

The Impact of FoMO-AI on Management Resilience Among Teaching Administrators: The Moderating Role of Perceived Organizational Support

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Abstract: The deep embedding and systematic reshaping of education by artificial intelligence have led teaching administrators to increasingly experience a novel form of occupational anxiety—fear of missing out on artificial intelligence developments, termed FoMO-AI. How this technological anxiety influences their management resilience, and the moderating role perceived organizational support plays in this dynamic, has emerged as a cutting-edge issue in educational management research. This paper systematically traces the conceptual origin and definitional boundaries of FoMO-AI, reviews the theoretical evolution and core dimensions of management resilience, and elucidates the theoretical foundation and mechanisms of perceived organizational support. Building upon this analysis, a theoretical integrative framework of "FoMO-AI—Management Resilience—Perceived Organizational Support" is constructed, revealing the potential non-linear relationship between FoMO-AI and management resilience, as well as the boundary-moderating function of perceived organizational support within this relationship. The paper further identifies existing gaps in current research, particularly concerning conceptualization and operationalization, the exploration of mediating mechanisms, and empirical validation. Future research should prioritize the development and validation of FoMO-AI measurement tools, delve into the mediating pathways through which it affects management resilience, and expand longitudinal tracking and cross-cultural comparative studies. Such efforts aim to provide a solid theoretical reference and evidence-based foundation for educational institutions to build supportive organizational environments amidst the process of digital transformation.

Keywords: FoMO-AI; management resilience; teaching administrators; perceived organizational support

1. Introduction

1.1 Research Background

Artificial intelligence technology is reshaping the underlying logic and operational paradigms of educational management with unprecedented depth and pace. From intelligent course scheduling systems to student data analytics platforms, from automated academic affairs processes to AI-assisted decision-making tools, wave after wave of technological iteration continues to surge forward, profoundly challenging traditional management models. Immersed in this transformative current, teaching administrators—serving as pivotal bridges connecting macro-level educational policies with micro-level teaching practices—are bearing immense pressure to adapt technologically. Research has established that the teaching profession itself is widely recognized as a high-stress occupation, and the pervasive infiltration of information technology has superimposed an additional dimension of stress: technostress. This concept is defined as a modern adaptation syndrome arising from an individual's inability to cope with emerging computer

technologies in a constructive and healthy manner. Notably, since 2018, and particularly during the COVID-19 pandemic, research on teacher technostress has witnessed significant growth, underscoring the urgency and contemporary relevance of this issue[1].

Against this macro-level backdrop, a novel form of occupational anxiety has quietly emerged: the fear of missing out on artificial intelligence developments, termed FoMO-AI. This concept originates from classical FoMO theory, which initially described a pervasive anxiety stemming from the fear of missing out on beneficial experiences of others. By contextually transplanting the theoretical core of FoMO into the domain of artificial intelligence, FoMO-AI acquires a more targeted connotation: it specifically refers to the persistent anxiety, unease, and complex psychological state experienced by teaching administrators who worry about their inability to keep pace with AI technology trends—such as the emergence of new management tools, the iteration of data analysis methods, and the proliferation of automated processes—characterized by a simultaneous desire to catch up and a feeling of helplessness in doing so.

1.2 Research Questions

Meanwhile, management resilience—conceptualized as a core positive psychological capacity that enables individuals to maintain functional stability, achieve adaptive recovery, and drive sustained growth under pressure—has increasingly emerged as a critical psychological resource for educational administrators in coping with technological transformation. Existing research has confirmed that resilience levels significantly predict educators' occupational well-being and job performance. However, the mechanisms underlying the relationship between technological anxiety and resilience are far from linear, and the complexity of their intrinsic logic warrants further in-depth exploration. This is compellingly illustrated by the recently identified phenomenon of the "resilience paradox": when individuals excessively maintain high levels of resilience without adequate psychological adjustment and external resource supplementation, it may paradoxically exacerbate the risk of occupational burnout rather than facilitate adaptation. This paradoxical finding suggests that a more complex, non-linear relational pattern may underlie the association between FoMO-AI and management resilience[2].

