another therapist, who guides them on how to support and manage their child's daily activities at home and at school. It means that learning progresses from peri-level, concrete and sensory-bound engagement to apo-level, abstract and conceptual understanding, requiring a shift from procedural imitation (praxis) to semantic comprehension (gnosis) (Chia & Kee, 2013) [7]. The MP3 model extends this by framing critical consciousness not merely as cognitive awareness but as a reflective-affective-volitional state. Freire's critical consciousness, which has been termed as mental states of one's mind (Chia & Tan, 2011) [10] or being mindful (Pagnini & Philips, 2015) [23], is therefore not purely cognitive; it depends on affect (values and moral response) and conation (agency and will to act), mirroring the triangulated architecture of Cognition-Conation-Affect (Poland, 1974 [24]) held together by Sensation (Chia, Kee, & Yusof, 2010) [8] central to the TMA meta-theory. Thus, the MP3 model operationalizes Freire's insights through the same CCAS structure articulated in the TMA model.

Schön and Reflective Practice: Episodic-Procedural-Semantic Integration

A similar alignment can be observed with the theory of reflective practice psotulated by Schön (1992/2017) [25]. Schön's theory distinguishes between reflection-in-action and reflection-on-action, highlighting how professionals think both during practice and after the fact. Within the TMA framework, procedural memory supports skilled actions that operate largely outside conscious awareness; episodic memory encodes lived experiences; and semantic memory enables abstraction, meaning-making, and conceptual understanding (Chia & Kee, 2013) [7]. Learning therefore arises from the dynamic interaction among these memory systems rather than through a rigid, linear progression. Schön's reflective practitioner acts in complex and uncertain situations (procedural), encounters unexpected outcomes or disruptions (episodic), and subsequently reframes understanding to guide future responses (semantic). The MP3 model extends this cyclical

process by embedding it within a structured praxis framework, where action is continuously shaped by reflection, reflection is anchored in lived experience, and experience is reinterpreted through theoretical insight. In this sense, the MP3 model represents a praxeological extension of the TMA learning process into professional and institutional practice. Praxeological, in this context, refers to the systematic and reflective improvement of human action within real-world settings.

For an example of a praxeological implication in working with children with autism spectrum disorder (ASD), this might involve an educational therapist, who notices during a social skills session (reflection-in-action) that the child becomes distressed when peer interaction becomes unpredictable. After the session (reflection-on-action), the educational therapist analyzes the entire event, recognizing that the child's procedural responses are triggered by sensory or social uncertainty (episodic experience), and then reframes the intervention plan using structured visual supports and predictable turn-taking routines (semantic reframing).

Rather than rigidly applying a predetermined technique, the practitioner (educational therapist) systematically adjusts the action through ongoing reflection grounded in the child's lived experience. This reflective adjustment, i.e., linking evidence-based scientific theory, real-time observation, and ethically responsive intervention (also see Chia, Lim, & Lee, 2017) [9], illustrates a praxeological approach in ASD practice in the abovementioned example.

Kemmis and Critical Participatory Praxis: Trans-Multiple Abilities in Social Space

Kemmis's theory of critical participatory praxis adds an explicitly social and political dimension that further extends the TMA framework. Kemmis with Smith (2008) [20] argues that praxis is socially situated, historically conditioned, and morally and politically charged. This position aligns with the TMA assertion that learning is shaped by sensation and context, mediated through interaction with others, and not confined to individual cognition (Chia & Kee, 2013) [7]. The MP3 model adapts the insights of Kemmis and Smith (2008) [20] by conceptualizing praxis as distributed across actors and embedded within practice architectures. Learning and change are understood to happen collectively within social systems, where Cognition-Conation-Affect-Sensation (CCAS) operate not only intrapsychically but also intersubjectively. In this sense, the MP3 model externalizes the TMA model: what TMA explains at the level of the learning mind, the MP3 model explains at the level of shared practice and institutional transformation.

Meta-Level Synthesis: From Cognitive Meta-Theory to Transformative Praxis

At a meta-theoretical level, the relationship between the two frameworks can be summarized as follows: the TMA model functions as a meta-theory of how learning occurs, whereas the MP3 model serves as a meta-framework for how learning is enacted, examined, and transformed through praxis. The MP3 model does not replace the TMA model. In fact, it presupposes it. Its assumption s fourfold: firstly, that learning is trans-multiple ability (TMA) rather than reducible to a single ability; secondly, that action is inseparable from affect and volition; thirdly, that meaning emerges through reflection on lived experience; and lastly, that development involves movement from concrete, peri-level engagement to abstract, apo-level understanding (also see Chia & Kee, 2013) [7].

On this basis, the MP3 model can legitimately claim theoretical lineage from Freire, Schön, and Kemmis (with Smith) without contradiction, as its cognitive underpinnings are already articulated within the TMA meta-theory of learning (MTL). In sum, the MP3 model may be understood as the praxeological and socio-critical extension of a trans-multiple abilities meta-theory of learning. It translates the CCAS architecture of the TMA model into reflective, critical, and participatory forms of professional action, thereby integrating learning theory with transformative praxis (Chia & Kee, 2013 [7]; Freire, 1970/2005 [14]; Kemmis & Smith, 2008 [20]; Schön, 1992/2017 [25]).

