

Teachers' Psychological Foundations in Enhancing Student Motivation and Creativity in Primary Schools: A Literature Review

Nurmayani, Putri Adilah Rahmadani, Novia Mawla Nisa, Lutfiah Gracia, Baihai Alessius Silalahi

⁽¹⁾ Universitas Negeri Medan

DOI: <https://doi.org/10.62872/61bs0637>

Abstrak

Dalam pendidikan dasar, motivasi dan kreativitas siswa sering kali belum berkembang secara optimal meskipun telah dilakukan berbagai inovasi kurikulum. Penelitian ini menyoroti permasalahan tersebut dengan mengkaji peran landasan psikologis guru, termasuk keyakinan mereka tentang pembelajaran, literasi motivasional, dan konsep diri kreatif, dalam membentuk praktik pembelajaran yang mendorong keterlibatan serta kreativitas peserta didik. Berlandaskan *Self-Determination Theory* (SDT), penelitian ini bertujuan untuk membangun dan memvalidasi kerangka konseptual yang mengaitkan psikologi guru dengan dukungan instruksional yang memotivasi, keterlibatan siswa, dan hasil belajar kreatif. Desain penelitian menggunakan pendekatan kualitatif konstruktivis dengan metode *grounded theory*, melalui wawancara semi-terstruktur, observasi kelas, dan analisis dokumen. Partisipan terdiri atas guru sekolah dasar dengan pengalaman minimal tiga tahun, dilengkapi dengan masukan dari pimpinan sekolah dan kelompok diskusi siswa. Analisis data dilakukan melalui siklus pengodean, mulai dari *open coding* hingga integrasi teoretis, dengan triangulasi dan *member checking* untuk menjamin keabsahan data. Hasil penelitian menghasilkan model jalur empat tahap: landasan psikologis guru, dukungan instruksional yang memotivasi, pengalaman siswa dalam pemenuhan kebutuhan belajar, dan ekspresi pembelajaran kreatif. Temuan menunjukkan bahwa praktik pembelajaran yang mendukung otonomi dan terstruktur, seperti pemberian pilihan bermakna, umpan balik yang menjelaskan, serta tugas terbuka yang disusun bertahap, secara signifikan meningkatkan keterlibatan dan kreativitas siswa. Selain itu, efikasi diri guru dan toleransi terhadap ketidakpastian kreatif berperan sebagai mediator dalam penerapan keyakinan psikologis ke praktik nyata. Kesimpulannya, penguatan sumber daya psikologis guru sangat penting untuk menjaga motivasi dan kreativitas siswa di ruang kelas sekolah dasar. Oleh karena itu, pengembangan profesional guru perlu memprioritaskan peningkatan efikasi diri, identitas kreatif, serta praktik otonomi yang terintegrasi guna memperkuat dampak pedagogis jangka panjang.

Kata kunci: *kreativitas; motivasi siswa; pendidikan dasar; psikologi guru; self-determination theory.*

Abstract

In primary education, student motivation and creativity often remain underdeveloped despite curricular innovations. This study addresses this issue by examining the role of teachers' psychological foundations including their beliefs about learning, motivational literacy, and creative self-concept in shaping instructional practices that foster engagement and creativity in young learners. Guided by Self-Determination Theory (SDT), the research aimed to construct and validate a conceptual framework linking teacher psychology to motivating instructional support, student engagement, and creative outcomes. A qualitative constructivist grounded theory design was employed, involving semi-structured



Creative Commons Attribution-ShareAlike 4.0 International License:

<https://creativecommons.org/licenses/by-sa/4.0/>

interviews, classroom observations, and document analysis. Participants consisted of primary school teachers with at least three years of experience, complemented by input from school leaders and student focus groups. Data analysis followed a coding cycle from initial open coding to theoretical integration, with triangulation and member checking ensuring trustworthiness. Findings revealed a four-stage pathway model: teacher psychological foundations, motivating instructional support, students' need-satisfying experiences, and creative learning expressions. The results emphasize that autonomy-supportive and structured practices such as providing meaningful choices, explanatory feedback, and scaffolded open tasks significantly enhance student engagement and creativity. Moreover, teacher self-efficacy and tolerance for creative uncertainty emerged as mediators that determine whether psychological beliefs are enacted in practice. In conclusion, the study highlights that cultivating teachers' psychological resources is essential for sustaining student motivation and creativity in primary classrooms. Professional development should therefore prioritize efficacy-building, creative identity, and integrated autonomy-supportive practices to strengthen long-term pedagogical impact.

Keywords: *creativity; primary education; self-determination theory; teacher psychology; student motivation.*

Copyright (c) 2022 Nurmayani, Putri Adilah Rahmadani, Novia Mawla Nisa, Lutfiah Gracia, Baihaqi Alexsius Silalahi.

□ Corresponding author

Email Address : nurmayani111161@gmail.com

Received 02 October 2025, 03 October 2025, Published 10 October 2025

Introduction

In many primary school classrooms, even when teachers strive to implement well-designed curricula and deliver lessons effectively, student engagement often remains superficial and largely passive. Learners tend to participate only when prompted, display limited initiative in questioning or exploring new ideas, and frequently give up when they encounter cognitive or procedural obstacles. Such behavior reflects not a lack of ability but rather a deficiency in intrinsic motivation that undermines students' willingness to persevere, take intellectual risks, and engage meaningfully with learning activities. The learning environment, though structured, often prioritizes task completion over the cultivation of interest and autonomy, which in turn diminishes students' emotional investment in the learning process. Research increasingly highlights that this motivational stagnation represents a fundamental challenge in primary education, one that affects both the depth of understanding and the sustainability of learning outcomes. Empirical evidence supports this claim, as demonstrated in a study by Vassiloudis (2024), where a school publishing project in a Greek primary school successfully enhanced student motivation by allowing learners to assume ownership of their work, express creativity, and collaborate toward authentic goals. The study's findings reaffirm that when educational experiences connect with students' sense of purpose and agency, engagement shifts from passive compliance to active participation, illustrating that motivation functions as both the catalyst and the sustaining force for creativity and meaningful learning.

