Journal of Global Economic Insights, 2026, 2(2), 1-12
https://doi.org/10.71204/dt1xcd81

Dual Cognition and Career Preparation of Accounting Undergraduates under Digital Intelligence: A Study from the Perspective of Conservation of Resources Theory

Ying Feng [1, *], Lu Feng [1], Haochen Sun [1], Chenlin Jia [1],Yutong Du [1]

[1] Beijing City University, Beijing 101300, China

*** Correspondence:**

Ying Feng

669276549@qq.com

Received: 2 October 2026 / Accepted: 9 November 2026 / Published online: 10 November 2026

Abstract

Digital technologies, including big data, artificial intelligence, and cloud computing, are transforming the accounting industry and accelerating the shift toward intelligent finance. Traditional accounting roles are being reshaped, while a structural mismatch persists between university training and labor-market demand. Accounting students therefore face uncertainty about job displacement and employment prospects. Drawing on conservation of resources (COR) theory and career resilience theory, this study conceptualizes threat cognition and resource cognition as two dimensions of students' perceptions and develops a threat cognition–resource cognition–career preparation framework. A questionnaire survey yielded 110 valid responses. The study used five-point Likert scales and descriptive statistical analyses. Students generally recognize both the opportunities and threats associated with industry transformation and report strong motivation to prepare for their careers. However, few have practical experience with digital-intelligence tools, suggesting a gap between career-preparation intentions and concrete action. The study proposes recommendations for universities and students. Universities should improve curricula and practical training, while students should strengthen their digital capabilities and career resilience. The findings may inform accounting education and efforts to enhance students' sustainable employability.

Keywords: Digital Intelligence; Accounting Undergraduates; Employment Anxiety; Career Resilience; Conservation of Resources Theory; Talent Development

1. Introduction

The growing adoption of digital technologies has brought big data, artificial intelligence, robotic process automation (RPA), cloud computing, and financial shared-service systems into many aspects of the accounting industry. As a result, accounting work is shifting from routine

bookkeeping toward areas such as management accounting and intelligent finance. Repetitive tasks—including bookkeeping, document verification, bank reconciliation, and tax filing—are increasingly being automated by intelligent financial systems. Corporate finance functions are becoming more streamlined, and the number of entry-level accounting positions may decline.

The accounting industry increasingly values practitioners who can apply digital technologies, integrate business and finance, and organize and analyze data. However, accounting curricula at many domestic universities remain focused on traditional subjects such as basic accounting, financial accounting, and auditing. Digital courses covering Python, SQL, Power BI, and financial robotics are less widely available. Consequently, graduates may not fully meet the industry's evolving needs, creating a mismatch between talent development and market demand. Against this backdrop, students may worry that artificial intelligence will replace some of their prospective jobs. Uncertainty about career development and employment pressure may also make career planning more difficult. This study examines why accounting undergraduates engage in career-preparation behaviors and how they prepare for their future careers amid digital transformation.

Drawing primarily on conservation of resources (COR) theory, this study distinguishes between two dimensions of students' perceptions: threat cognition and resource cognition. Threat cognition refers to students' assessments of whether intelligent-finance technologies may replace jobs they aspire to obtain. Resource cognition refers to their assessments of their professional knowledge, practical skills, internship experience, professional certificates, and available learning resources. COR theory proposes that individuals strive to obtain, retain, and protect valued resources and experience stress when those resources are threatened or lost (Hobfoll, 1989; Hobfoll et al., 2018). When students perceive a high risk of job displacement but believe that their professional resources are insufficient, they may invest more time and effort in career preparation, including coursework, professional certification, and internships. Conversely, underestimating industry-related risks or overestimating their own competencies may weaken their motivation to prepare. Thus, students' threat and resource cognitions may be associated with their career-preparation behaviors. Although prior studies have discussed COR theory and career resilience, the relationship among threat cognition, resource cognition, and career preparation in the context of digital transformation warrants further investigation. This study explores accounting undergraduates' career preparation in this context and identifies potential cognitive biases and practical shortcomings.

This study uses COR theory as its primary theoretical foundation and career resilience theory as a supplementary perspective. It follows several steps. First, the relevant literature is reviewed to define the study variables and clarify their conceptual relationships. Second, an initial questionnaire is developed based on the literature and refined through a pilot investigation; reliability and validity are then assessed before the formal survey. Third, questionnaires are administered to accounting undergraduates at multiple universities. Responses are collected using four scales with five-point Likert items. Descriptive statistics, group-difference tests, and correlation analyses are used to examine the survey data. Finally, drawing on the findings, the study proposes recommendations for curriculum development and career-planning guidance from the perspectives of universities and individual students. The findings may help universities identify students' perceptions and career-

preparation needs and improve training programs for accounting majors in the digital intelligence era.

