

AN EXAMINATION OF COMMUNICATION FACULTY STUDENTS' CAREER ANXIETY LEVELS IN THE AGE OF ARTIFICIAL INTELLIGENCE

UMA ANÁLISE DOS NÍVEIS DE ANSIEDADE PROFISSIONAL DE ALUNOS DO CURSO DE COMUNICAÇÃO NA ERA DA INTELIGÊNCIA ARTIFICIAL

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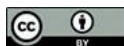
Abstract

In today's digitalized world, artificial intelligence (AI) transforms not only technological innovation but also social and professional structures. The communication sector is among the most affected fields. This study examines how the impact of AI on professional roles and employment expectations shapes the future-oriented anxiety of communication faculty students. A quantitative study was conducted with 377 students from four universities in Istanbul. Data were collected through an online questionnaire and analyzed using SPSS 25.0. Reliability and validity tests were followed by factor analysis, Mann-Whitney U test, Kruskal-Wallis test, and Spearman correlation analyses. Findings indicate that students' career-related anxiety has a multidimensional structure. Those perceiving AI as a competitor report higher levels of professional anxiety, while those viewing it as an opportunity for development show lower anxiety and even positive effects on learning motivation. No significant gender differences were found. Overall, the study demonstrates that communication students' professional anxiety in the age of AI is shaped by threat perception, individual motivation, self-efficacy, and adaptation strategies. The results emphasize the need for universities to strengthen curricula with AI-driven competencies and to develop policies preparing students for the future labor market.

Keywords: Artificial Intelligence. Communication Students. Career Anxiety. Digitalization.

Resumo

No mundo digitalizado de hoje, a inteligência artificial (IA) transforma não apenas a inovação tecnológica, mas também as estruturas sociais e profissionais. O setor da comunicação está entre as áreas mais afetadas. Este estudo examina como o impacto da IA nas funções profissionais e nas expectativas de emprego molda a ansiedade voltada para o futuro dos estudantes de comunicação. Foi realizado um estudo quantitativo com 377 estudantes de quatro universidades em Istambul. Os dados foram coletados por meio de um questionário online e analisados utilizando o SPSS 25.0. Testes de confiabilidade e validade foram seguidos por análise fatorial, teste U de Mann-Whitney, teste de Kruskal-Wallis e análises de correlação de Spearman. Os resultados indicam que a ansiedade dos estudantes relacionada à carreira possui uma estrutura multidimensional. Aqueles que percebem a IA como um concorrente relatam níveis mais elevados de ansiedade profissional, enquanto aqueles que a veem como uma oportunidade de desenvolvimento apresentam menor ansiedade e até mesmo efeitos positivos na motivação para a aprendizagem. Não foram encontradas diferenças significativas entre os sexos. De modo geral, o estudo demonstra que a ansiedade profissional dos estudantes de comunicação na era da IA é moldada pela percepção de ameaça, motivação individual, autoeficácia e estratégias de adaptação. Os resultados enfatizam a necessidade de as universidades fortalecerem os currículos com competências orientadas para a IA e desenvolverem políticas que preparem os estudantes para o futuro mercado de trabalho.



Palavras-chave: Inteligência Artificial. Estudantes de Comunicação. Ansiedade Profissional. Digitalização.

1 INTRODUCTION

The rapidly advancing process of digitalization today not only generates transformation within technological infrastructures but also profoundly redefines business practices, significantly influencing the perceived value of existing goods and services. Moreover, this transformation intensifies the demand for swift, flexible, and efficient processes, compelling organizations operating across diverse sectors to undergo a comprehensive structural adaptation in order to preserve their competitive advantage.

The integration of artificial intelligence applications into the business processes of nearly all industries stands out as one of the most visible impacts of digitalization. Within the context of the communication sector, professionals encounter these developments across a wide spectrum of activities, ranging from content distribution to news production, from data analysis to customer services. While advancements driven by artificial intelligence-accelerating at an unstoppable pace-create positive effects in processes such as productivity and efficiency, they simultaneously introduce uncertainties concerning role transformations, job security, and skill expectations. Furthermore, students approaching graduation or entering the job market thereafter may perceive artificial intelligence technologies as a dual phenomenon: on the one hand offering opportunities, yet on the other intensifying anxieties about the future of their professions.