Within this context, perceived organizational support emerges as another critical variable for understanding this dyadic relationship. Perceived organizational support refers to employees' overall perception of the extent to which their organization values their contributions and cares about their well-being. It is highly plausible that this construct plays a significant boundary-moderating role between technological anxiety and resilience. Social exchange theory and the job demands-resources model provide robust theoretical anchors for elucidating this moderating mechanism: when teaching administrators genuinely perceive that their organization provides adequate training support, resource guarantees, and psychological care, the anxiety triggered by FoMO-AI may, through the lubricating effect of social exchange, be successfully transformed into sustained learning motivation and positive adaptive behaviors. Conversely, in the stark context of deficient organizational support, technological anxiety, lacking the buffering and supplementation of external resources, is more likely to accelerate individuals' psychological depletion.

Grounded in the aforementioned theoretical background and practical concerns, this paper aims to systematically review the research trajectories and theoretical developments of three core concepts—FoMO-AI, management resilience, and perceived organizational support. It seeks to construct an integrative theoretical framework of their interrelationships, precisely identify existing gaps and limitations in current research concerning conceptual definitions and methodologies, and accordingly propose key directions for future inquiry, thereby providing a systematic theoretical reference and a clear logical starting point for subsequent empirical exploration.

2. Core Concepts and Research Trajectories

2.1 FoMO-AI: Conceptual Origin and Definitional Boundaries

2.1.1 From FoMO to FoMO-AI: Conceptual Evolution

The concept of Fear of Missing Out (FoMO) originates from the field of psychology, where it was initially employed to describe the pervasive anxiety state individuals experience due to concerns about missing out on others' beneficial experiences, social events, or interaction opportunities. With the rapid proliferation and widespread penetration of digital media, the FoMO phenomenon has become increasingly prominent and has been empirically linked to negative outcomes such as social media addiction and psychological distress. In recent years, the leapfrog development of artificial intelligence technology has propelled the conceptual boundaries of FoMO to extend progressively from traditional social domains into the realm of technological application—scholars have begun to focus on specific forms of anxiety triggered by individuals' concerns over the rapid pace of technological iteration, seeking to illuminate this distinctive tension in the human-technology relationship within the digital age. It is against this backdrop that FoMO-AI has emerged as a novel entry point for understanding technological anxiety[3].

2.1.2 Connotative Dimensions of FoMO-AI

Based on a systematic review of extant literature, this study conceptualizes FoMO-AI as a composite psychological state encompassing anxiety, unease, and even a persistent sense of being compelled to catch up, arising from individuals' concerns about their inability to synchronize with the developmental trajectory of artificial intelligence technologies—including the iteration of technical knowledge, the advancement of tool application proficiency, and the optimization of technological processes. Its connotation can be further deconstructed into three interrelated core dimensions:

First, the fear of AI knowledge blind spots, referring to the deep-seated unease individuals experience due to concerns that their technological understanding lags behind others—an apprehension often accompanied by underlying anxiety over a widening knowledge gap. Second, the worry about AI substituting for human labor, which denotes the existential threat perception triggered when individuals sense that AI technologies may progressively erode or even replace their existing positions and professional responsibilities. Third, the sense of obsolescence stemming from insufficient competence in applying AI tools, manifested as feelings of powerlessness and alienation that individuals experience in the practice of technological application, along with the persistent anxiety derived therefrom[4].

Collectively, these three dimensions delineate the complex contours of FoMO-AI as a form of epochal occupational anxiety, reflecting both the impact of technological transformation on individual identity construction and revealing the psychological tensions confronting educational administrators amidst the digital wave.

2.1.3 Differentiation from Related Concepts

Admittedly, FoMO-AI is intricately intertwined with technostress at a theoretical level; however, the conceptual boundaries between the two require careful delineation. Technostress, as a more inclusive superordinate concept, broadly refers to the complex stress experiences triggered by the introduction and application of information technologies, encompassing multiple dimensions such as the burden of technology overload, the perplexity of technological complexity, and the intrusion of technology insecurity. In contrast, FoMO-AI can be viewed as a contextualized manifestation of technostress in the age of artificial intelligence, with its defining feature being the dominant role of the "fear of missing out" psychological mechanism—the anxiety individuals experience stems not only from practical difficulties in technology use, but is more deeply rooted in persistent concerns about missing opportunities for technological advancement; hidden beneath the surface of technology lies a profound unease about being "left behind by the times."