2. Relevant Theoretical Foundations

2.1. Definition of Core Concepts

2.1.1. Digital Resilience

Digital resilience refers to an individual's capacity to adapt to technological change, respond to occupational risks, and adjust their skills and capabilities in a changing digital environment. In accounting, the wider use of RPA and big data has changed the demand for traditional accounting tasks. Students' digital resilience is reflected in their ability to assess technological change realistically, acquire digital-finance skills, and address capability gaps. These abilities may help them manage employment uncertainty and sustain their career development. Digital resilience is therefore an important capability for accounting professionals in the digital intelligence era.

2.1.2. Academic and Employment Development of Accounting College Students

The academic and career development of accounting undergraduates encompasses their learning activities during university, including knowledge acquisition, skills development, and professional certification, as well as career planning and preparation for employment in response to industry needs. Traditional accounting education often emphasizes accounting and bookkeeping but may not fully address the requirements of intelligent finance and data analysis (Liu & Chen, 2025; Wang & Li, 2024). Students' academic engagement and skill profiles may therefore affect their employability and are central to this study.

2.1.3. Technological Dividend and Replacement Anxiety

Technological dividends and replacement anxiety are related aspects of digital transformation. Technological dividends arise when intelligent technologies automate repetitive tasks and create or expand roles in areas such as financial analysis (Tong, 2025). Replacement anxiety refers to students' uncertainty about employment and confusion about what skills to develop as they observe changes in entry-level jobs and employer expectations (Zhang & Wang, 2024). Such perceptions may influence how students prepare for their careers.

2.2. Conservation of Resources Theory

COR theory, proposed by Hobfoll (1989), holds that individuals strive to obtain, retain, and protect resources they value. Perceived resource loss, inadequate resources, or threats of future loss can cause psychological stress and motivate individuals to take action to protect or replenish their resources. Hobfoll et al. (2018) further discussed the relevance of this theory to organizational contexts. In a review of the theory, Cao and Qu (2014) explained its potential for understanding the choices and actions individuals take under pressure.

For accounting students, relevant personal resources include professional knowledge, digital skills, internship experience, professional certificates, and learning opportunities. As the industry changes, the value of some traditional accounting skills may decline. If students believe that their existing

resources are insufficient to respond to changing job requirements, they may experience anxiety and adjust their career-preparation behaviors, for example, by pursuing professional certificates or digital-skills training. COR theory therefore provides a useful basis for examining the relationship between students' perceptions of threats and resources and their career-preparation behaviors (Cao & Qu, 2014; Hobfoll, 1989).

2.3. Career Resilience Theory

Career resilience refers to an individual's ability to adapt to a changing work environment and recover from career-related setbacks (Li et al., 2011). Li et al. (2011) describe career resilience as both a relatively stable psychological characteristic and a dynamic process of adjustment when individuals encounter career difficulties. Chen and Wang (2012) similarly suggest that people with stronger career resilience are better able to respond to changes in the occupational environment, address capability limitations, and engage in career-development activities.

For accounting majors, career resilience may help alleviate anxiety about technological displacement and transform pressure into motivation to learn. Students with stronger resilience may be more likely to assess industry changes realistically, identify capability gaps, and address them proactively. By contrast, students with lower resilience may experience greater anxiety, become passive in their learning, or have difficulty developing clear career plans (Chen & Wang, 2012; Li et al., 2011). Career resilience is used here as a supplementary perspective for understanding why students' perceptions do not always translate into action.

2.4. Logic of Theoretical Application

This study uses COR theory (Cao & Qu, 2014; Hobfoll, 1989; Hobfoll et al., 2018) as its main framework and career resilience theory (Chen & Wang, 2012; Li et al., 2011) as supplementary support. The accounting industry's digital transformation may create perceived threats to employment (Tong, 2025; Zhang & Wang, 2024). Students assess their own resources by considering their academic knowledge, skills, and practical experience, and judge whether these resources are sufficient to meet changing job requirements. Their career-preparation behaviors may then reflect both their threat and resource cognitions, alongside their capacity to cope with career-related pressure.

Together, these theories provide a basis for examining why accounting students experience technology-related career anxiety and what may motivate them to prepare for employment. They also inform the analytical framework and the recommendations developed in this study.

