

Study on the Influence Mechanism of Teachers' Emotional Engagement on Students' Learning Behavior and Its Enhancement Pathways

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ABSTRACT

Teachers' emotional investment exerts a pivotal influence on students' learning behaviors. Nevertheless, the prevalent tendency of prioritizing knowledge over emotion persists in current educational practices. This paper sorts out the concept of teachers' emotional investment and its impacts on students' learning behaviors, and elaborates on the core functions of teachers' positive emotional investment in satisfying students' developmental needs, building trust-based teacher-student relationships, and conforming to the orientation of modern educational reform. In reality, however, teachers' emotional investment is confronted with dilemmas including weak emotional regulation capacity and insufficient support from professional training. Its investment level is jointly restricted by multiple factors such as teachers' professional identity, students' classroom feedback, school organizational atmosphere and evaluation systems. Accordingly, this paper puts forward systematic optimization strategies from multiple dimensions: guiding teachers to establish correct professional ethics, boosting their sense of professional honor, constructing a supportive organizational atmosphere, improving teaching hardware facilities, advancing educational informatization, and upgrading teachers' personal professional competence. The study stresses that education should return to the people-oriented value of fostering virtue through education, integrate emotional care into the whole process of daily teaching, activate students' learning potential through emotional power, and lay a solid foundation for advancing high-quality educational development.

KEYWORDS

Teachers' emotional investment; Student engagement; Emotional education; Teacher-student relationship.

1. INTRODUCTION

Against the backdrop of the demand for high-quality educational development, enhancing students' learning engagement has become a key issue in deepening educational reform. However, contemporary educational practices are still marked by a prominent bias toward knowledge and away from emotion. In an exam-oriented evaluation system centered solely on academic scores, students' emotional experiences and affective demands as living individuals are often overlooked, resulting in a certain degree of emotional deficiency in the educational process. In fact, learning is not merely a process of knowledge construction, but also an interaction of emotion and volition. As a critical educational resource, teachers' emotional investment can significantly shape students' learning behaviors and engagement by fostering positive teacher-student relationships, alleviating students' academic anxiety, and strengthening their psychological sense of security. Teachers' positive instructional emotions can greatly boost teaching effectiveness, stimulate students' learning interest and classroom participation, and create a favorable classroom atmosphere. Conversely, inappropriate instructional emotions will dampen students' enthusiasm for learning, reduce teaching efficiency, and

even lead to school weariness among students [1]. Therefore, exploring how teachers' emotional investment affects students' learning behaviors carries important theoretical value and practical significance for enriching research on educational emotion and optimizing classroom teaching practice.

2. DEFINITION OF CORE CONCEPTS

Teachers' emotional investment refers to a psychological activity in which teachers apply the laws of emotional psychological activities to transmit ideological and emotional information to students via language, writing, facial expressions, physical movements and other forms, so as to achieve emotional integration between teachers and students[2]. Such attitudes and feelings can be expressed through a range of emotional words and behaviors, such as love or dislike, fondness or aversion, earnestness or perfunctoriness, closeness or rejection. Naturally, numerous transitional or intermediate emotions exist between such bipolar emotional states as love and hatred, which cannot be ignored either [3]. Teachers' emotional investment can be interpreted from multiple dimensions. Within China's educational context, it is often operationalized as teachers' concrete manifestations including enthusiasm, vitality and caring behaviors. Teacher vitality refers to teachers' subjective perception of their own energy reserves. Teachers with abundant vitality tend to experience more positive emotions and higher subjective well-being, enabling them to devote themselves to teaching efficiently and deliver outstanding work performance, thereby exerting a positive influence on students' learning enthusiasm[4]. In recent years, researchers have further categorized teachers' emotional investment into two dimensions: positive emotional investment (e.g., enthusiasm, joy, care) and negative emotional investment (e.g., anxiety, anger, burnout), and explored their differentiated impacts on students' learning behaviors[5]. Positive emotional investment improves learning behaviors by arousing students' positive emotions and internal motivation, while negative emotional investment may trigger students' anxiety and avoidance behaviors through emotional contagion.