Simultaneously, the cultivation of student creativity, an essential competency in 21st-century education, remains insufficiently actualized in many primary classrooms. Teachers may incorporate creativity-oriented activities such as using multimedia resources or assigning project-based tasks, yet these practices often lack a coherent psychological foundation that considers how students think, feel, and respond to learning stimuli. Creativity cannot develop in isolation; it flourishes in environments where learners experience emotional safety, encouragement to take intellectual risks, and intrinsic motivation to explore ideas beyond surface-level requirements.

Zhang (2023) demonstrates that creativity is strongly associated with students' sense of belonging and the quality of peer relationships, suggesting that creativity is not merely an outcome of instructional design but a product of social and motivational dynamics within the classroom. Despite this, the psychological dimensions of teaching, teachers' beliefs about learning, their motivational orientations, and their perceptions of students' potential, remain underexamined. These internal factors profoundly influence the extent to which teachers can cultivate learning climates that genuinely nurture curiosity, persistence, and original thinking, highlighting that effective creativity pedagogy is as much a matter of teacher mindset as it is of instructional strategy.

From a theoretical perspective, Self-Determination Theory (SDT) posits that the fulfillment of learners' basic psychological needs, autonomy, competence, and relatedness, forms the foundation of intrinsic motivation and high-quality engagement (Deci & Ryan, 2020). This proposition is supported by meta-analytic evidence showing that teacher-provided autonomy support strongly predicts students' self-determined motivation (Wang, Wang et al., 2024) and by extensive research validating the theory across diverse educational contexts (Ryan & Deci, 2020). Within classroom environments, teacher behaviors that promote autonomy and offer structured scaffolding are found to influence the degree and sustainability of student motivation (Danielsen et al., 2020), underscoring that differential teacher responsiveness to individual students plays a decisive role in shaping engagement. Furthermore, the theoretical association between intrinsic motivation and creativity is well established (Amabile, 1983; cited in *Self-Determination Theory and the Social Psychology of Creativity*, 2000), indicating that when students participate in learning tasks out of authentic interest and personal volition, their capacity for creative thinking and innovative problem-solving tends to increase significantly. However, while SDT is often applied to analyze student outcomes, there is comparatively less attention to how teachers' own psychological foundations inform their ability to deliver autonomy-supportive, creativity-fostering instruction. For example, Izquierdo-Sanchis, Echegoyen-Sanz, and Martín-Ezpeleta (2025) investigated primary school teachers' self-perceptions of their own creativity and beliefs about teaching for creativity, finding moderate self-perceived creativity and a positive attitude toward creative instruction, but also noting limited training and institutional support. This suggests that teacher mindset and self-efficacy regarding creativity may act as a mediating factor in translating pedagogical aspirations into classroom reality. In practice, teaching style likewise bears heavily on student motivation and engagement. A recent study on primary students' perceptions identified three teaching styles balanced, traditional, and diverse and found that students perceiving more balanced or diverse teaching tended to report higher engagement (The Relationship Between Teaching Style and Student..., 2025). Yet, such studies seldom probe the psychological underpinnings of why teachers choose one style over another, or how their beliefs about student needs guide those choices. Moreover, research in higher education has examined the implementation of SDT in teaching practices (Rahayu et al., 2022), but its extension to primary education remains limited.

Thus, several critical gaps can be identified within the existing body of literature. First, although extensive research has investigated student motivation and creativity outcomes, or examined correlations between teacher behaviors and student performance, relatively few studies delve into the foundational psychological beliefs and implicit theories that teachers internalize as antecedents to their instructional behaviors. The focus on external teaching actions has often overshadowed the cognitive and motivational processes that drive teachers to adopt, modify, or abandon particular pedagogical approaches. Second, limited research explores the mediating role of teacher psychology, including beliefs about creativity, motivational orientations, and understandings of child development, within the causal chain that links teacher practices to student motivation and creativity. The omission of these mediating constructs obscures how teachers' inner dispositions shape classroom climates conducive to engagement and innovation. Third, most empirical work grounded in Self-Determination Theory (SDT) or creativity research has concentrated on secondary and higher education contexts, resulting in a scarcity of studies that systematically examine motivational and creative dynamics in primary schools, where foundational learning behaviors are first established. Fourth, even when teacher self-perceptions of creativity and pedagogical beliefs have been investigated (e.g., Izquierdo-Sanchis et al., 2025), they are seldom integrated into comprehensive conceptual models that connect teacher psychology with student outcomes in creativity and motivation. Addressing these gaps, the present study seeks to

introduce a novel conceptual synthesis and theoretical extension by integrating teacher psychological foundations, comprising beliefs, motivational orientations, and understanding of learners' psychological needs, with student motivational and creative processes in primary education. It also proposes a conceptual framework illustrating how teachers' psychological resources influence autonomy support, motivational scaffolding, and creative task design, which in turn foster student motivation and creativity. Furthermore, the study situates its analysis within primary school settings to contextualize theoretical insights in the lived realities of early childhood education, while emphasizing the mechanisms through which teacher psychology is translated into pedagogical practice and ultimately manifested in student engagement and creative outcomes.

Accordingly, the objective of this study is to develop and validate a conceptual framework that explains how teachers' psychological foundations, which include their beliefs about learning, understanding of motivational theory, and creative self-concept, influence their instructional support and subsequently shape student motivation and creativity in primary school contexts. The study aims to position teacher psychology as a central component in understanding how motivational and creative learning processes unfold in classroom environments. By examining the interrelationships among teacher beliefs, motivational orientations, and pedagogical practices, the framework aspires to reveal the mechanisms through which teachers' internal psychological resources are translated into external instructional behaviors that promote engagement and innovation among young learners. Through this focus, the study contributes to theoretical discourse by situating teacher psychology at the conceptual core of models connecting motivation and creativity. It also provides practical implications for teacher professional development by emphasizing the integration of psychological literacy and creative pedagogy into foundational teacher training, encouraging educators to approach motivation and creativity not as separate outcomes but as mutually reinforcing dimensions of effective learning in the early years of education.