3. Research Design

3.1. Research Subjects

The survey targeted undergraduate students majoring in accounting and related fields in the context of digital transformation. The online questionnaire was distributed to students at several universities, yielding 110 valid responses. As shown in Table 1, women accounted for 63.64% of respondents and men for 36.36%. Sophomores constituted the largest group (56.36%), followed by

juniors (21.82%), freshmen (17.27%), and seniors (4.55%). In terms of major, accounting students accounted for 44.55%, financial management students for 38.18%, auditing students for 9.09%, and students in other accounting-related majors for 8.18%. Regarding exposure to digital-intelligence tools, 22.86% had never used tools such as financial robots or big-data-based financial analysis systems, 66.67% had encountered relevant content only in coursework, and 10.48% had used such tools in practical tasks. Overall, most respondents had theoretical exposure but limited hands-on experience.

Table 1. Demographic Characteristics of the Sample

Survey Item	Option	Subtotal	Percentage
Gender	Male	40	36.36%
	Female	70	63.64%
Grade	Freshman	19	17.27%
	Sophomore	62	56.36%
	Junior	24	21.82%
	Senior	5	4.55%
Major Direction	Accounting	49	44.55%
	Financial Management	42	38.18%
	Auditing	10	9.09%
	Other Accounting-related Majors	9	8.18%

3.2. Research Instruments

This study used four scales: the Dual-Cognition Scale for Digital Transformation, the Resource-Conservation Strategy Scale, the Career Resilience Scale, and the Career-Preparation Behavior Scale for Accounting Undergraduates. All items were rated on a five-point Likert scale.

The Dual-Cognition Scale for Digital Transformation covers two dimensions: perceived technological opportunities and anxiety about occupational substitution. The Resource-Conservation Strategy Scale measures students' resource-acquisition and resource-protection behaviors in response to industry change. The Career Resilience Scale assesses students' psychological capacity to cope with pressures associated with digital transformation. The Career-Preparation Behavior Scale for Accounting Undergraduates assesses preparation in three areas: coursework, professional-certification examinations, and practical training.

3.3. Data Collection

A total of 110 valid questionnaires were collected. The survey examined accounting undergraduates' perceptions of digital transformation, resource conservation, career resilience, and career-preparation behaviors to describe the sample and its overall attitudes. Figure 1 summarizes selected findings.

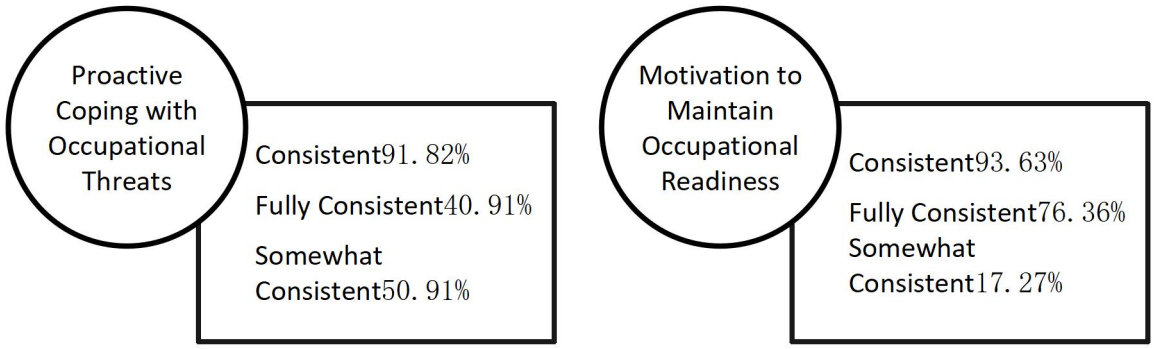


Figure 1. Occupational Coping Behaviors and Career-Preparation Intentions

Figure 1 shows that 91.82% of respondents were willing to respond proactively to occupational threats by obtaining professional certificates or completing internships, while 93.63% reported positive motivation to prepare for their careers. Students therefore appear to recognize both the opportunities and the threats associated with digital transformation. Although many are concerned about a reduction in job openings, they also see opportunities arising from technological change and are willing to broaden their career options. Overall, respondents reported strong learning initiative and positive career-preparation intentions.

Most respondents were sophomores, and many had encountered digital-intelligence tools only through coursework rather than practical application. The findings suggest that students recognize both the opportunities and risks associated with digital transformation in accounting. They generally believe that digital technologies can support career development and expand career opportunities, while also acknowledging the possibility that traditional roles may be displaced. Respondents reported relatively positive attitudes toward career preparation. However, their intentions do not necessarily translate into concrete actions, as illustrated in Figure 2.