Furthermore, FoMO-AI is potentially associated with emerging psychological phenomena that have appeared in the digital society in recent years, such as "brain rot" and "doomscrolling." Although these phenomena manifest in different forms, they collectively point to the erosive mechanisms of excessive digital engagement on individuals' cognitive functions and emotional states: as the relentless flood of information continuously assaults individuals' psychological defenses, the depletion of cognitive resources and the destabilization of emotional equilibrium have become prevalent concerns of our time. In this sense, FoMO-AI represents not merely a manifestation of occupational anxiety, but rather a convergence point for the multiple tensions inherent in the human-technology relationship in the digital age, reflecting individuals' deep-seated psychological need to seek positioning and control amidst the technological tide[5].

2.2 Management Resilience: Theoretical Evolution and Application in Educational Management Contexts

2.2.1 The Origin and Development of the Resilience Concept

The term "resilience" has a long and rich history, with its etymological roots tracing back to the Latin word "resilire," which originally signified "to rebound" or "to spring back," embodying a dynamic connotation of returning to one's original state after experiencing pressure. Through conceptual migration and theoretical reconstruction across multiple disciplines, this term has gradually crystallized into a core construct within psychological research, carrying the indomitable human capacity to confront adversity.

In the psychological context, resilience was initially defined as the stable ability of individuals to successfully cope with and maintain normal psychological functioning when facing the onslaught of adversity, the impact of trauma, or significant stress. It functions like an inner spring, capable of returning to its original shape after the external force is removed[6].

However, as theoretical exploration has deepened and perspectives have continuously evolved, the scholarly understanding of resilience has undergone a profound paradigm shift: from stable trait theory to dynamic process theory. This shift signifies that resilience is no longer as an innate, immutable personality attribute, but has been reconceptualized as an adaptive process of continuous interaction and dynamic evolution between the individual and their environment. It is no longer a static "possession," but a fluid "becoming"—with each cycle of pressure and coping, resilience is reshaped and rewritten anew. This transformation has not only expanded the theoretical horizons of resilience research but has also opened up broader possibilities for its application in complex and ever-changing real-world contexts.

2.2.2 Management Resilience in the Educational Context

Reflecting on the developmental trajectory of educational research, the topic of resilience initially focused its attention on the growth and adaptation of student populations, as well as the perseverance and adjustment of teacher groups amidst professional currents. However, as organizational change intensifies and uncertainty becomes the norm, researchers have begun to extend their perspective to the critical group of educational administrators, seeking to unveil their unique psychological adaptation mechanisms in contexts of organizational transformation and pressure.

Within this context, "management resilience" has been endowed with a more precise connotation: it refers to the capacity for rapid recovery, flexible adaptation, and sustained growth demonstrated by teaching administrators when confronting unexpected events (such as abrupt adjustments to teaching plans, immediate responses to teacher-student conflicts, or rigid implementation of policy changes), withstanding the cumulative effects of work pressure, or enduring the turbulent disruptions of technological impact. Synthesizing existing research findings, the internal structure of management resilience can be distilled into four core dimensions: stress tolerance, namely the capacity to maintain functional stability under high-pressure conditions; adaptability, signifying the wisdom of flexible behavioral adjustment

amidst environmental change; recoverability, referring to the speed of state rebound and psychological restoration following setbacks; and learning capacity, denoting the impetus for capability enhancement through the accumulation of experience[7].

Notably, recent research has revealed a thought-provoking finding: when individuals maintain high levels of resilience over extended periods while bearing the weight of adversity, yet lack necessary psychological resource replenishment and dynamic equilibrium mechanisms, they may instead fall into the paradoxical situation of exacerbated occupational burnout. This phenomenon, keenly captured by scholars and termed the "resilience paradox," serves as a powerful reminder that resilience research should no longer confine itself to the linear thinking paradigm of "the higher, the better," but should instead direct attention to the optimal level of resilience and its profound dependence on specific contextual characteristics—after all, true resilience lies not only in rebounding under pressure, but also in the wisdom to discern when to bend and when to rest.

2.3 Perceived Organizational Support: Theoretical Foundations and Research in Educational Organizations

2.3.1 Core Tenets of Organizational Support Theory

The concept of Perceived Organizational Support (POS) was systematically introduced into academic discourse by Eisenberger and his collaborators in 1986, serving to delineate employees' holistic cognitive appraisal of whether their organization genuinely values their contributions and sincerely cares about their well-being. It functions not only as an intangible yardstick in employees' minds for measuring the organization's temperature, but also as a crucial anchor point connecting the emotional bond between individuals and their organization.