Students' learning behaviors are generally investigated centered on the core concept of student engagement. Current definitions of student engagement fall into three categories as follows:

2.1. Behavioral Engagement

Behavioral engagement mainly refers to the intensity of students' efforts and participation in learning activities. It manifests in the diligence displayed during classroom learning, such as attentive listening, active question answering, participation in group work, and perseverance in tackling academic difficulties [6]. It also covers out-of-school learning efforts, including completing assignments on time, further reflecting on or discussing classroom content with peers, and joining extracurricular interest groups [7].

2.2. Emotional Engagement

Emotional engagement denotes students' interest, value perceptions and affective experiences during learning activities. Highly engaged students demonstrate initiative paired with positive emotions such as curiosity and delight and disengaged students act passively accompanied by negative feelings like worry and irritability [7]. Connell regards students' emotional engagement as a continuous variable consisting of six components: disaffection, compliance, rebellion, obedience, innovation and engagement [8].

2.3. Cognitive Engagement

At its core, cognitive engagement refers to students' motivation, diligence and adoption of learning strategies during study. Students with high cognitive engagement exert substantial academic efforts,

enjoy in-depth thinking, possess strong intellectual curiosity and ambition, and dare to confront learning challenges [9]. Pintrich and De Groot argue that the essence of cognitive engagement lies in the level of self-regulated learning. Students who frequently adopt deep cognitive strategies show higher engagement than those relying on surface-level cognitive strategies: they invest more mental effort, actively engage in association and creation, and achieve better comprehension. Deep cognitive strategies focus on exploring connections between knowledge and the meaning of learning content, whereas surface-level strategies center on mechanically memorizing superficial key headings and elements [10].

3. RATIONALE FOR TEACHERS' EMOTIONAL INVESTMENT

3.1. Emotional Needs Form an Indispensable Foundation for Students' Healthy Growth and Holistic Development

The ancient Roman educator Quintilian stated: "Teachers ought to treat students with the affection of parents; without sincere love, there can be no genuine education" [11]. Human growth is sustained by three core demands: physical, cognitive and emotional needs. As a fundamental spiritual demand, emotional needs run through adolescents' entire schooling process and constitute a cornerstone for personality shaping, mental maturity and harmonious physical and mental development. Student growth entails far more than knowledge accumulation and physical development and it is a dynamic process of emotional experience, construction and refinement. School-aged students possess immature mental faculties and underdeveloped self-perception and emotional regulation capabilities, thus holding strong desires for care, respect, understanding, recognition and a sense of belonging. Satisfying positive emotional needs nourishes students' inner world, relieves negative emotions including academic pressure and developmental anxiety, stabilizes their mental state, cultivates sound traits such as self-confidence, optimism and tolerance, and provides spiritual support for their physical and mental health. On the contrary, long-term emotional neglect, deprivation or repression easily triggers emotional imbalance, psychological fragility and distorted self-perception among students. These issues not only hinder mental health but also impede the advancement of learning competence, social skills and comprehensive literacy. Character education, the fundamental task of education in the new era, advocates all-round development of morality, intelligence, physical fitness, aesthetics and labor skills, and emotion itself constitutes a vital component of students' core literacy.

3.2. Emotion Serves as a Bond for Harmonious Teacher-student and Instructional Relationships

Teaching constitutes a two-way interactive process filled with emotional fusion and ideological resonance between teachers and students, rather than a one-way activity where teachers transmit knowledge and students receive it passively. Emotional interaction acts as the core bond linking teacher-student relations and activating classroom atmosphere. Among all interpersonal relationships in education, the teacher-student bond is the most fundamental and critical, directly shaping classroom climate, learning efficiency and educational outcomes. Sincere and positive emotional connection serves as the prerequisite for building harmonious teacher-student relationships. Teachers' genuine care, respect, tolerance and patient guidance bridge the psychological gap stemming from hierarchical identities, fostering students' trust, closeness and recognition. Students will voluntarily narrow the mental distance with teachers, taking initiative to communicate and cooperate with teaching activities. Meanwhile, students' positive emotional feedback, sincere respect and acknowledgment in turn fuel teachers' passion for teaching and sense of educational responsibility, forming a virtuous cycle of bidirectional emotional interaction. This emotional bond breaks the rigid, alienated and confrontational teacher-student model of traditional teaching, forging a new type of equal, respectful, mutually supportive and symbiotic teacher-student relationship. From an instructional perspective, emotional resonance eliminates students' resistance to learning, mobilizes

their initiative and enthusiasm, and transforms students from passive knowledge recipients to active explorers, substantially improving classroom compatibility and effectiveness. The more emotional investment teachers devote to classroom teaching, the better the instructional outcomes and the more positive responses they receive from students. Teachers' efforts gain wider recognition from students, parents and society, which further motivates teachers to increase emotional investment in classroom instruction and sustain a positive cycle of classroom atmosphere [12].