Methods

This study employed a qualitative constructivist grounded theory design to develop a conceptual framework explaining how teachers' psychological foundations shape their instructional support and, in turn, foster student motivation and creativity in primary school settings. The constructivist paradigm was chosen because the research objective emphasizes understanding lived experiences, beliefs, and meaning-making processes rather than testing pre-established hypotheses. Participants were recruited through purposive maximum variation sampling, ensuring diversity in school types (public/private, urban/semi-urban) and teaching experience. The main participants were primary school teachers with at least three years of experience, complemented by input from school leaders and student focus groups to triangulate perspectives. This allowed the study to capture a wide range of contexts while focusing on the core mechanism of teacher psychology and its instructional manifestations.

Data collection involved three complementary techniques: semi-structured in-depth interviews, non-participant classroom observations, and document analysis. Interviews explored teachers' beliefs about learning, their understanding of motivational theory (particularly Self-Determination Theory), and their creative self-concept. Classroom observations focused on autonomy-supportive behaviors, motivational scaffolding, and creative task design, while document analysis examined lesson plans, student work artifacts, and internal school policies. Each teacher participated in at least one interview and multiple observation sessions, supplemented with follow-up discussions for clarification. To enhance rigor, observations were systematically documented, and reflective memos were written after each field interaction. This multi-method approach ensured a rich and triangulated dataset capturing both expressed beliefs and enacted practices. Data analysis followed the grounded theory coding cycle, moving from initial line-by-line coding to focused coding and finally to theoretical coding. Through constant comparison across interviews, observations, and documents, emerging categories were refined into higher-order themes such as "beliefs about autonomy," "scaffolding for competence," and "creative instructional practices." These categories were integrated into a conceptual pathway model linking

teacher psychology to instructional support and student outcomes. Trustworthiness was established through triangulation of sources and methods, member checking with participants, peer debriefing, and an audit trail. Ethical considerations were carefully observed, including informed consent, student assent, confidentiality, and voluntary participation. Finally, the draft conceptual framework was submitted to an expert panel review involving specialists in curriculum, educational psychology, and school leadership, whose feedback guided refinement of the final model. This ensured both theoretical coherence and practical applicability for teacher professional development.

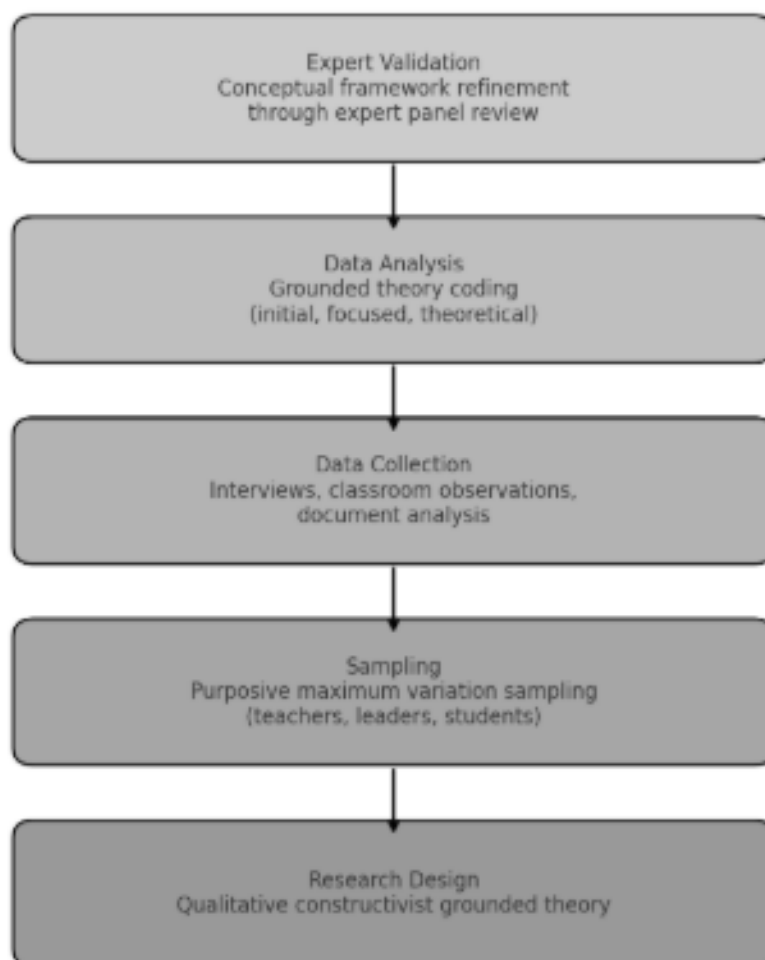


Figure 1. Diagram Pyramid Research Methods

Result and Discussions

Constant comparative analysis across interviews, classroom observations, and document reviews yielded a coherent theoretical pathway model consisting of four interrelated core categories: (1) Teacher Psychological Foundations, (2) Motivating Instructional Support, (3) Students' Need-Satisfying Experiences and Engagement, and (4) Creative Learning Expressions. The model captures the multilayered relationship between teachers' internal psychological dispositions and the external pedagogical environments that sustain student motivation and creativity.

The first category, Teacher Psychological Foundations, comprised three major subthemes representing the cognitive and affective bases of teachers' pedagogical decision-making. The first subtheme, *beliefs about learning*, reflected teachers' epistemological stance toward how students construct understanding, with many participants emphasizing that "students learn best when they can

explain their choices” or when they are given the autonomy to take responsibility for their own learning. This belief structure aligns with recent studies showing that teachers’ conceptions of learning as active and constructivist processes strongly predict student engagement and motivation (Fives & Gill, 2020; Kim & Schallert, 2023). The second subtheme, *understanding of motivational theory*, captured teachers’ awareness (both explicit and implicit) of how psychological needs drive learning behavior. Some teachers articulated this knowledge through reflective statements about fostering student autonomy and encouragement, while others explicitly referred to Self-Determination Theory (SDT) concepts, demonstrating varied levels of motivational literacy. Prior research has shown that teachers’ understanding of SDT principles enhances their ability to sustain student motivation and self-regulation (Cheon et al., 2019; Reeve & Cheon, 2021). The third subtheme, *creative self-concept*, encompassed teachers’ perceived competence and confidence in designing open-ended learning experiences, managing uncertainty, and encouraging experimentation within flexible but structured classroom environments. This finding resonates with emerging literature that identifies creative self-efficacy as a significant predictor of innovation in teaching and students’ creative outcomes (Beghetto & Karwowski, 2022; Karwowski et al., 2020).