Organizational support theory is deeply rooted in the logic of social exchange, with its core propositions flowing as clearly and powerfully as a gentle stream: when employees genuinely perceive positive treatment and resource investment from their organization, a sense of responsibility and obligation to reciprocate quietly emerges from within. This emotional calling, rippling outward like water waves, ultimately manifests as enhanced work enthusiasm, more positive work attitudes, and those organizational citizenship behaviors that transcend role requirements and nourish the organizational fabric—a tacit, heart-to-heart responsive exchange, a vivid inscription of the implicit contract between employee and organization[8].

2.3.2 Research Status of Perceived Organizational Support Among Educators

In the practical context of educational organizations, the value of perceived organizational support has long transcended theoretical conceptualization, having been repeatedly validated by a substantial body of empirical research: it functions as a gentle undercurrent, continuously exerting significant and profound positive nourishment on teachers' job satisfaction, work engagement, and turnover intention. When teachers perceive the metaphorical umbrella their organization holds for them, they are more willing to invest their enthusiasm and take root—this is the simple logic where emotion and belonging intertwine.

In recent years, as the issue of technostress has surged to the forefront of educational research, scholars have increasingly turned their attention to the latent protective function of perceived organizational support within the transmission pathways of technostress—suggesting that it may serve as a critical line of defense against the spread of technological anxiety. For example, the research team led by Gabbiadini was among the first to identify that perceived organizational support exerts a significant moderating influence on the relationship between technostress and teachers' willingness to adopt remote teaching technologies: when perceived support is high, the negative effect of technostress on adoption intention is substantially attenuated. Similarly, Hassan and colleagues further demonstrated that perceived organizational support plays an indispensable moderating role between school teachers' technostress creators and their

organizational commitment, functioning as an invisible buffer that subtly mitigates the erosive impact of stress on commitment.

These converging findings not only provide preliminary yet robust empirical evidence for understanding the distinctive function of perceived organizational support in technology-laden contexts, but also contribute to a more nuanced conceptual picture: amidst the turbulence of technological transformation, perceived organizational support may well represent the unseen anchor that enables teachers to maintain stability and sustain forward momentum.

3. An Integrative Theoretical Framework: Examining the Relationships Among FoMO-AI, Management Resilience, and Perceived Organizational Support

3.1 The Relationship Between FoMO-AI and Management Resilience: A Double-Edged Sword Effect and Non-Linear Perspective

3.1.1 Positive Pathway: Anxiety Activating Learning Motivation

Moderate levels of FoMO-AI, much like an undercurrent surging from the depths of one's inner being, can be skillfully transformed into an endogenous driving force for learning motivation. This impetus propels teaching administrators to actively embrace and explore the practical application of artificial intelligence tools in educational management, not only significantly enhancing their work efficiency but also, through subtle immersion, honing their core capacity to solve complex problems—precisely the fertile soil in which management resilience takes root and flourishes.

This positive pathway aligns precisely with the theoretical logic of challenge stressors: when a stressor is cognitively appraised by individuals as a latent opportunity for growth rather than a mere threat, it ignites the spark of adaptive coping and activates problem-focused action strategies. Extant research has long revealed that technostress is by no means a monolithic negative presence—moderate technological challenges can instead give rise to a positive psychological state termed techno-eustress. This is an invigorating experience that quietly emerges when navigating the waves of technological change, acting like a wind that propels individuals beyond the fatigue of learning and toward the shores of innovation[10].

3.1.2 Negative Pathway: Excessive Anxiety Depletes Psychological Resources

However, when FoMO-AI quietly exceeds the critical threshold that individuals can bear, it ceases to be an undercurrent propelling progress and instead becomes a bottomless vortex—intensely depleting individuals' limited cognitive resources and emotional reserves, triggering a cumulative effect of occupational anxiety. In this endless pursuit, administrators often find themselves trapped in a vicious cycle of "technological pursuit—resource depletion—efficacy decline": the more vigorously they strive to keep pace with technological waves, the more mentally and physically exhausted they become; the more exhausted they grow, the more alarmingly their managerial efficacy diminishes. Ultimately, this is like a tidal surge that turns back upon itself, silently eroding the very management resilience that should have remained robust.

