

Conceptualizing AI-Related Career Anxiety: An Integrated Counseling Psychology Framework

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Abstract: Artificial intelligence (AI) is transforming contemporary workplaces and generating new forms of career uncertainty. AI-related career anxiety has emerged as a psychological concern as individuals face changing work demands. Existing studies have primarily explained AI-related career anxiety as a direct response to technological disruption, with limited attention paid to the psychological process underlying individuals' experiences. We argue that understanding AI-related career anxiety requires shifting the focus from technological disruption itself to the psychological processes through which individuals interpret and adapt to AI-driven career change. Building on this perspective, we propose an integrated counseling psychology framework that synthesizes Cognitive Behavioral Theory (CBT), psychodynamic theory, humanistic-existential theory, and systems theory. The framework conceptualizes the development and maintenance of AI-related career anxiety as an evolving process in which cognitive appraisal, emotional responses, identity reconstruction, and meaning-making continuously interact within broader systemic contexts to shape individuals' responses to AI-related career uncertainty. This perspective extends the existing technology-centered explanations and offers a more comprehensive understanding of how AI-related career anxiety develops and persists in the context of AI-driven workplace transformation. The proposed framework also provides a foundation for future empirical research and informs counseling practices aimed at fostering adaptive career development and psychological resilience in the AI era.

1. Introduction: Understanding AI-Related Career Anxiety

The rapid advancement of artificial intelligence (AI) is transforming the nature of work and career development. Through automation, intelligent decision-making, and changing skill requirements, AI has reshaped occupational structures and individuals' expectations regarding future careers [1-3]. While AI-driven transformation provides new opportunities for innovation and professional development, it also generates increasing uncertainty regarding employment stability, career prospects, skill relevance, and professional identity [4-6]. As individuals navigate these changes, adapting to AI-driven workplace transformation has become not only an economic challenge but also a psychological challenge. AI-related career anxiety has consequently emerged as a psychological concern. Individuals may experience worries about skill obsolescence, potential job displacement, declining employability, and uncertain career trajectories in response to AI-driven changes [7].

However, such anxiety is not solely determined by technological disruption itself; rather, it reflects how individuals interpret, emotionally respond to, and adapt to uncertain career circumstances. Therefore, understanding AI-related career anxiety requires attention to the psychological processes underlying individuals' experiences of technological change.

Existing research has primarily examined AI-related career anxiety through career psychology, organizational psychology, and technology-related perspectives [8-10]. These perspectives have advanced understanding of career adaptability, workplace uncertainty, and responses to technological transformation. However, they provide limited insight into the integrated psychological mechanisms through which AI-related career anxiety develops and persists. In particular, insufficient attention has been given to the dynamic interactions among cognitive appraisal, emotional responses, identity reconstruction, meaning making, and systemic influences.

To address this gap, this perspective adopts a counseling psychology lens and proposes an integrated conceptual framework for understanding AI-related career anxiety. Rather than conceptualizing anxiety as a direct outcome of AI disruption, this paper argues that it emerges from a dynamic process shaped by individual psychological mechanisms and broader systemic contexts. By integrating cognitive behavioral theory, psychodynamic theory, humanistic-existential theory, and systems theory, the proposed framework offers a more comprehensive explanation of AI-related career anxiety.

2. Reconsidering AI-Related Career Anxiety through a Counseling Psychology Lens

AI-related career anxiety has often been understood as a consequence of technological disruption and increasing career uncertainty [11,12]. However, such an explanation overlooks the complex psychological processes through which individuals interpret, experience, and adapt to AI-driven career changes. A more comprehensive understanding requires moving beyond technology-centered explanations and examining the cognitive, emotional, identity-related, existential, and contextual dimensions involved in individuals' responses to technological transformation. Accordingly, AI-related career anxiety should be reconceptualized as a multidimensional psychological phenomenon rather than merely a career development concern [13-15]. It involves not only concerns about employment opportunities but also individuals' perceptions of competence, professional identity, future possibilities, and personal meaning in an AI-transformed workplace.