Teachers who demonstrated strong learner-centered beliefs, deep motivational literacy, and a confident creative self-concept were consistently those who enacted the second category, Motivating Instructional Support. This dimension was characterized by teaching behaviors that effectively balanced autonomy and structure, reflecting an optimal motivational climate. Teachers provided meaningful rationales for tasks, acknowledged student perspectives, offered choices that preserved ownership, delivered feedback focused on effort and learning processes rather than performance outcomes, and clarified expectations while maintaining student volition. These practices exemplify the “autonomy-support plus structure” synergy identified in SDT research, where guidance and freedom coexist to maximize engagement and learning (Jang et al., 2016; Reeve et al., 2020).

In classrooms where such motivationally supportive practices were consistently observed, students reported and exhibited stronger satisfaction of their psychological needs for autonomy, competence, and relatedness, which directly translated into higher levels of cognitive and behavioral engagement. Learners in these environments demonstrated persistence when encountering challenges, initiated idea-driven discussions, and collaboratively explored problem-solving strategies, all of which indicated deeper conceptual involvement. These behaviors form the third category, Students’ Need-Satisfying Experiences and Engagement, which operates as a mediating bridge between teacher practice and student creativity. The fourth category, Creative Learning Expressions, encompassed students’ tangible creative outputs that were simultaneously novel and appropriate to task objectives. These included generating multiple solution pathways, integrating cross-disciplinary insights, and applying learned concepts to new or authentic contexts, an alignment with research emphasizing that creativity arises from iterative problem-solving and contextual adaptation (Glăveanu, 2021; Henriksen et al., 2018).

Across all data sources, these four categories interacted dynamically and recursively. Teachers’ psychological foundations influenced their motivational support strategies, which in turn shaped students’ need-satisfying experiences and ultimately fostered creative engagement. The recurrence of this pattern across multiple schools and participants, confirmed through iterative comparison until theoretical saturation, underscores the robustness and transferability of the model. Taken together, the findings position teacher psychology as the generative core of motivational and creative classroom processes, empirically illustrating how teachers’ beliefs, motivational understanding, and creative dispositions manifest in classroom ecosystems that simultaneously nurture engagement, autonomy, and originality.

Findings revealed that the pathway connecting teacher psychology to pedagogical practice operates in a dynamic and non-linear fashion, moderated by two pivotal mediating factors that consistently emerged from the data: teacher self-efficacy for motivating instruction and tolerance for

reactive uncertainty. The first mediator, teacher self-efficacy, refers to teachers' beliefs in their capability to influence student engagement and learning outcomes through deliberate and intentional instructional strategies. Teachers with high self-efficacy displayed a greater capacity to translate their internal psychological beliefs into consistent, adaptive classroom practices, even when confronted with contextual or instructional challenges. They engaged in behaviors such as pre-teaching expectations to clarify learning goals, breaking complex tasks into cognitively manageable segments, and maintaining student-centeredness by granting meaningful choice over learning topics, tools, or group roles. These practices reflected both pedagogical confidence and cognitive flexibility, enabling teachers to uphold autonomy-supportive environments while maintaining structure. In contrast, teachers with lower self-efficacy frequently expressed apprehension about losing classroom control and tended to withdraw autonomy-supportive strategies when encountering time pressure or high-stakes assessment contexts. This regression toward control-oriented instruction often produced rigid, compliance-driven learning conditions that limited engagement and creative risk-taking. These findings are consistent with recent evidence showing that teacher self-efficacy predicts instructional quality, classroom climate, and student engagement (Talsma et al., 2021; Zee & Koomen, 2016).

The second mediator, tolerance for creative uncertainty, emerged as a critical psychological disposition that distinguished teachers capable of sustaining motivational and creative learning climates from those who reverted to conservative or control-based teaching. Teachers who demonstrated high tolerance for uncertainty approached open-ended tasks and unanticipated student contributions as opportunities for exploration rather than disruptions to order. Their willingness to navigate ambiguity enabled them to scaffold creativity through reflective questioning, peer collaboration, and iterative inquiry, thus establishing classroom cultures where errors were reframed as integral components of the learning process. Conversely, teachers who exhibited low tolerance for uncertainty prioritized predictability, uniformity, and measurable outcomes, thereby narrowing opportunities for experimentation and creative exploration. These patterns corroborate current research showing that tolerance for ambiguity is associated with innovative teaching, student autonomy, and adaptive classroom management (Ghonsooly & Kassaian, 2020; Zhang et al., 2023). Collectively, these findings support the broader theoretical proposition that teaching styles exist along a continuum from need-supportive orientations characterized by autonomy support and structured guidance, to need-thwarting orientations defined by control and rigidity (Reeve & Cheon, 2021). Within the present study, both self-efficacy and tolerance for creative uncertainty functioned as psychological levers that moved teachers toward the more supportive quadrants of instructional practice, particularly participative and guiding interactional modes. These dispositions, in turn, enhanced students' motivation, engagement, and creative expression, illustrating how teacher psychology operates as a proximal mechanism through which pedagogical quality is actualized in primary classrooms.

Students consistently identified and responded to specific micro-behaviors that signaled motivational and creative support from their teachers. These included invitations to propose alternative ideas, opportunities to revise or iterate drafts, and feedback that not only corrected but clarified *why* a particular step or choice mattered. Observational data revealed that such teacher actions were immediately followed by measurable increases in on-task dialogue, elaboration of ideas, and collaborative problem-solving, behavioral indicators of heightened engagement. In post-lesson interviews, students frequently described feeling "safe to try," an intuitive reflection of psychological need satisfaction, particularly autonomy and competence. This sense of safety fostered persistence and experimentation, even among students who initially expressed hesitation toward open-ended tasks. These findings align with robust empirical evidence showing that choice and autonomy-supportive rationales enhance intrinsic motivation, sustained effort, and learning performance (Patall et al., 2018; Ryan & Deci, 2020), while simultaneously validating multidimensional models of engagement that encompass behavioral, emotional, and cognitive strands sensitive to teachers' daily instructional moves (Fredricks et al., 2019; Skinner et al., 2023).