3.3. Emotion-centered Instruction Is a Basic Requirement and Developmental Trend of Modern Education

With the deepening of educational reform, modern education has broken away from the single developmental model of traditional exam-oriented education that prioritizes knowledge over literacy and scores over holistic cultivation. It has gradually shifted toward a modern nurturing system centered on students, focused on core literacy cultivation and targeting all-round development, making emotional education an indispensable component of modern education. Traditional education overemphasizes knowledge indoctrination and score improvement while ignoring students' emotional experiences and spiritual demands, leading to one-sided educational practice and utilitarian nurturing outcomes that fail to meet the core talent cultivation requirements of the new era. Rooted in a people-oriented educational philosophy, modern education highlights humanism, inclusiveness and developmental potential. It demands that teaching not only fulfill the basic task of knowledge transmission but also shoulder the mission of emotional cultivation, character shaping and spiritual nourishment, fundamentally establishing emotional investment as a basic instructional requirement of modern education. Meanwhile, amid the comprehensive advancement of educational modernization and quality-oriented education, warm education centered on emotional cultivation has become a prevailing trend. Modern education extends far beyond classroom knowledge teaching, stressing holistic emotional infiltration across instructional design, classroom interaction, daily student management and home-school co-education to realize deep integration of knowledge instruction and emotional cultivation. Rational application of emotion compensates for the nurturing deficiencies of traditional education, enriches the connotation of modern education, enhances its humanistic warmth and depth, aligns with the goal of cultivating well-rounded talents with sound physical and mental health and intact personalities in the new era, represents an inevitable direction for high-quality modern education, and embodies education's return to its original nurturing essence.

4. REVIEW OF THE CURRENT SITUATION AND INFLUENCING FACTORS OF TEACHERS' EMOTIONAL INVESTMENT

4.1. Practical Dilemmas Confronting Teachers' Emotional Investment

Despite wide recognition of its importance, teachers' emotional investment faces multiple challenges in instructional practice. First, teachers suffer from insufficient emotional regulation capacity. Burdened with heavy workloads, problematic student behaviors and occupational burnout, many teachers struggle to regulate their emotions effectively, resulting in inappropriate emotional expression or diminished emotional investment. Particularly under high-intensity work demands, teachers' emotional resources are continuously depleted, giving rise to prevalent emotional exhaustion. Teachers must resolve daily difficulties including student conflicts, misconduct, weariness of study, poor academic performance and hostile attitudes toward instructors, a process that frequently breeds weariness and stress[13]. As Friedman and Farber noted in their 1992 report, student misbehavior, apathy and lack of enthusiasm for learning materials easily induce teacher burnout[14]. Second, systematic training targeting teachers' emotional literacy remains inadequate. Current professional development programs for teachers predominantly focus on instructional skills

and subject knowledge, with insufficient attention to emotional competencies such as emotion recognition, expression and regulation.

4.2. Major Factors Shaping Teachers' Emotional Investment

Teachers' emotional investment is not static but jointly shaped by multiple interacting factors. In educational practice, it constitutes an integrated process of voluntary devotion to educational enthusiasm, sincere care and emotional labor, serving as a core prerequisite for implementing emotional education and sustaining positive teacher-student interaction. Its continuity and intensity are not determined merely by teachers' subjective willingness but result from the interplay of individual traits, student conditions, campus environment and institutional mechanisms.

From an individual teacher perspective, professional identity, emotional regulation capacity and burnout level act as core influencing factors. Teachers with firm educational aspirations and a strong sense of professional belonging can overcome instructional pressures, maintain consistent positive educational emotions, and willingly devote time, energy and genuine care to student growth. In contrast, teachers with weak professional identity and prolonged burnout tend to experience emotional exhaustion, fading educational passion, emotional detachment and perfunctory teaching, drastically reducing the initiative and stability of their emotional investment. Meanwhile, teachers' personal emotion management skills, professional literacy and educational cognition directly determine their ability to control instructional emotions and deliver targeted emotional guidance.