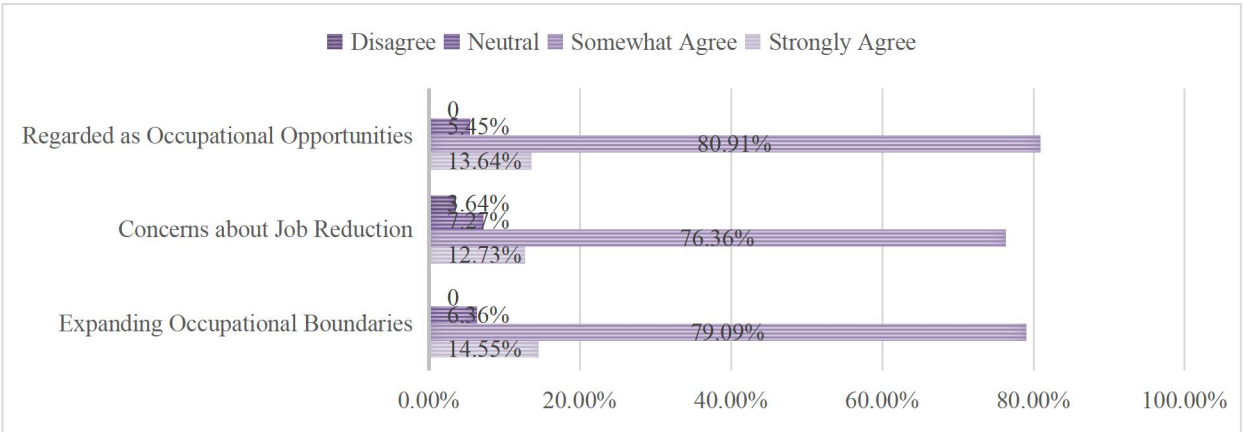


Figure 2. Occupational Perceptions: The Coexistence of Opportunities and Threats

Figure 2 indicates that accounting students perceive digital transformation as involving both opportunities and threats. These perceptions can be examined from three perspectives.

(1) Perceiving Digital Transformation as an Occupational Opportunity

The questionnaire results indicate that approximately 90% of respondents recognize the development opportunities that digital technologies may create in the accounting industry. They believe that these technologies can create opportunities for personal growth and generally view technology-enabled industry development positively. Overall, students tend to regard digital transformation as a potential career opportunity, are willing to adapt to technological change, and report positive motivation to prepare for their careers.

(2) Concerns about the Risk of Job Displacement

Students are aware that digital transformation may reduce the number of some jobs and intensify labor-market competition. Most recognize the possibility that traditional entry-level positions may be displaced. However, perceived threats appear less prominent than the opportunities identified by respondents. Some students remain neutral or disagree that job displacement is inevitable or imminent. Overall, students appear to take a balanced view of industry change: they recognize potential opportunities while acknowledging the risk of occupational displacement.

(3) Recognizing That Digital Technologies May Broaden Career Opportunities

Most respondents believe that new technologies may broaden career opportunities in accounting, and very few express negative views. Students show similar response patterns for the items concerning broader career opportunities and the perception of occupational opportunities. However, they assess their own capabilities more cautiously. Around 20% of respondents are neutral, potentially reflecting awareness of gaps between their current skills and the requirements of digital accounting roles. Although many intend to prepare through certification, internships, and training, a gap remains between their perceptions and practical action.

Overall, respondents demonstrate a balanced perception of the opportunities and risks associated with digital transformation. They assess their personal resources relatively cautiously while reporting positive behavioral intentions and career motivation. The apparent gap between intentions and actual behavior warrants further investigation.

4. Analysis and Countermeasure Suggestions

4.1. Research Status and Existing Problems

Based on 110 valid questionnaire responses, this study examines accounting undergraduates' career preparation amid digital transformation and identifies several challenges.

First, students have limited practical experience with digital accounting tools. Only 10.48% of respondents reported relevant hands-on experience. Most students acquire accounting knowledge primarily through coursework, while opportunities for computer-based practice and university–industry training appear limited. This may leave students with insufficient opportunities to develop practical skills.

Second, students' perceptions of digital transformation vary. Although most recognize both industry opportunities and the risk of job displacement, some may underestimate these risks, whereas others experience substantial employment anxiety. Students may recognize gaps in their capabilities and report strong learning motivation, yet still struggle to translate that motivation into action.