The Job Demands-Resources (JD-R) model serves as a powerful analytical lens, offering a systematic theoretical framework to illuminate this negative pathway. When external job demands—such as the mandatory requirement to continuously learn and keep pace with AI technological iterations—consistently exceed the job resources available to individuals, much like a steadily rising water level that surpasses its banks, the consequences become severe. In the absence of organizational training, the lack of technical support, and the scarcity of time buffers, psychological depletion and occupational burnout quietly accumulate beneath the surface, eventually overflowing into manifest dysfunction.

This theoretical reasoning is far from speculative—a substantial body of empirical research has repeatedly confirmed the existence of a clear and persistent positive correlation between technostress and teachers' job burnout, turnover intention, and even mental health issues.

3.1.3 The Resilience Paradox and the Theoretical Possibility of an Inverted U-Shaped Relationship

The recently uncovered phenomenon of the "resilience paradox," much like a beam of light cast into darkness, offers novel theoretical insights into our understanding of the complex relationship between FoMO-AI and management resilience. The value of resilience does not reside in functioning as a load-bearing wall that withstands perpetual pressure without yielding—when individuals sustain high levels of resilience over extended periods while lacking necessary psychological resource replenishment and dynamic regulatory mechanisms, this seemingly unshakeable toughness may paradoxically become a hidden driver accelerating occupational burnout.

Building upon this paradoxical finding, we can further deduce a thought-provoking theoretical landscape: the relationship between FoMO-AI and management resilience may not simply be a zero-sum game of reciprocal gains and losses, but rather an inverted U-shaped curvilinear association. Moderate anxiety, like a perfectly controlled flame, can activate growth-oriented adaptive behaviors, igniting the passion for exploration and continuous improvement. However, once anxiety crosses the critical threshold, it begins to steadily erode already finite psychological resources, much like turbulent undercurrents that eventually breach the embankment. Conversely, excessively low levels of anxiety may signify a state of stagnant indifference, like a pool of dead water, where individuals remain unmoved by the waves of technological change, their adaptive mechanisms stagnate, equally failing to nurture the growth of management resilience.

The introduction of this non-linear research perspective represents a liberation from the dualistic constraints of traditional stress research that simplistically casts anxiety as a purely negative factor—anxiety is no longer merely an enemy to be eliminated, but rather a beam of light with a multidimensional spectrum. This more explanatorily powerful theoretical lens opens a window toward a more nuanced and comprehensive understanding of the complex effects of technological anxiety.

3.2 The Moderating Mechanism of Perceived Organizational Support: Explanations from Social Exchange and Resource Replenishment

3.2.1 The Explanatory Logic of Social Exchange Theory

According to the inherent logic of social exchange theory, when teaching administrators genuinely perceive that their organization has invested ample AI training resources, technical support, and psychological care, a subtle psychological contract quietly takes shape—positive emotions toward the organization and a sense of obligation to reciprocate take root and germinate in the depths of their hearts like seeds.

This positive organizational perception, much like a window opening onto a renewed vista of the world, profoundly shapes individuals' cognitive reappraisal of FoMO-AI. Technological anxiety, which might otherwise be interpreted as a threatening signal of "personal inadequacy," is subtly reframed within this supportive organizational climate, transformed instead into an affirmation that "the organization values technological competence." Thus, anxiety ceases to be a shadow to be avoided and becomes a light illuminating the path forward—it is re-coded as an opportunity for growth and channeled into sustained motivation for continuous improvement, propelling individuals to stride confidently toward technological waves rather than retreat from them.

3.2.2 The Complementary Perspective of the Job Demands-Resources Model

The Job Demands-Resources model opens another explanatory pathway for understanding the buffering role of perceived organizational support: perceived organizational support, as an invaluable work resource, functions like a fully charged psychological replenishment station, continuously providing individuals with the psychological energy needed to cope with technostress.

When teaching administrators find themselves situated in the fertile soil of high perceived organizational support, their reservoir of resources becomes abundantly enriched—buoyed by organizational training, backed by technical assistance, and warmed by psychological care. These resources act as invisible lines of defense, effectively withstanding the onslaught of job demands brought by FoMO-AI, progressively diminishing the negative impact of anxiety and preventing it from genuinely eroding their psychological resilience.