Application of MP3 Model in Treatment of Learning Disabilities

Already mentioned in the beginning, the author has chosen to apply the MP3 model in the context of pediatric therapeutic alliance (PTA). In this section, the MP3 model is applied in the treatment of learning disabilities (LD) within a pediatric therapy clinic/hospital for children with LDs (not limitd to LDs but also includes other special needs). The model provides a structured, integrative, and developmentally responsive framework that bridges assessment, relational engagement, and targeted intervention. Being grounded in praxis theory, the MP3 model is best understood as reflective, goal-directed action informed by theory and context (Freire, 1970/2005 [14]; Schön, 1992/2017 [25]), the MP3 model conceptualizes multidisciplinary pediatric diagnostic intervention across three key interrelated domains of Diagnostics, Dialogics, and Didactics, which, in turn, constitute the Triple-D model (Chia & Kee, 2012) [6], an interdisciplinary, biopsychosocial approach to pediatric management, especially when working with children with developmental, learning, or psychosocial challenges.

In the pediatric management of LDs, the first domain of Triple-D model, Diagnostics, extends beyond categorical identification (e.g., specific learning disorder criteria as stated in DSM-5-TR or ICD-11) to include dynamic, functional, and ecological assessment of cognitive processing, language (receptive and expressive), executive functioning, socio-emotional status, and environmental supports (American Psychiatric Association [APA], 2022 [1]; Grigorenko *et al*., 2020 [16]; World Health Organizartion [WHO], 2019 [30]). This domain of Diagnostics aligns with contemporary views that LD is heterogeneous and requires multidimensional profiling rather than reliance on discrepancy models alone (Fletcher *et al*., 2019) [13]. Within the MP3 framework, diagnostic praxis is therefore iterative and informs individualized goal formulation.

The second domain, Dialogics, stresses on collaborative meaning-making among the stakeholders, i.e., therapist, child, caregivers, and when appropriate, teachers. Drawing on dialogical and socio-cultural theories (Vygotsky, 1978 [28]; Wegerif, 2011 [29]), this Dialogics situates therapeutic

progress as relationally mediated. In pediatric LD treatment, Dialogics operationalizes shared goal setting, caregiver coaching, and child-centered feedback processes, thereby enhancing treatment adherence and generalization across home and school contexts. Research consistently supports that family engagement and therapeutic alliance significantly influence intervention outcomes in child developmental and educational therapy (Karver *et al*., 2018) [19]. In the pediatric therapy clinic/hospital setting, dialogic praxis may include reflective consultations, structured parent guidance sessions, and collaborative review of learning progress data, ensuring that intervention remains contextually responsive.

The third domain, Didactics, focuses on evidence-based instructional and therapeutic strategies tailored to the child's neurocognitive profile. For children with reading disorder (dyslexia), for example, structured literacy approaches grounded in explicit, systematic phonics instruction demonstrate strong empirical support (Ehri *et al*., 2001 [11]; Snowling & Hulme, 2021 [26]). For written expression difficulties (dysgraphia) or mathematics learning difficulties (dyscalculia), explicit strategy instruction, scaffolded practice, and metacognitive training are recommended (Fletcher *et al*., 2019 [13]). Within the MP3 framework, didactic praxis is not merely technique-driven; it is continuously refined through feedback loops from Diagnostics and Dialogics (i.e., to inform the practices in Didactics). This cyclical integration reflects implementation scientific principles emphasizing data-driven adaptation and contextual fit in clinical settings (Fixsen *et al*., 2005) [12].

More importantly, the MP3 model supports a tiered and systemic approach within pediatric therapy clinic/hospital settings. At the organizational level, Diagnostics inform service planning and resource allocation; Dialogics shape interdisciplinary collaboration; and Didactics guide intervention protocols and outcome measurement. Such integration is consistent with multi-tiered systems of support (MTSS) frameworks widely adopted in educational and clinical contexts (Fuchs & Fuchs, 2017) [15]. By embedding reflective practice across these three domains of the Triple-D model, the MP3 model enhances clinical coherence, promotes individualized yet evidence-aligned intervention, and safeguards ethical responsiveness to the child's developmental trajectory and lived context.

In summary, the application of the MP3 model in the pediatric treatment of LDs fosters an integrated assessment-intervention continuum (Batsche *et al*., 2008) [2], strengthens caregiver and child engagement, and ensures that instructional strategies are dynamically informed by ongoing diagnostic insight and relational feedback. This triadic, praxis-oriented framework advances both clinical rigor and humanistic responsiveness in pediatric therapy practice.

Conclusion

In conclusion, the MP3 model represents a coherent praxeological extension of the Trans-Multiple Abilities (TMA) meta-theory of learning, translating its Cognition-Conation-Affect-Sensation (CCAS) architecture into reflective, dialogic, and ethically accountable professional action. By integrating Diagnostics, Dialogics, and Didactics within a structured two-level 3-D management system, the MP3 model bridges cognitive theory and transformative praxis in pediatric therapeutic contexts. Its application to pediatric therapeutic alliance (PTA) and the treatment of learning disabilities demonstrates how assessment, relational engagement, and evidence-based intervention can be unified within a recursive, data-informed, and contextually responsive cycle of practice. Ultimately, the MP3 model advances an integrated framework that strengthens clinical coherence, deepens caregiver-child engagement, and promotes developmentally attuned, humanistic, and scientifically grounded intervention in pediatric therapy settings.

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