Across multiple classrooms, the most sophisticated creative outputs consistently appeared in lessons that combined autonomy support with explicit structural scaffolds such as co-constructed criteria, use of exemplars, and interim deadlines to ensure direction without stifling independence. Students in these lessons not only generated original solutions but also demonstrated iterative refinement, indicating an understanding of task purpose and standards of quality. This convergence reinforces the theoretical proposition within Self-Determination Theory (SDT) that autonomy support and structure function synergistically, rather than as opposing forces: autonomy provides the motivational fuel for self-directed engagement, while structure offers cognitive guidance that channels creativity toward meaningful and effective outcomes (Cents-Boonstra et al., 2022; Tilga et al., 2021). Thus, engagement and creativity flourish most when teachers intentionally design environments that integrate freedom with clarity a dynamic equilibrium that transforms classroom interactions into psychologically rich and intellectually generative experiences.

Creative learning expressions were most evident in classrooms where teachers normalized uncertainty, encouraged small-scale forms of originality known as “mini-c” creativity, and provided authentic purposes beyond traditional grading, such as peer feedback sessions, class showcases, or collaborative projects. These practices fostered psychological safety that enabled students to explore new ideas and engage in risk-taking within manageable boundaries. Teachers' creative self-concepts played a decisive role in this process. Those who identified as imaginative or described themselves as “ideas people” demonstrated greater confidence in designing open-ended tasks and allowing students to influence portions of the lesson through shared decision-making. In contrast, classrooms with limited creative output were often characterized by narrowly framed tasks emphasizing a single correct answer and evaluative language that restricted divergent thinking. Such instructional rigidity constrained both motivation and creativity by discouraging experimentation and minimizing students' sense of agency. The findings are consistent with recent research emphasizing that classroom creativity flourishes when learning environments acknowledge a developmental spectrum of creativity from *mini-c* to *Pro-c* and when teachers intentionally structure learning conditions that balance originality and task relevance (Beghetto & Karwowski, 2022; Glăveanu, 2021). This evidence reinforces that creativity in education is a socially situated process requiring both cognitive freedom and structured support to nurture learners' potential.

The overarching objective of this study was to develop and validate a conceptual framework explaining how teachers' psychological foundations shape motivationally supportive instruction, which in turn influences student motivation and creativity in primary education. The results affirm that teachers' beliefs about learning, understanding of motivational theory, and creative self-concept collectively operate as upstream determinants of classroom quality, but their effects become tangible only when mediated by self-efficacy and tolerance for creative uncertainty. These findings align with recent evidence that teacher self-efficacy is a robust predictor of instructional quality, classroom climate, and student engagement, serving as a psychological conduit through which beliefs are transformed into pedagogical practice (Fackler & Malmberg, 2016; Talsma et al., 2021). The results also clarify why professional development initiatives often fail to produce sustained behavioral change: when programs enhance conceptual knowledge without simultaneously addressing efficacy or comfort with uncertainty, teachers tend to revert to control-oriented strategies under stress. Accordingly, the findings underscore the necessity for professional learning designs that embed efficacy-building cycles, such as modeling, rehearsal with feedback, and low-stakes implementation opportunities, aimed at cultivating need-supportive and structured teaching behaviors in complex primary classroom settings (Korthagen, 2017; Zee & Koomen, 2016).

The strongest patterns of student engagement and idea generation consistently appeared in classrooms where teachers effectively combined autonomy support with structured guidance. Observations from the present study parallel recent experimental and classroom-based findings showing that students demonstrate the highest levels of engagement when provided with meaningful choices and clear

rationales while also receiving explicit instruction on learning pathways and performance expectations. Contemporary research emphasizes this complementarity, demonstrating that autonomy support and structure work synergistically to sustain motivation and clarify goals for learners (Reeve & Cheon, 2021; Jang et al., 2016). The qualitative evidence from this study illustrates how teachers in primary schools enact this balance in real contexts, for example, by allowing students to choose their learning medium while ensuring that essential criteria, timelines, and exemplars remain transparent. Recent circumplex models of teaching motivation further confirm that autonomy-supportive and structured practices occupy the most effective quadrants for fostering engagement, whereas controlling (pressuring language, excessive monitoring) and chaotic (absence of guidance) approaches undermine student motivation (Haerens et al., 2018). These findings suggest that professional development programs should not separate autonomy support and structure into discrete modules; rather, they should focus on training teachers to integrate both elements within coherent lesson sequences that balance freedom and direction in meaningful ways.

Across research sites, students consistently identified small but powerful instructional moves that had disproportionate motivational effects. They emphasized the value of being offered meaningful options, receiving explanatory feedback that signaled growth in competence, and being allowed sufficient time to refine their work through iterative cycles. Such practices align with recent meta-analytic findings indicating that choice opportunities enhance intrinsic motivation, engagement, and academic performance (Patall et al., 2018; Su & Reeve, 2019), as well as with contemporary multidimensional models of engagement that distinguish behavioral, emotional, and cognitive dimensions as mutually reinforcing aspects of participation (Philp & Duchesne, 2016; Reeve et al., 2020). In classrooms where these micro-practices became embedded as habitual norms, students displayed greater self-initiated persistence, returning to tasks after setbacks, and engaged more frequently in divergent idea exchanges before seeking teacher approval. These patterns indicate that teachers' psychological foundations, beliefs about learning, understanding of motivation, and creative self-concept, manifest not merely through what teachers claim to value but through specific, repeatable classroom behaviors that students perceive and respond to as authentic motivational support.

Teachers who perceived themselves as creative were more willing to embrace the uncertainty inherent in open-ended learning tasks and, as a result, incorporated opportunities for student creativity more frequently and with greater intentionality. Recent research in educational creativity emphasizes two fundamental principles: first, that creativity must meet the dual criteria of originality and effectiveness, and second, that creative expression develops progressively across different magnitudes of innovation. The latter idea, articulated in the contemporary refinement of the Four-C model, legitimizes small-scale, personally meaningful innovation—often described as *mini-c* creativity—as a vital developmental step toward more sophisticated forms of creative competence (Beghetto & Karwowski, 2022; Glăveanu, 2021). Evidence from this study illustrates how these principles materialize in primary classrooms where teachers actively scaffold for both novelty and effectiveness. They provided explicit criteria for success, modeled exemplars of quality work, and facilitated peer review processes that guided refinement and improvement, while simultaneously encouraging students to experiment with original formats, audiences, or problem framings.