Conversely, in environments where perceived organizational support is as barren as a desert, individuals must confront the pounding waves of technological change alone. Resource scarcity leaves them with empty hands and unprotected hearts—each wave of anxiety triggered by FoMO-AI penetrates more easily, accelerating the depletion of psychological energy and leaving administrators increasingly exhausted in their solitary struggle.

This vividly illustrates the mechanism of resource replenishment: when resources abound, stress remains merely a passing traveler; when resources are scarce, anxiety becomes the master.

3.2.3 Insights from Existing Empirical Evidence

Retracing the trajectory of existing research, the moderating role of perceived organizational support has quietly accumulated a constellation of empirical evidence, providing a solid foundation for our theoretical reasoning. For instance, the research team led by Harunavamwe astutely captured that perceived organizational support functions as a finely calibrated moderating mechanism, skillfully balancing the relationship between pressure and growth in the context of technostress and thriving at work. Gabbiadini and colleagues, meanwhile, further delineated another landscape—when technostress surges toward teachers like tidal waves, perceived organizational support acts as an invisible breakwater, effectively buffering its erosive impact on technology adoption intention.

Although these studies direct their gaze toward different dependent variables, they converge upon a shared implication: perceived organizational support, as a contextual resource, may similarly play an analogous moderating role between FoMO-AI and resilience—when anxiety strikes, it is the force that steadies one's footing; when pressure intensifies, it is the buffer that dissipates the impact. This avenue of inquiry awaits subsequent research to adopt a more systematic lens, unveiling the deeper operational mechanisms that still lie beneath the surface.

3.3 Integrative Framework Construction: Theoretical Synthesis and Propositions

Based on a comprehensive synthesis of the foregoing theoretical analyses, this study, grounded in the profound interconnections between technological anxiety and psychological adaptation, systematically constructs an integrative theoretical framework of "FoMO-AI—Management Resilience—Perceived Organizational Support." This framework aims to elucidate the psychological tensions and adaptive mechanisms experienced by teaching administrators amidst the waves of technological transformation. The core logic of this framework posits that FoMO-AI does not exert a simple linear effect on management resilience, but rather follows an inverted U-shaped nonlinear trajectory—moderate technological anxiety, like a perfectly calibrated wind, can activate growth-oriented adaptive behaviors, nurturing the cultivation and enhancement of management resilience. However, once anxiety crosses a critical threshold, excessive consumption begins to erode psychological resources, while excessively low anxiety signifies a state of stagnant

indifference akin to a pool of dead water; neither scenario benefits the growth of resilience.

Building upon this foundation, perceived organizational support assumes a critical boundary-moderating role: when perceived organizational support is as abundant as sunshine, it effectively buffers the negative impact of excessive FoMO-AI on management resilience, flattening the declining slope of the inverted U-shaped curve. Conversely, in contexts where perceived organizational support is scarce, the detrimental effect of excessive anxiety on resilience becomes more pronounced, rendering the curve increasingly steep. This moderating function operates subtly through two parallel pathways: the first is the resource replenishment pathway, whereby organizational investments in training support, technological resources, and emotional care directly infuse individuals with the psychological energy needed to cope with technostress; the second is the cognitive reappraisal pathway, wherein perceived organizational support, like a lens reframing one's perception of the world, prompts individuals to reinterpret technological anxiety from a threatening appraisal of "personal inadequacy" to a challenging interpretation of "organizational development opportunities," fundamentally altering the direction of transformation between anxiety and resilience. This integrative framework transcends the linear paradigm of traditional stress research, offering a more explanatorily powerful theoretical lens for understanding the multidimensional effects of technological anxiety and the protective function of organizational contexts.

4. Literature Review and Future Directions

4.1 Major Contributions of Existing Research

Through a systematic review and integrative analysis of the extant literature, it becomes evident that current research has achieved notable theoretical advancements across several dimensions.

First, the technostress research framework, having undergone multiple rounds of conceptual extension and model refinement, has evolved from its initial exploratory constructions into a relatively mature and explanatorily powerful analytical system. This framework has firmly rooted itself in the soil of educational contexts, providing a solid theoretical foundation and systematic analytical tools for gaining deeper insights into the psychological adaptation mechanisms of educators amidst waves of technological transformation.