Counseling psychology provides a suitable theoretical lens for examining this complexity because it emphasizes the interaction among cognitive processes, emotional experiences, identity development, interpersonal relationships, and broader contextual influences [16,17]. Unlike approaches that focus primarily on occupational outcomes or technological adaptation, counseling psychology examines how individuals perceive, interpret, and respond to life transitions while maintaining a coherent sense of self and pursuing personal growth. In particular, CBT, psychodynamic theory, humanistic-existential theory, and systems theory provide complementary explanations of different psychological dimensions of AI-related career anxiety. CBT [18] highlights the role of cognitive appraisal in shaping anxiety experiences. AI does not directly generate anxiety; rather, individuals' interpretations of AI-related changes influence their perceived threat and emotional responses. Psychodynamic theory [19] extends this understanding by emphasizing unconscious emotional conflicts, self-worth, and identity processes. AI-driven occupational changes may activate deeper concerns related to competence, achievement, failure, and the preservation of professional identity. Humanistic-existential theories [20,21] further contribute by emphasizing authenticity, self-development, and meaning-making. As AI reshapes career pathways and traditional definitions of expertise, individuals may experience uncertainty not only about employment but also about the meaning and purpose derived from their work. Furthermore, systems theory [22] highlights

that career anxiety does not develop in isolation but is embedded within broader relational and social contexts. Family expectations, organizational cultures, and societal narratives regarding AI influence how individuals interpret technological change and respond psychologically. Integrating these theories provides a theoretical foundation for understanding AI-related career anxiety as a complex psychological process shaped by interactions among cognition, emotion, identity, meaning-making, and systemic influences.

3. An Integrated Framework for Understanding AI-Related Career Anxiety

Building on the complementary perspectives of counseling psychology discussed in the previous section, this section proposes an integrated framework for understanding AI-related career anxiety. The proposed framework argues that AI-related career anxiety develops through a dynamic psychological process shaped by the interaction between AI-driven workplace transformation, individual psychological mechanisms, and broader systemic contexts. This conceptualization is consistent with stress and coping theory, which suggests that psychological distress arises not only from external stressors but also from individuals' cognitive appraisals and the contextual environments in which these experiences occur [23]. Accordingly, AI-related career anxiety is conceptualized as an emergent outcome of interconnected psychological processes rather than a simple reaction to technological change.

3.1 Framework Overview

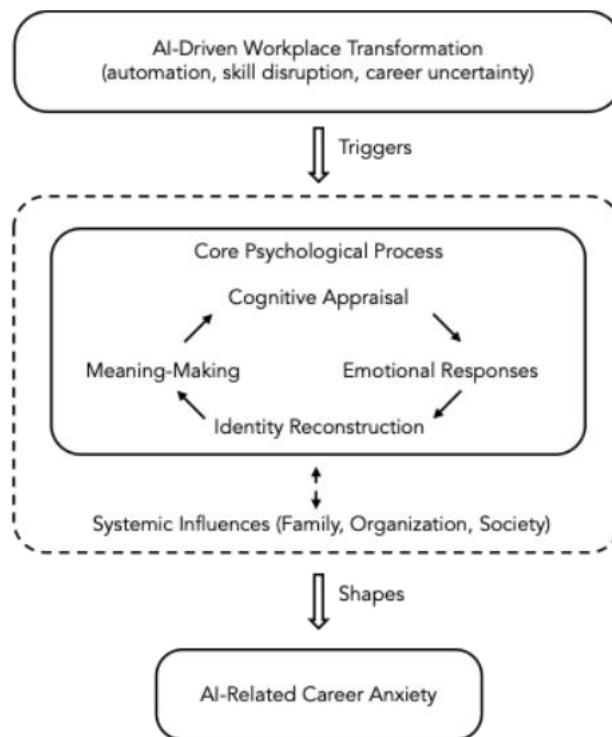


Figure 1: An Integrated Counseling Psychology Framework for Understanding AI-Related Career Anxiety

Figure 1 illustrates the proposed framework. AI-driven workplace transformation serves as the triggering context that initiates psychological process. Individuals first interpret AI-related workplace changes through cognitive appraisal, which influences their emotional responses toward technological uncertainty, perceived threat, and loss of control. Persistent emotional responses may

subsequently challenge existing professional identities, prompting individuals to reconstruct their professional self and reconsider the meaning and purpose of work. Meaning-making, in turn, reshapes subsequent cognitive appraisals, creating a dynamic feedback process through which individuals continuously interpret and reinterpret AI-related career experiences. Throughout this process, family, organizational, and societal contexts continuously shape how individuals experience and respond to AI-related career challenges.