From the student dimension, students' learning attitudes, behaviors and emotional feedback exert direct reverse impacts on teachers' emotional investment. Students' active cooperation, voluntary communication and respectful, diligent learning deliver positive feedback to teachers' educational efforts, stimulating emotional resonance and teaching motivation to form a mutually fulfilling interactive model. Conversely, persistent student disengagement, disciplinary violations and resistance to communication continuously deplete teachers' emotional resources, weaken their willingness to invest emotionally, and even trigger a declining trend in emotional devotion.

From the external environmental and institutional dimension, campus nurturing atmosphere, home-school collaboration and educational evaluation mechanisms carry equal weight. A harmonious, inclusive campus culture that respects teachers and prioritizes humanistic care provides robust support for teachers' emotional investment and alleviates their psychological stress. By contrast, overly utilitarian evaluation systems, excessive non-teaching administrative burdens and tense home-school conflicts continuously consume teachers' emotional labor, squeeze space for emotional education, and hinder consistent, sufficient emotional investment. Additionally, supporting conditions including school faculty support, team atmosphere and training guarantees indirectly shape teachers' professional mindset and emotional investment status, collectively forming a comprehensive system of influencing factors.

5. PRACTICAL PATHS TO BOOST TEACHERS' EMOTIONAL INVESTMENT

Addressing the multifaceted factors constraining teachers' emotional investment, schools can comprehensively optimize nurturing environments, mitigate teachers' emotional depletion and sustain their voluntary emotional devotion through diverse measures including stimulating teachers' sense of professional honor, guaranteeing sufficient teaching resources and advancing educational informatization, empowering high-quality educational work.

5.1. Guide Teachers to Establish Correct Professional Ethics

Establishing sound professional ethics lays the ideological foundation for stable teachers' emotional investment. Professional ethics serve as value criteria and behavioral norms guiding teachers' instructional practice and emotional education, determining the consciousness, purity and sustainability of their emotional devotion. They distinguish educational nurturing labor from ordinary professional work. Teachers' emotional investment is not mere emotional output, but voluntary educational practice rooted in educational aspirations, teacher ethics and professional responsibility. Only with scientific and upright professional ethics can teachers abandon utilitarian and formalistic educational mindsets and ensure sincere, moderate and pure emotional investment. Teachers must hold firm convictions about their occupation and genuine, intense emotions toward the knowledge they transmit. People guided by authentic emotions readily convince others of their sincerity, as all humans share this innate tendency; only those who truly feel anger or sorrow can arouse corresponding indignation or reflection in others[15]. Schools should regularly organize special training on teacher ethics and professional ethics, systematically interpreting professional conduct codes and educational ethical norms for teachers in the new era. Such training helps teachers grasp the nurturing essence of education, deeply recognize that emotional care, respect for individuality and equal treatment of all students constitute core professional obligations rather than extra workload. Meanwhile, regular mechanisms for ethical guidance and self-reflection should be established, encouraging teachers to uphold educational aspirations in practice, discard utilitarian teaching logic, respect students' individual differences and emotional demands, consciously restrain negative occupational emotions, and engage in education with a positive, inclusive and responsible mindset. Sound professional ethics cultivate a stable core of professional values within teachers, shielding them from burnout and negative educational mindsets. Ideologically, teachers will voluntarily maintain high-level emotional investment, making warm, heartfelt education a professional consciousness and providing fundamental ideological safeguards for long-term emotional education.

