The Unseen Force: How AI Anxiety Shapes Career Decisions

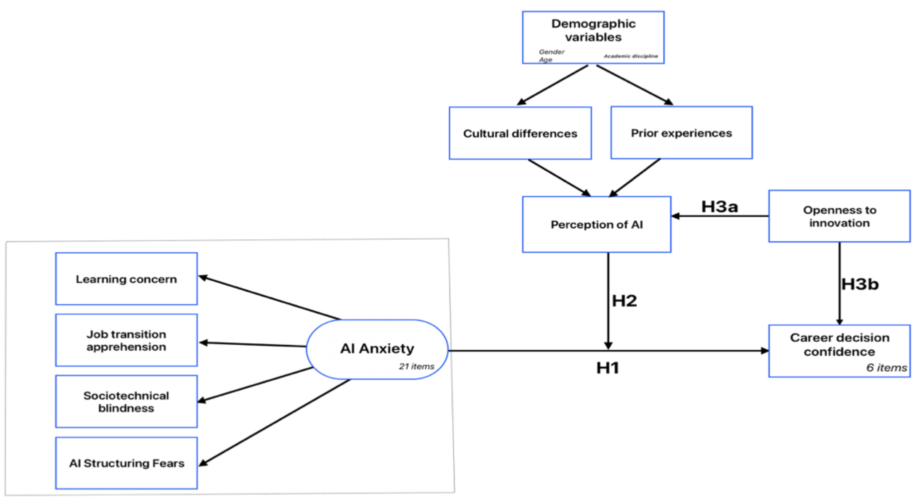
Artificial intelligence (AI) has rapidly become an integral part of daily life, shaping the ways individuals learn, work, and communicate. Although AI is designed to simplify human tasks (Gansser & Reich, 2021), its rapid development has also created uncertainty—especially for university students who are making important career plans. As a result, understanding how students perceive AI and how these perceptions affect their career expectations is now an important research area.

In this study, AI anxiety is defined as a broad set of emotional and cognitive reactions toward AI technologies. This definition matches the four dimensions of the AI Anxiety Scale (Wang & Wang, 2022): AI learning anxiety, job-transition anxiety, sociotechnical blindness, and AI configuration anxiety. These dimensions reflect worries about learning AI-related skills, fears of job loss or job change, misunderstandings about how dependent AI is on human input, and discomfort with human-like AI systems. Such concerns may lower students' confidence in making career decisions or change how they view technological developments.

Previous research shows that individual differences—such as gender, academic field, and personal values—shape how people interpret AI. Some students feel uncertain and less confident in their career choices, while others become more motivated to gain new technological skills when AI is connected to their academic goals (Wang et al., 2023). In this study, openness to innovation is included as a moderator. Students who are more open to new experiences may respond to AI more positively and may be better at adapting to technological change.

Demographic variables (gender, age, academic field) are used as control variables, which means they will not be treated as predictors but will help clarify whether the main psychological relationships remain stable when background differences are considered.

The purpose of this study is to explore the relationship between AI anxiety and career decision confidence among university students and to identify demographic and psychological factors—such as age, gender, academic field, and openness to innovation—that may shape this relationship. The proposed research model is presented in Figure 1.



This research uses a quantitative survey design, and data collection is ongoing. Three established instruments were administered:

- AI Anxiety Scale, developed by Wang and Wang (2022), has strong reliability (α = .964), with its four subscales showing high internal consistency (α = .917–.974), and measures various forms of AI-related anxiety.
- Career Decision-Making Confidence Scale by Lounsbury et al. (1999) shows good reliability (α = .82-86) and assesses students' confidence in making career choices.
- Openness to Experience subscale of the IPIP-NEO-FFI-50, adapted by Strus et al. (2014), demonstrates acceptable reliability (α = .77) and measures students' openness to new ideas and experiences.

These tools were selected for their strong psychometric properties and suitability for measuring the constructs central to the theoretical model. The investigation is correlational, aiming to test whether (1) AI anxiety predicts lower career decision confidence, (2) AI perception mediates this relationship, and (3) openness to innovation moderates the impact of both AI anxiety and AI perception on students' career confidence.

By analyzing emotional reactions to AI together with personality and demographic factors, this study aims to provide a clearer understanding of how AI shapes students' career planning. The results may help educators, career advisors, and policymakers support young adults as they face an increasingly AI-driven job market.

References

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