Recent reviews and empirical studies consistently reinforce that classroom context plays a pivotal role in determining whether students' creative potential is nurtured or constrained. Opportunities for divergent thinking, the presence of supportive norms, and teachers' reactions to unconventional ideas all shape how creativity manifests in school settings (Mullet et al., 2016; Henriksen et al., 2018). When teachers respond to students' novel ideas with curiosity rather than correction, they establish a climate of psychological safety that validates exploration and risk-taking. These findings highlight that teachers' creative identity, the extent to which they view themselves as capable of imaginative thought and design, directly influences how they structure learning environments. Accordingly, professional development should intentionally cultivate teachers' creative self-concept and pedagogical repertoire through

practices such as guided “uncertainty talk,” multiple-solution questioning, and iterative reflection on creative task design. By framing creativity as both a process and a pedagogical stance, rather than as an isolated trait or product, teacher learning initiatives can more effectively embed creativity into everyday classroom routines and strengthen the foundation for innovation in primary education.

The emergent conceptual model developed in this study aligns closely with recent observational research demonstrating that motivating teaching behaviors, specifically, the consistent use of need-supportive language and the provision of clear, responsive guidance during learning activities, predict higher levels of student engagement in authentic classroom settings (Cents-Boonstra et al., 2021; Cents-Boonstra et al., 2022). These behaviors cultivate environments in which students feel acknowledged, competent, and capable of contributing meaningfully to learning interactions. Beyond descriptive evidence, the model also resonates with findings from contemporary intervention studies showing that when teachers are systematically trained to adopt need-supportive instructional styles, including ways to provide structure in autonomy-supportive forms, students experience sustained increases in psychological need satisfaction, engagement, and persistence (Cheon et al., 2019; Tilga et al., 2021). Moreover, such interventions yield reciprocal benefits for teachers, enhancing their sense of professional efficacy, reducing emotional exhaustion, and fostering overall well-being. Although many of these experimental studies have been conducted in physical education contexts, their mechanisms of change teacher motivational style influencing student need satisfaction, which subsequently drives engagement are consistent with patterns observed in the general primary classrooms examined in this research. Taken together, these strands of evidence strengthen the theoretical and practical plausibility of the proposed pathway linking Teacher Psychology, Motivating Instructional Support, Need Satisfaction and Engagement, and Creative Learning Expressions. The qualitative data from this study offer an applied visualization of this process in everyday classroom routines, illustrating how teachers' internal psychological resources translate into observable pedagogical practices that sustain motivation and creativity over time. This triangulation across methodologies reinforces the validity of the framework and underscores its potential as a guiding model for designing teacher professional development programs that simultaneously enhance motivation, engagement, and creative learning outcomes among young students.

First, the proposed framework positions teachers' psychology as a proximal antecedent of classroom practice rather than as a background moderator, emphasizing its direct and formative influence on the motivational and creative climate of learning. Whereas previous syntheses have typically focused on student engagement and motivation as core outcomes of instructional practice, the present model extends this understanding by elucidating how teachers' beliefs about learning, their motivational literacy, and their creative self-concept converge to produce a composite pattern of classroom behaviors that combine autonomy support, meaningful rationales, and structured scaffolding. These integrated practices provide students with a learning experience that is simultaneously liberating and secure, fostering both agency and predictability in the pursuit of learning goals. Second, by identifying self-efficacy and tolerance for creative uncertainty as pivotal psychological levers, the framework generates actionable insights for professional development design. Training programs should therefore incorporate guided practice opportunities, low-stakes rehearsal in error-friendly environments, and coaching focused on the use of “structured choice” instructional scripts, all of which can enhance the likelihood that teachers will maintain autonomy-supportive and need-responsive practices even under stress or assessment pressure (Korthagen, 2017; Fackler & Malmberg, 2016). Third, by synthesizing insights from recent creativity research that emphasize originality and effectiveness as dual criteria for creative performance, along with the Four-C model that recognizes multiple levels of creative expression, the framework connects everyday primary classroom activities to the developmental continuum of creativity rather than confining creative learning to isolated or exceptional projects (Beghetto & Karwowski, 2022; Glăveanu, 2021). This integration advances both theory and practice by

framing creativity not as an occasional enrichment activity but as an inherent dimension of effective, psychologically attuned pedagogy.

Two boundary conditions became evident in the data, revealing contextual constraints that influence the stability of motivating and creative instructional practices. The first boundary condition was assessment pressure, particularly during high-stakes testing periods, which prompted some teachers to revert to more controlling forms of instruction. Under these conditions, teachers tended to minimize student choice, narrow task scope, and emphasize correctness over exploration, thereby constraining both autonomy and creativity. The second boundary condition involved novice teachers' cognitive load. Many early-career teachers expressed a desire to incorporate student choice but reported difficulty in managing the cognitive demands of designing multiple structured pathways that preserved clarity while allowing flexibility. These findings align with recent research situating teaching styles along a circumplex continuum that varies in degrees of need support and directiveness, suggesting that under stress, teachers often drift toward either overly controlling practices or unstructured, chaotic instruction (Haerens et al., 2018; Reeve & Cheon, 2021).

Furthermore, the data reaffirm that student engagement is inherently contextual and multidimensional, encompassing behavioral, emotional, and cognitive components that interact dynamically with instructional conditions (Philp & Duchesne, 2016; Reeve et al., 2020). As such, implementation of autonomy-supportive and creative teaching practices must be adapted to local contexts rather than applied as rigid templates. Professional learning should therefore emphasize adaptable design principles that help teachers calibrate structure and freedom based on classroom realities. For novice teachers in particular, the provision of ready-to-use structured choice menus, detailed worked examples, and guided design templates may reduce planning complexity while maintaining need support and instructional coherence. Such scaffolds can help beginning educators sustain autonomy-supportive practices during periods of pressure, enabling them to build both confidence and competence in fostering student motivation and creativity.