5.2. Stimulate Teachers' Sense of Professional Honor

Cultivating teachers' sense of professional honor forms the internal driving force behind enhanced emotional investment. As a psychological foundation enabling teachers to uphold educational aspirations and voluntarily devote emotional labor, professional honor fundamentally alleviates burnout, reshapes professional identity and mission, and drives spontaneous emotional devotion. In his 2013 Teachers' Day letter to all teachers nationwide, General Secretary Xi Jinping proposed that "the whole society should vigorously promote a culture of respecting teachers and valuing education, making teaching the most respected profession in society." Therefore, schools should build a comprehensive system of teacher incentives and humanistic care, abandoning evaluation frameworks solely focused on academic performance. A diversified evaluation mechanism should be established to balance instructional performance, nurturing outcomes, ethical conduct and emotional educational contributions, fully recognizing the value of teachers' invisible nurturing work including student psychological counseling, character cultivation and sustaining teacher-student emotional bonds. Regular activities such as teacher ethics commendations, excellent teacher lectures and sharing sessions on educational experience should be held to highlight outstanding moments in teachers' nurturing work. Emotional labor should be incorporated into professional practice assessments, and teachers' emotional practice outcomes regarded as key evaluation indicators. Incentive policies should be formulated to reward teachers with outstanding emotional labor performance. While such rewards may not bring substantial material benefits, they offer spiritual encouragement, motivating teachers to voluntarily dedicate emotional labor to education[16]. Teachers' emotional devotion and nurturing achievements deserve to be seen and acknowledged. Furthermore, schools should implement humanistic care for teachers, pay attention to their work pressure and psychological wellbeing, unblock channels for teachers to voice demands, build platforms for professional growth and value realization, help teachers gain professional fulfillment and happiness through teaching

practice, continuously strengthen their sense of professional belonging and honor, and drive them to engage in daily teaching and nurturing with full, positive emotions.

5.3. Foster a Positive Organizational Atmosphere

For a long time, the teaching profession has been sanctified by society. As disseminators of knowledge and moral guardians of society, teachers bear heavy psychological burdens stemming from parental expectations and social demands. Minor misdeeds by individual teachers often trigger widespread public criticism targeting the entire teaching group. As social beings, teachers deserve greater tolerance, understanding and care from society. Cultivating teachers' professional emotion requires a social environment that respects knowledge and educators[17]. A 1997 study by Esther, Greenglass, Burke and Konarski found that informational support (e.g., provision of necessary knowledge), practical support (e.g., assistance with work tasks) and emotional support from colleagues strengthen teachers' sense of control over work conditions, thereby reducing stress and depersonalization while boosting personal accomplishment and work performance[18]. Schools and society should jointly build a people-oriented, inclusive, mutually supportive culture that respects teachers and education, abandoning management models fixated solely on academic results and weakening utilitarian management featuring excessive quantitative assessment and supervision. Flexible management culture that respects teachers' labor, tolerates diverse instructional styles and encourages educational innovation should be cultivated. Management practices should fully respect teachers' principal status, establish communication platforms for teachers to participate in school governance and instructional reform discussions, listen to their instructional perplexities and developmental demands, grant moderate instructional autonomy and educational freedom, and enhance teachers' organizational identification and self-efficacy.

5.4. Guarantee Adequate Teaching Facilities

Complete, sufficient and well-adapted teaching hardware effectively reduces teachers' ineffective labor and workload, cutting repetitive, mechanical work burdens and laying a foundational guarantee for teachers to focus on emotional education and instructional quality improvement. Schools should conduct regular inspections, updates and upgrades of teaching facilities aligned with daily instructional demands, fully equipping classrooms, after-class tutoring and practical teaching spaces with necessary infrastructure to eliminate instructional barriers caused by outdated, scarce or inadequate equipment. Meanwhile, a maintenance and management system for teaching facilities should be established with dedicated staff responsible for inspection, upkeep and renewal, ensuring stable, efficient operation of all teaching resources and mitigating teachers' negative emotions and work frustration arising from hardware deficiencies. Sufficient hardware resources greatly optimize teachers' instructional experience, reduce work pressure and psychological burdens, freeing teachers from extra energy spent resolving equipment shortages. Teachers can then allocate more time, energy and emotion to core educational work including teacher-student interaction, classroom education and individualized student growth guidance, securing stable and sustained emotional investment.