Third, students' learning may not fully match industry requirements. Many focus on textbook knowledge and professional-certification examinations, while having limited experience with Python, RPA, data analysis, and other digital skills. As a result, they may not yet have developed the interdisciplinary capabilities that combine accounting knowledge with digital technology.

4.2. Countermeasure Suggestions

4.2.1. University Talent Cultivation

(1) Optimize the curriculum to develop digital-accounting capabilities. Universities should offer a broader range of courses in intelligent finance, such as RPA applications, Python-based financial data analysis, and enterprise resource planning (ERP) systems. Digital training should also be integrated into traditional courses, including financial accounting, auditing, and financial management, with more computer-based practice to narrow the gap between theory and practice.

(2) Strengthen university–industry collaboration in practical training. Universities should develop on-campus training platforms based on realistic business scenarios, such as voucher processing, account reconciliation, and tax filing, where students can use RPA and intelligent tax tools. They should also expand internship opportunities in intelligent finance and financial analysis to help students gain practical experience.

(3) Improve career guidance to address perceptual biases. Universities should offer lectures based on real-world business cases to help students understand the opportunities and risks associated with digital transformation. Career guidance should encourage students to assess their existing resources, prioritize learning tasks, and channel employment anxiety into constructive learning motivation.

4.2.2. Individual Students

(1) Develop a balanced understanding of digital transformation. Students should follow changes in the accounting industry and assess technological displacement risks objectively, avoiding both excessive anxiety and complacency. They should identify their own capability gaps and actively develop digital skills alongside traditional accounting knowledge.

(2) Increase practical digital training and develop interdisciplinary capabilities. Students can use online platforms to learn RPA, ERP systems, and data analysis. They should also participate in training programs, competitions, and internships to apply theoretical knowledge in practical settings. Professional-certification preparation should be planned alongside the development of digital skills.

(3) Strengthen career resilience and translate perceptions into action. Students should maintain sustainable learning motivation during industry transformation, set phased learning goals, and break employment-related concerns into manageable tasks. These steps may help improve their competitiveness in the digital intelligence era.

5. Conclusions

5.1. Current Status and Practical Dilemmas of Accounting Majors' Career Preparation

Rapid advances in digital technologies are changing the skills required in the accounting industry. Routine accounting and bookkeeping tasks are increasingly automated, while demand is growing for interdisciplinary professionals with both accounting expertise and digital analytical capabilities. This creates challenges for universities seeking to align accounting education with industry needs. Drawing on COR theory and career resilience theory, this study develops a framework linking threat cognition, resource cognition, and career preparation. Based on 110 valid questionnaire responses, it describes accounting undergraduates' perceptions of digital transformation, career resilience, and career-preparation intentions and behaviors.

The findings suggest that accounting undergraduates generally recognize both the opportunities and challenges associated with digital technologies. They acknowledge that these technologies may broaden the scope of accounting work while also posing a risk to some traditional positions. Respondents report cautious assessments of their own capabilities and generally strong motivation to prepare for their careers. However, several shortcomings remain. First, most respondents have encountered digital-accounting topics mainly through theoretical coursework, and only a small proportion have practical experience with digital tools. Second, some students may underestimate the risks associated with occupational change, whereas others experience excessive anxiety. Third, and importantly, students may find it difficult to translate their willingness to learn into concrete preparation, such as systematic practical training and skills development. Their interdisciplinary capabilities may therefore lag behind changing industry requirements.

Several factors may contribute to these challenges. University curricula remain largely focused on traditional accounting subjects, with limited practical training in digital technologies. University–industry collaboration may also provide insufficient exposure to real business scenarios. In addition, some students may lack clear self-assessments and well-defined career plans, making it difficult to turn concerns about industry change into constructive action.

The study therefore proposes recommendations for both universities and students. Universities should develop curricula for digital accounting, integrate digital content into conventional accounting courses, strengthen university–industry training platforms, and provide targeted career guidance. Students should develop a balanced understanding of industry change, address gaps in their practical digital capabilities, strengthen career resilience, clarify learning objectives, and translate their intentions into career-preparation behaviors.

5.2. Theoretical Contributions and Practical Implications of This Study

Theoretically, this study applies COR theory to the career preparation of accounting undergraduates by distinguishing between threat cognition and resource cognition and examining their relationship with career-preparation behaviors. It extends the application of COR theory to accounting education in the context of intelligent finance. Career resilience theory provides a supplementary perspective for interpreting the gap between awareness and action, while the

discussion of digital resilience offers a basis for further research on students' adaptation to technological change.