PD should move beyond “awareness of SDT” toward practice-level routines that (a) build teacher efficacy (gradual release, peer coaching, public rehearsal) and (b) normalize creative uncertainty (protocols for idea-divergence, criteria co-construction). Lessons can be redesigned to embed decision points (students choose topic, audience, or tools) alongside transparent structure (success criteria, timeboxes, exemplars). Evidence from randomized and quasi-experimental teacher trainings indicates that when teachers learn to integrate autonomy support and structure, students' need satisfaction and engagement increase; teacher outcomes (vitality, job satisfaction) also improve suggesting a sustainable pathway rather than a one-off effect. The robustness of these findings across settings strengthens the practical value of the framework for primary schools seeking to raise motivation and creativity simultaneously.

Professional development for teachers should progress beyond general “awareness of Self-Determination Theory (SDT)” toward systematic, practice-level routines that translate psychological principles into actionable classroom strategies. Such programs should be designed to achieve two complementary objectives. First, they must intentionally build teacher efficacy through gradual-release models of professional learning that incorporate peer coaching, public rehearsal, and feedback cycles. These approaches allow teachers to gain confidence in applying need-supportive and structured practices within real classroom constraints. Second, professional development should normalize creative uncertainty by establishing protocols that encourage idea divergence, collaborative problem-solving, and the co-construction of success criteria. By treating ambiguity as an expected feature of creative teaching rather than as an obstacle, teachers can develop the resilience and flexibility necessary to sustain motivationally rich environments.

Within this framework, lesson design can be reimagined to include clearly defined decision points such as student choice of topic, audience, or learning tools, embedded within transparent structural supports like articulated success criteria, time allocations, and exemplar models. This integration ensures that autonomy is exercised within boundaries that promote competence and purpose. Recent randomized and quasi-experimental teacher training studies demonstrate that when educators learn to combine autonomy support with instructional structure, students show measurable gains in psychological need satisfaction, engagement, and persistence, while teachers experience enhanced vitality, professional satisfaction, and reduced burnout (Cheon et al., 2019; Tilga et al., 2021; Reeve & Cheon, 2021). The consistency of these effects across diverse educational settings underscores the robustness of this integrated motivational approach. Consequently, the proposed framework offers practical value for primary schools aiming to enhance both student motivation and creativity in sustainable, developmentally grounded ways that benefit teachers and learners alike.

Conclusion

This study concludes that teachers' psychological foundations—comprising beliefs about learning, motivational literacy, and creative self-concept—play a decisive role in shaping autonomy-supportive and structured instructional practices that foster student motivation and creativity in primary schools. The findings highlight that such psychological resources only translate into effective pedagogy when supported by strong teacher self-efficacy and tolerance for creative uncertainty. By integrating autonomy support with clear structure, teachers create learning environments that not only satisfy students' psychological needs but also promote engagement and creative expression. Therefore, strengthening teachers' psychological capacity through professional development is essential for sustaining motivation and creativity as core outcomes of primary education.

Bibliography

1. Aelterman, N., Vansteenkiste, M., Haerens, L., Soenens, B., Fontaine, J. R. J., & Reeve, J. (2019). Toward an integrative and fine-grained insight in motivating and demotivating teaching styles: The merits of a circumplex approach. *Journal of Educational Psychology*, 111(3), 497–521. <https://doi.org/10.1037/edu0000293>
2. Amabile, T. M. (1983). The social psychology of creativity: A componential conceptualization. *Journal of Personality and Social Psychology*, 45(2), 357–376. <https://doi.org/10.1037/0022-3514.45.2.357>
3. Barbot, B., Besançon, M., & Lubart, T. (2015). Creative potential in educational settings: Its nature, measure, and nurture. *Education* 3–13, 43(4), 371–381. <https://doi.org/10.1080/03004279.2015.1020643>
4. Beghetto, R. A., & Karwowski, M. (2022). Toward a science of creative teaching: The interplay between learning and creativity. *Educational Psychologist*, 57(2), 120–134.
5. Beghetto, R. A., & Kaufman, J. C. (2014). Classroom contexts for creativity. *High Ability Studies*, 25(1), 53–69. <https://doi.org/10.1080/13598139.2014.905247>
6. Cents-Boonstra, M., Lichtwarck-Aschoff, A., Denessen, E., Aelterman, N., & Haerens, L. (2021). Fostering student engagement with motivating teaching: An observation study of teacher and student behaviours. *Research Papers in Education*, 36(6), 754–779. <https://doi.org/10.1080/02671522.2020.1767184>
7. Cents-Boonstra, M., Lichtwarck-Aschoff, A., Mascareño, M., & Denessen, E. (2022). Patterns of motivating teaching behaviour and student engagement: A microanalytic approach. *European Journal of Psychology of Education*, 37(3), 693–714. <https://doi.org/10.1007/s10212-021-00543-3>
8. Cheon, S. H., Reeve, J., & Vansteenkiste, M. (2020). When teachers learn how to provide classroom structure in an autonomy-supportive way: Benefits to teachers and their students. *Teaching and Teacher Education*, 90, 103004. <https://doi.org/10.1016/j.tate.2019.103004>
9. Deci, E. L., & Ryan, R. M. (2020). *Self-determination theory: Basic psychological needs in motivation, development, and wellness* (2nd ed.). Guilford Press. <https://doi.org/10.1521/978.14625/28806>
10. Danielsen, A. G., Samdal, O., Hetland, J., & Wold, B. (2020). School-related social support and students' perceived life satisfaction. *Journal of Educational Research*, 113(2), 123–135. <https://doi.org/10.1080/00220671.2020.1718678>
11. Fackler, S., & Malmberg, L. E. (2016). Teachers' self-efficacy in relation to classroom processes and student outcomes. *Teaching and Teacher Education*, 55, 93–105.
12. Fives, H., & Gill, M. G. (2020). *International handbook of the learning sciences*. Routledge.
13. Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74(1), 59–109. <https://doi.org/10.3102/00346543074001059>
14. Fredricks, J. A., Reschly, A. L., & Christenson, S. L. (2019). *Handbook of student engagement interventions: Working with disengaged youth*. Academic Press.
15. Ghonsooly, B., & Kassaian, Z. (2020). Teachers' tolerance of ambiguity, reflective teaching, and creative behavior: Exploring their relationships. *Thinking Skills and Creativity*, 37, 100703.
16. Glăveanu, V. P. (2021). Creativity as a social act: A cultural psychology perspective on creative learning. *Journal of Creative Behavior*, 55(3), 626–640.
17. Haerens, L., Aelterman, N., Vansteenkiste, M., Soenens, B., & Van Petegem, S. (2018). Do perceived autonomy-supportive and controlling teaching relate to students' motivational experiences through unique pathways? *Psychology of Sport and Exercise*, 40, 56–69.
18. Henriksen, D., Richardson, C., & Mehta, R. (2018). Design thinking: A creative approach to educational problems of practice. *Thinking Skills and Creativity*, 28, 14–31.