5.5. Accelerate School Educational Informatization Construction

As professionals responsible for teaching, teachers constitute the key to classroom instruction, innovative talent cultivation and educational quality improvement. To encourage greater emotional investment in classroom teaching, sufficient material living conditions and teaching facilities must be guaranteed for teachers. Against the backdrop of educational digital transformation, intelligent educational information systems simplify instructional workflows, optimize teaching models and boost educational efficiency through technological advantages, reducing burdens and enhancing effectiveness for teachers engaged in emotional education. Schools should continuously develop smart campuses and smart classrooms, introduce high-quality digital teaching resources, intelligent

lesson planning systems and learning analytics platforms, and leverage information technology to streamline routine tasks including lesson preparation, assignment grading, academic data statistics and report compilation, drastically cutting mechanical workloads and unnecessary emotional depletion. Additionally, diversified teacher-student communication channels can be built via information platforms to break traditional communication limitations, enabling teachers to timely track students' learning status, psychological dynamics and emotional shifts, and deliver targeted individualized emotional guidance and educational support. Training on digital literacy should be offered to teachers to upgrade their proficiency in digital teaching tools, helping them skillfully leverage intelligent technology to empower emotional and individualized education. Digital technology will serve as an auxiliary tool for teachers' emotional investment, unifying efficient instruction with warm nurturing and continuously lifting overall educational quality.

5.6. Improve Teachers' Personal Professional Competence

Teacher competence refers to stable psychological traits demonstrated in educational activities that directly or indirectly shape the quality and completion of teaching tasks[19]. Teachers' positive emotions stem from self-confidence in their own capabilities. Weak instructional competence leads to low classroom efficiency, inadequate responses to student learning situations and unsatisfactory nurturing outcomes, trapping teachers in a strenuous cycle with little reward, which gradually breeds frustration, powerlessness and diminished willingness to invest emotionally. Therefore, consistent advancement of professional teaching competence strengthens teachers' instructional self-confidence and educational assurance, enabling them to calmly address diverse instructional challenges and student developmental issues, reduce negative emotional depletion, and provide professional support for high-quality emotional investment. As students gain greater principal status in classrooms, teachers are required to master corresponding competencies including educational tact and educational research. Teachers should participate in national research activities, and schools may establish collaborative growth mechanisms with outstanding provincial and domestic schools to realize coordinated development among campuses and teachers[20]. Meanwhile, teachers should uphold the philosophy of lifelong learning, proactively deepen subject expertise, systematically study cutting-edge theories in pedagogy and educational psychology, and accurately grasp adolescents' cognitive and emotional developmental laws.

6. CONCLUSION

Against the era backdrop of high-quality education and fostering virtue through education, this study sorts out the internal correlation between teachers' emotional investment and students' learning behaviors, clarifying their core connotations, practical dilemmas and optimization paths. Emotional elements constitute an indispensable core component of teaching activities; students' all-round development relies on adequate emotional nourishment, harmonious teacher-student instructional relationships are sustained by positive emotional bonds, and emotional education represents an inevitable trend in the transformation of modern education. Teachers' emotional investment transcends superficial emotional expression in teaching, acting as a critical factor that profoundly intervenes in students' behavioral, emotional and cognitive engagement. Positive teacher emotional investment optimizes students' learning behaviors and raises overall learning engagement through multiple channels: fostering supportive classroom atmospheres, building secure psychological environments, stimulating students' internal learning motivation and narrowing the psychological distance between teachers and students. It alleviates academic anxiety and learning resistance among students. Conversely, teachers' negative emotional states, insufficient emotional investment and inadequate emotional competence hinder deep student learning and weaken classroom educational effectiveness.

In current educational practice, teachers' emotional investment generally faces practical dilemmas including insufficient emotional regulation capacity, mismatched emotional support and imperfect emotional literacy training systems. Its intensity exhibits complex, dynamic and systematic characteristics, simultaneously constrained by teachers' personal literacy, student behavioral feedback, campus nurturing environments and educational institutional mechanisms. To address these issues, this study constructs a comprehensive, multi-layered system for elevating teachers' emotional investment spanning ideological cognition, professional motivation, hardware resource guarantees, digital technology empowerment and professional competence support, so as to resolve teacher emotional burnout and consolidate the foundation of emotional education. Future teaching practice must abandon utilitarian educational logic that prioritizes knowledge over emotion, uphold a people-oriented educational philosophy, integrate emotional cultivation and investment into all stages of teaching, continuously optimize the educational environment supporting teachers' emotional education, improve teachers' emotional literacy and nurturing competence, and realize deep integration of knowledge transmission, emotional nourishment and competence cultivation. This will provide solid support for students' sustainable all-round development and the advancement of high-quality education.

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