Practically, the survey identifies perceived shortcomings in digital capabilities and differences in how accounting undergraduates understand industry transformation. The recommendations may inform curriculum reform, the development of practical-training platforms, and career-guidance services for accounting majors. They may also help students understand industry change, identify areas for improvement, and strengthen their sustainable employability.

This study has several limitations. First, the sample comprises only 110 valid responses, and sophomores account for a relatively large proportion, which limits the representativeness of the findings. Second, the cross-sectional questionnaire design captures perceptions and reported behaviors at one point in time and cannot track changes as students progress through university or as technologies evolve. Third, the data are self-reported and may therefore be subject to reporting bias.

5.3. Prospects for Future Research

Future research could address these limitations in several ways. First, researchers could expand the sample to include students from universities of different types, students at more year levels, and recent accounting graduates. Longitudinal surveys could track changes in threat cognition, resource cognition, and their relationships with longer-term employment outcomes. Second, contextual variables—such as family support, teaching quality, and employer feedback—could be incorporated to examine whether external conditions shape the relationship between students' perceptions and career preparation. Third, locally tailored measurement instruments and mixed methods, including interviews and case studies, could help explain the barriers that prevent students from translating awareness into action. Finally, future studies could compare university graduates' capabilities with employers' competency requirements to provide further evidence for reforming accounting education in the digital intelligence era.

Author Contributions:

Conceptualization, Y. F, Y. D and C. J; methodology, H. S and C. J; questionnaire survey, L. F; formal analysis, Y. F, L. F and Y. D; investigation, L. F; data curation, L. F; writing—original draft preparation, Y. F, L. F, H. S, C. J and Y. D; writing- summary, Y. D; writing- review and editing, Y. F; visualization, Y. F,L.F. All authors have read and agreed to the published version of the manuscript.

Funding:

This research was funded by the Student Innovation and Entrepreneurship Training Program of Beijing City University, grant number S202611418098.

Institutional Review Board Statement:

Not applicable.

Informed Consent Statement:

Not applicable.

Data Availability Statement:

Not applicable.

Acknowledgments:

The authors would like to express their gratitude to Rui Cui for her guidance, to all college student respondents who participated in this questionnaire survey, and to the team members for their support in questionnaire distribution and data sorting.

Conflict of Interest:

The authors declare no conflict of interest.

References

Cao, X., & Qu, J. (2014). Tracing the origin of conservation of resources theory, analyzing its main contents and implications. Human Resources Development of China, (15), 75–81. https://doi.org/10.16471/j.cnki.11-2822/c.2014.15.008

Chen, M., & Wang, Y. (2012). A literature review of career resilience. Chinese Journal of Ergonomics, 18(3), 92–95. https://doi.org/10.13837/j.issn.1006-8309.2012.03.007

Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. American Psychologist, 44(3), 513–524.

Hobfoll, S. E., Halbesleben, J., Neveu, J.-P., & Westman, M. (2018). Conservation of resources in the organizational context: The reality of resources and their consequences. Annual Review of Organizational Psychology and Organizational Behavior, 5, 103–128.

Li, X., Xie, J., & Zhang, L. (2011). A review of research on career resilience. Advances in Psychological Science, 19(7), 1027–1036.

Liu, J., & Chen, J. (2025). Research on the employability cultivation of accounting undergraduates in the intelligent finance era. Theory and Practice of Education, 45(3), 22–26.

Tong, X. (2025). Research on the training mode of accounting talents under the background of financial digital-intelligent transformation. China Collective Economy, (34), 193–196.

Wang, L., & Li, N. (2024). Research on curriculum system reform of accounting majors under digital intelligence. Friends of Accounting, (8), 156–160.

Xu, L. (2025). Value orientation and resilience improvement: New progress in digital resilience research. Social Work and Management, (6), 1–9.

Zhang, M., & Wang, Y. (2024). Research on the impact of artificial intelligence on the accounting industry and talent transformation paths. Communication of Finance and Accounting, (12), 167–172.

License: Copyright (c) 2026 Author.
All articles published in this journal are licensed under the Creative Commons Attribution 4.0 International License (CC BY 4.0). This license permits unrestricted use, distribution, and reproduction in any medium, provided the original author(s) and source are properly credited. Authors retain copyright of their work, and readers are free to copy, share, adapt, and build upon the material for any purpose, including commercial use, as long as appropriate attribution is given.