Second, resilience research has quietly undergone a profound paradigm shift: emerging from the constraints of static trait theory and advancing into the expansive realm of dynamic process theory. Researchers' focus is no longer confined to questioning "whether individuals possess resilience innately," but has shifted toward exploring "how resilience is generated and evolves within specific contexts." This shift, like an opened window, has enabled the academic community to glimpse resilience's previously hidden contextual dependence and cultivability, injecting new vitality into subsequent intervention research.

Furthermore, the application of organizational support theory in educational contexts, like seeds planted in fertile soil, has yielded substantial fruit. Perceived organizational support, as a key variable explaining educators' work attitudes and behaviors, has had its explanatory power repeatedly validated and confirmed across countless empirical studies. The sustained accumulation of these studies has not only enriched theoretical boundaries but has also paved a solid theoretical foundation for educational institutions to design evidence-oriented organizational intervention strategies.

4.2 Research Gaps and Limitations

However, when the light of scholarly inquiry penetrates the depths of the existing literature, systematic review also reveals several theoretical gaps and empirical limitations that cannot be overlooked—like shadowed corners yet to be

illuminated, awaiting the gaze of subsequent exploration.

First, the conceptualization and operationalization of FoMO-AI remains shrouded in exploratory mist. Although the academic community has provisionally outlined its theoretical connotations, a standardized measurement tool subject to rigorous reliability and validity testing is still lacking. Most studies remain confined to conceptual delineation and theoretical deduction, struggling to cross the threshold of empirical testing—the absence of such a tool acts as an invisible chain, severely constraining the in-depth conduct of relevant empirical research.

Second, research on the intrinsic mechanisms through which FoMO-AI affects management resilience remains akin to a sketch with only contours drawn and details unfilled. Existing studies predominantly focus on testing direct effects among variables, yet systematic exploration of those mediating mechanisms lurking deep within the pathways—such as the adaptive function of job crafting, the activation of learning engagement, and the transformative role of cognitive reappraisal—remains conspicuously absent. Consequently, how technological anxiety progressively acts upon psychological adaptation and through which channels it subtly permeates remains an unresolved puzzle.

Third, the empirical testing of non-linear relationships has been conspicuously delayed. Although theoretical propositions regarding a potential inverted U-shaped curvilinear relationship between FoMO-AI and management resilience have long been advanced, few studies have employed appropriate statistical methods to rigorously test this nonlinear hypothesis. Deprived of the honing afforded by empirical data, theoretical propositions struggle to truly penetrate the fabric of reality.

Fourth, the foundation for longitudinal tracking designs and causal inference remains akin to an edifice built on sandy soil, with shallow foundations. Existing research predominantly adopts cross-sectional designs, capturing only static snapshots at single time points, yet failing to depict the dynamic evolutionary trajectory between FoMO-AI and management resilience, let alone provide robust support for rigorous causal inferences among variables. The absence of the temporal dimension relegates many conclusions to the level of correlation, making it difficult to reach the deeper logic of causality.

Fifth, the systematic absence of cross-cultural comparative studies resembles a map depicting only limited regions. Across different cultural contexts, teaching administrators' cognitive construction of and coping strategies toward technological anxiety may exhibit profound and subtle differences. Yet existing research samples are predominantly concentrated in Asian countries and regions, with perspectives confined to one corner, lacking systematic comparison and theoretical testing from cross-cultural vantage points. Those moderating variables lurking in the depths of culture remain dormant in the blind spots of current research.

4.3 Future Research Directions

Based on the foregoing research review and gap identification, the vessel of future inquiry may set sail along the following six directions, navigating toward broader theoretical horizons.

First, the development and standardized validation of FoMO-AI measurement instruments represent a theoretical foundation urgently needing consolidation. It is recommended to adopt qualitative research approaches, such as in-depth interviews and focus groups, to delve into the authentic experiences of educational administrators and systematically explore the localized connotations and dimensional structures of FoMO-AI. Building upon this foundation, initial scales with sound content validity should be developed, followed by repeated testing of their reliability and validity indicators through large-sample surveys, ultimately providing subsequent empirical research with a reliable measuring tool capable of withstanding scrutiny—for only with a precise ruler can true distance be measured.

Second, the empirical testing of nonlinear relationships and moderating effects necessitates more rigorous

methodological support. It is recommended to employ large-sample survey designs, utilizing advanced analytical techniques such as hierarchical regression analysis or response surface analysis, to rigorously examine whether the hypothesized inverted U-shaped curvilinear relationship between FoMO-AI and management resilience genuinely exists, and to systematically investigate the moderating role of perceived organizational support on this nonlinear relationship along with its boundary conditions—thereby subjecting theoretical propositions to rigorous empirical scrutiny, enabling the discernment of truth from falsehood amidst conceptual ambiguity.