3.2 Core Psychological Process

AI transforms the workplace in aspects of automation, skill disruption, and career uncertainty [24,25]. Individuals may respond to AI-driven workplace transformation differently depending on how they interpret its implications for their careers. For some individuals, AI may represent an opportunity for professional growth and enhanced productivity, whereas others may perceive it as a threat to job security, competence, and identity [26-28]. Drawing upon cognitive behavioral, psychodynamic, humanistic, and existential perspectives, the psychological process explains how individuals interpret AI-related workplace changes, experience emotional responses, reconstruct their professional identities, and construct meaning regarding their future careers. Rather than functioning independently, these psychological mechanisms interact dynamically to contribute to the emergence and maintenance of AI-related career anxiety. The following sections elaborate on each psychological mechanism and illustrate how they interact to shape AI-related career anxiety.

3.2.1 Cognitive Appraisal: Interpreting AI-Related Career Threats

Cognitive appraisal represents the first stage of the psychological process through which individuals evaluate AI-driven workplace changes. Recent research indicates that employees' concerns about AI are frequently associated with uncertainty regarding future roles, skill requirements, and career sustainability rather than only direct job replacement [29]. From a cognitive-behavioral perspective, individuals do not respond directly to external events but to the meanings they assign to them, which are shaped by their underlying cognitive structures [18]. Individuals holding negative core beliefs about their competence and professional worth (e.g., "I am not competent enough") may be more likely to interpret AI-related workplace changes as threatening. These core beliefs can shape intermediate beliefs, such as the assumption that maintaining professional value requires continuously outperforming technological advancement or demonstrating abilities that AI cannot replace. When individuals encounter AI-driven workplace transformation, these beliefs may activate automatic thoughts such as "My skills will become obsolete" or "AI will replace my role". Consequently, individuals may appraise AI not merely as a technological innovation but as a threat to their career development. These cognitive appraisals shape individuals' subsequent emotional responses and constitute the initial psychological process contributing to the development of AI-related career anxiety.

3.2.2 Emotional Responses: Fear, Uncertainty, and Loss of Control

Emotional responses emerge from individuals' cognitive appraisals of AI-driven workplace transformation. From a psychodynamic perspective, these emotional responses extend beyond reactions to objective career uncertainty by activating unconscious concerns about competence, self-worth, and personal adequacy [19]. When previously valued expertise or professional roles are challenged by AI, individuals may experience fear, uncertainty, and a diminished sense of control, accompanied by deeper concerns about losing professional value and becoming replaceable. As these emotional experiences persist, they may increasingly challenge individuals' existing perceptions of themselves as professionals, facilitating subsequent identity reconstruction while reinforcing the

ongoing development of AI-related career anxiety.

3.2.3 Identity Reconstruction: Struggling to Redefine the Professional Self

As the third stage of the psychological process, identity reconstruction emerges when persistent emotional responses to AI-related workplace changes begin to challenge individuals' existing professional identities. Humanistic theory [21] suggests that psychological distress may arise when individuals experience incongruence between their current self-concept and their ideal self. In the context of AI-driven workplace transformation, individuals whose professional identities have been shaped by their occupational roles, achievements, and contributions may experience increasing tension when these sources of self-worth are challenged by technological change. As AI performs tasks traditionally associated with human expertise, individuals may begin to question the meaning of their previous accomplishments and their continued professional value. This struggle to redefine the professional self reflects individuals' difficulties in reconciling AI-driven workplace changes with their existing identities, intensifying uncertainty about their future professional roles and contributing to the development and maintenance of AI-related career anxiety.