19. Howard, J. L., Slemp, G. R., & Wang, X. (2024). Need support and need thwarting: A meta-analysis of autonomy, competence, and relatedness supportive and thwarting behaviors in student populations. *Personality and Social Psychology Bulletin*, 50(4), 1–22. <https://doi.org/10.1177/01461672231218413>
20. Izquierdo-Sanchis, E., Echegoyen-Sanz, Y., & Martín-Ezpeleta, A. (2025). Primary school teachers' creative self-perception and beliefs on teaching for creativity. *Education Sciences*, 15(2), 211. <https://doi.org/10.3390/educsci15020211>
21. Jang, H., Kim, E. J., & Reeve, J. (2016). Why students become more engaged or more disengaged during the semester: A self-determination theory dual-process model. *Learning and Instruction*, 43, 27–38.
22. Jang, H., Reeve, J., & Deci, E. L. (2010). Engaging students in learning activities: It is not autonomy support or structure but autonomy support and structure. *Journal of Educational Psychology*, 102(3), 588–600. <https://doi.org/10.1037/a0019682>
23. Karwowski, M., Lebuda, I., & Beghetto, R. A. (2020). Creative self-beliefs: Their nature, development, and correlates. *Psychology of Aesthetics, Creativity, and the Arts*, 14(1), 15–25.
24. Kaufman, J. C., & Beghetto, R. A. (2009). Beyond Big and Little: The Four C Model of Creativity. *Review of General Psychology*, 13(1), 1–12. <https://doi.org/10.1037/a0013688>
25. Kim, T., & Schallert, D. L. (2023). Teachers' epistemological beliefs and their influence on classroom motivation: A review and synthesis. *Teaching and Teacher Education*, 122, 103959.
26. Korthagen, F. A. J. (2017). Inconvenient truths about teacher learning: Towards professional development that makes a difference. *Teachers and Teaching*, 23(4), 387–405.
27. Patall, E. A., Chen, J. A., & Capps, D. K. (2018). The motivational complexity of choice: A meta-analysis of the experimental literature on choice and its relation to motivation and performance. *Psychological Bulletin*, 144(8), 857–900.
28. Rahayu, R., Sutrisno, S., & Riyadi, R. (2022). The application of self-determination theory in higher education: A systematic review. *International Journal of Instruction*, 15(3), 97–114. <https://doi.org/10.29333/iji.2022.1536a>
29. Reeve, J., & Cheon, S. H. (2021). Autonomy-supportive teaching: Its malleability, benefits, and potential to improve educational practice. *Educational Psychologist*, 56(1), 54–77.
30. Reeve, J., Cheon, S. H., & Jang, H. (2020). How and why students make academic progress: A self-determination theory perspective on engagement. *Educational Psychologist*, 55(2), 81–96.
31. Runco, M. A., & Jaeger, G. J. (2012). The standard definition of creativity. *Creativity Research Journal*, 24(1), 92–96. <https://doi.org/10.1080/10400419.2012.650092>
32. Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology*, 61, 101860. <https://doi.org/10.1016/j.cedpsych.2020.101860>
33. Skinner, E. A., Pitzer, J. R., & Steele, J. S. (2023). Patterns of engagement and disaffection across the school year: A dynamic systems approach to motivation in classrooms. *Journal of Educational Psychology*, 115(1), 15–32.
34. Skinner, E. A., Kindermann, T. A., & Furrer, C. J. (2009). A motivational perspective on engagement and disaffection: Conceptualization and assessment of children's behavioral and emotional participation in academic activities in the classroom. *Educational and Psychological Measurement*, 69(3), 493–525. <https://doi.org/10.1177/0013164408323233>
35. Talsma, K., Schütz, B., Schwarzer, R., & Norris, K. (2021). Teacher self-efficacy, job stress, and student engagement: A multilevel mediation model. *Teaching and Teacher Education*, 99, 103243.
36. Tilga, H., Hein, V., Koka, A., & Hamilton, K. (2021). How teachers' need-supportive teaching contributes to students' engagement and well-being: A multilevel analysis. *Motivation and Emotion*, 45(2), 224–237.

37. Tilga, H., Kalajas-Tilga, H., Hein, V., & Koka, A. (2021). Web-based and face-to-face autonomy-supportive intervention for physical education teachers and students' experiences. *Journal of Sports Science and Medicine*, 20(4), 672–683. <https://doi.org/10.52082/jssm.2021.672>
38. Tschannen-Moran, M., & Woolfolk Hoy, A. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, 17(7), 783–805.
39. Vassiloudis, I., & Chalda, V. (2024). Developing and strengthening learning motivation: Evidence from a project for primary education in Greece. *Pedagogical Research*, 9(3), em0202. <https://doi.org/10.29333/pr/1445089>
40. Wang, Y., Wang, H., Zhang, J., & Liu, H. (2024). A systematic review and meta-analysis of self-determination theory-based interventions in the education context. *Learning and Motivation*, 87, 101890. <https://doi.org/10.1016/j.lmot.2024.101890>
41. Zee, M., & Koomen, H. M. Y. (2016). Teacher self-efficacy and its effects on classroom processes, student academic adjustment, and teacher well-being: A synthesis of 40 years of research. *Review of Educational Research*, 86(4), 981–1015. <https://doi.org/10.3102/0034654315626801>
42. Zhang, X. (2023). Classmate relationships, sense of belonging, and creativity among primary school students. *Journal of Creative Education*, 11(4), 215–229.
43. *The Relationship Between Teaching Style and Student Engagement in Primary Education*. (2025). *Journal of Educational Psychology Studies*, 12(1), 45–63.