Third, systematic exploration of mediating mechanisms constitutes an essential pathway for unveiling the black box of underlying processes. It is recommended to introduce mediating variables such as job crafting, learning engagement, and cognitive reappraisal, constructing moderated mediation models to deeply elucidate the process mechanisms and transformative pathways through which FoMO-AI affects management resilience. Only through such approaches can research transcend the superficial limitations of existing studies that predominantly remain confined to direct effect testing, truly penetrating the deep structures of how technological anxiety progressively permeates psychological adaptation.

Fourth, the systematic implementation of longitudinal tracking designs serves as a powerful approach for capturing dynamic trajectories. It is recommended to adopt multi-wave tracking designs, employing methods such as cross-lagged analysis or latent growth curve modeling, to trace the dynamic evolutionary trajectory between FoMO-AI and management resilience. The introduction of the temporal dimension will enable researchers to discern how variables intertwine and mutually influence one another over time, providing more robust methodological support for causal inferences.

Fifth, the expansion and advancement of cross-cultural comparative studies represent a critical touchstone for testing theoretical generalizability. It is recommended to conduct comparative research across diverse cultural contexts, systematically examining how cultural value dimensions—such as uncertainty avoidance and collectivist orientation—influence the effects of FoMO-AI. Only by situating research under the lens of multiculturalism can we ascertain whether conclusions represent universally applicable principles or unique landscapes cultivated within specific cultural soil.

Sixth, the development and effectiveness evaluation of organizational intervention programs constitute the ultimate realization of theory being translated into practice. It is recommended to design and implement evidence-based organizational intervention programs grounded in theoretical research findings—whether through the systematic implementation of AI literacy training initiatives, the meticulous construction of technical support systems, or the compassionate deployment of psychological counseling service mechanisms—all requiring experimental or quasi-experimental designs to rigorously test their intervention effectiveness. Only through such approaches can the seeds of theory be sown into the soil of practice, providing educational management practice with evidence-based foundations that embody both academic rigor and practical relevance.

5. Conclusion and Future Directions

The deep embedding and sustained infusion of artificial intelligence technology in education have long surpassed mere technological iteration, emerging as an irreversible structural tide within the broader process of educational digital transformation. At the heart of this transformative wave stand those pivotal agents tasked with bridging technological advancement and educational practice—teaching administrators. The technological anxiety embedded in their daily work, along with the ensuing challenges of psychological adaptation, is no longer a marginal individual concern but rather a central issue demanding rigorous scholarly attention.

It is from this standpoint that the present paper has systematically traced the intellectual trajectories and theoretical foundations of three core constructs—FoMO-AI, management resilience, and perceived organizational support—charting a conceptual map of their interwoven dynamics. Building on this groundwork, we have proposed an integrative theoretical framework to illuminate the potential nonlinear relationship between FoMO-AI and management resilience—not a simple trade-off between gains and losses, but rather an inverted U-shaped curve embodying a delicate equilibrium. More notably, within this relational architecture, perceived organizational support assumes a critical boundary-moderating function, operating as an invisible regulatory mechanism that subtly shapes both the direction and magnitude of the transformation from anxiety to resilience.

Nevertheless, the process of literature review also reveals several underexplored terrain awaiting further inquiry: the conceptualization and operationalization of FoMO-AI remain tentative, the investigation of underlying mediating mechanisms is still shrouded in ambiguity, and methodological innovation increasingly calls for more audacious approaches. These gaps, far from being mere deficiencies, serve as guiding signposts for future research endeavors.

Looking forward, only through sustained exploration along pathways such as measurement instrument development, empirical testing of nonlinear relationships, longitudinal tracking, and cross-cultural comparison can we equip educational institutions with theoretically grounded and contextually sensitive foundations for cultivating genuinely supportive organizational environments amid the tides of digital transformation. The ultimate aim of these efforts is to facilitate a profound role transition for teaching administrators—transforming them from passive followers swept along by technological currents into active navigators capable of steering through change, preserving inner resilience, growing continuously, and advancing with confidence in an era of relentless flux.

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