3.2.4 Meaning-Making: Questioning Career Purpose in the AI Era

As individuals struggle to redefine their professional identities, they may also begin to question the broader meaning and purpose of their careers. Existential psychology suggests that experiences of uncertainty and identity disruption often prompt individuals to search for meaning and coherence in their lives [30]. In the context of AI-driven workplace transformation, individuals may question not only what they are capable of doing but also whether their work continues to provide personal value and significance [31,32]. When individuals are unable to develop meaningful interpretations of AI-related career changes, uncertainty regarding career purpose and personal contribution may reinforce negative evaluations of their future careers. Rather than alleviating earlier emotional distress, unresolved meaning-making may sustain uncertainty and strengthen perceptions of AI as an uncontrollable career threat. Meaning-making also functions as a feedback mechanism within the proposed framework. The meanings individuals construct regarding AI and their future careers influence subsequent cognitive appraisals, shaping whether future AI-related changes are interpreted as threats or opportunities. Therefore, meaning-making represents not an endpoint but an ongoing interpretive process through which individuals continuously renegotiate their relationship with work in an AI-transformed environment, contributing to the development and maintenance of AI-related career anxiety.

3.3 Systemic Influences across Psychological Processes

Consistent with the systems perspective discussed earlier, AI-related career anxiety should be understood as a dynamic process embedded within broader relational and environmental systems rather than an isolated individual experience. From a systems perspective, continuous interactions between individuals and their surrounding contexts shape the development of psychological experiences over time [22,33]. Family, organizational, and societal systems shape how individuals appraise AI-related workplace changes, regulate emotional responses, negotiate professional identities, and construct career meaning. For example, family expectations may influence individuals' perceptions of career success and self-worth [34], organizational practices may affect perceived control and available support during AI adoption [35], and societal narratives surrounding AI may shape collective interpretations of technological change [36]. Individuals' psychological responses may also affect how they engage with their surrounding systems. Therefore, systemic influences and psychological processes operate through a reciprocal relationship, collectively shaping the emergence

and maintenance of AI-related career anxiety.

4. Discussion

The proposed framework contributes to the understanding of AI-related career anxiety by shifting attention from technological disruption to the psychological process through which individuals interpret and experience AI-driven workplace transformation. Rather than viewing career anxiety as a direct consequence of AI advancement, this framework conceptualizes it as an emergent psychological outcome shaped by the interaction among technological changes, individual psychological mechanisms, and systemic contexts.

A key contribution of this framework is the integration of complementary counseling psychology perspectives. Cognitive behavioral perspectives explain how individuals' beliefs and appraisals shape interpretations of AI-related changes as threats or opportunities, while psychodynamic perspectives highlight deeper concerns related to competence, self-worth, and psychological security. Humanistic and existential perspectives further explain how AI disruption may challenge professional identity and career meaning. Together, these perspectives provide a more comprehensive understanding of AI-related career anxiety across cognitive, emotional, identity, and meaning-related dimensions.

Moreover, the framework emphasizes the recursive nature of the psychological process involved in AI-driven workplace transformation. Cognitive appraisal, emotional responses, identity reconstruction, and meaning-making interact dynamically, and meaning-making in turn influences future appraisals of AI-related changes. Systemic influences, including family expectations, organizational practices, and societal narratives, further shape how individuals experience and adapt to AI-related transitions. Future research may empirically examine these proposed relationships and explore how psychological processes and contextual factors jointly affect the development and maintenance of AI-related career anxiety.

5. Conclusion

This paper proposes an integrated framework from counseling psychology to understand AI-related career anxiety in the context of AI-driven workplace transformation. Instead of conceptualizing anxiety as a direct reaction to technological disruption, this framework emphasizes the psychological process individuals experience in interpreting uncertainty, coping with emotional challenges, reconstructing professional identity, and rethinking the meaning of work. AI-related occupational anxiety stems from the dynamic interaction of the psychological process, while interpersonal relationships and environmental factors shape the conditions under which individuals experience and cope with AI-driven workplace transformation. By adopting a counseling psychology perspective, this framework emphasizes that adapting to AI involves not only coping with technological uncertainty but also understanding how individuals reconstruct self-perception, professional identity, and the meaning of work. Ultimately, this framework underscores the importance of supporting individual psychological adaptation during ongoing technological transformation, thus laying the foundation for future research and counseling practice.

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