While forecasts regarding the future of numerous occupational fields in the wake of artificial intelligence are frequently shared, communication faculty students also appear destined to grapple with both traditional professional uncertainties and the new risks engendered by these transformations. In this context, the concept of professional anxiety-requiring critical consideration-is rooted in uncertainties surrounding students' employment prospects and the implications of artificial intelligence for professional roles. Gaining an understanding of students' professional anxieties is of great significance, particularly for educational institutions, as it may inform the revision of curricula when

necessary and the development of competencies tailored to students' future needs. Taking these dynamics into account, this study aims to examine the levels of professional anxiety experienced by communication faculty students in the era of artificial intelligence. To this end, the research sample consisted of 377 students from Istanbul Topkapı University, Marmara University, Istanbul University, and Istanbul Bilgi University, with data collected through the survey method, one of the quantitative research techniques.

2 THE IMPACT OF ARTIFICIAL INTELLIGENCE ON THE COMMUNICATION SECTOR

Artificial intelligence, now regarded as far more than a mere technological innovation, has become a fundamental force shaping the transformation of contemporary societies. Numerous stories, narratives, and scenarios that, at the beginning of the twentieth century, appeared confined to the realm of science fiction and deemed unattainable have, today, become integral components of everyday life through artificial intelligence applications.

First conceptualized in 1921 within a theatrical play by Karel Čapek, robot technologies were redefined in the 1980s as programmable mechanical systems in industrial production. However, this technological evolution was not confined to the industrial domain; rather, it expanded across multiple sectors—including energy, agriculture, healthcare, automotive, software development, and, most notably, communication technologies—thereby engendering a comprehensive transformation. Today, within a wide spectrum ranging from voice assistants to online chatbots, artificial intelligence redefines human-machine interaction and reshapes the job descriptions of numerous professional groups (Arslan, 2020, p. 75). Positioned at the core of this transformation, artificial intelligence has transcended its role as a mere tool to emerge as a paradigm that actively shapes both societal and professional structures.

Conceptually, artificial intelligence constitutes a multidimensional field that seeks to replicate cognitive functions specific to the human mind through machines. Accordingly, it may be regarded not merely in terms of computational capacity but rather as a system that models more complex processes such as perception, learning, and decision-making.

Today, along with its subfields such as machine learning, natural language processing, image recognition, and recommendation systems, artificial intelligence assumes pivotal roles across a wide range of sectors, from education to healthcare and from security to communication. In particular, the communication sector is profoundly influenced by AI-based automation systems, especially in its core functions such as content production and distribution.

Since its inception, the concept of artificial intelligence has been defined in various ways across different disciplines, with these definitions diversifying further in parallel with technological advancements. In the literature, AI is frequently approached as the design and implementation of systems capable of performing cognitive functions unique to human intelligence. One of the pioneers of the concept, John McCarthy, defines artificial intelligence as “the science and engineering of making intelligent machines, especially intelligent computer programs” (McCarthy, 2004, p. 2). He further emphasizes that AI is related to attempts to understand human intelligence, yet it is not confined to biologically observable methods. This perspective underscores that artificial intelligence not only seeks to imitate human intelligence but also encompasses the reconstruction of intelligence in different forms, thereby constituting a broad scientific and technical field.

In another definition, AI is associated with the ability to predict and generate previously unavailable knowledge through existing data (Agrawal *et al.*, 2017, p. 2). As observed, the literature presents a wide array of definitions based on different perspectives. Some conceptualizations view AI as the execution of cognitive functions through machines, while others frame it in terms of its functions of prediction, decision-making, or environmental responsiveness. Despite this diversity, a common thread emerges in positioning AI as an assemblage of systems that simulate, augment, or expand processes intrinsic to human intelligence. Indeed, Jiang *et al.* (2022, p. 1) define artificial intelligence as a field encompassing theoretical approaches, methodologies, technologies, and applications developed with the aim of imitating, extending, and transforming human intelligence. In sum, artificial intelligence emerges as a multilayered reality, not only in its technical dimension but also through its societal and professional implications.

Historical reflections on artificial intelligence originated long before modern science, taking root in the cultural and mythological heritage of humanity. As McCorduck observes, the human desire to create a likeness of oneself has been part of an enduring

imagination, extending from antiquity through the “transformation of art into science.” This imaginative pursuit acquired a new trajectory with the emergence of computers in the early 1950s. The computer was embraced as the most powerful instrument through which the idea of artificial intelligence could be materialized, providing a medium in which forms of intelligence once confined to imagination could technically be realized. Thus, AI evolved from the notion of divine creative power enacted by human hands into a systematic inquiry situated within the domains of engineering and science (McCorduck, 1977, pp. 951–952).

The human aspiration to construct an artificial system resembling the mind manifested itself across numerous mythological and intellectual imaginaries throughout history, yet by the twentieth century, this imaginative quest increasingly gave way to scientifically grounded systems. One of the most pivotal milestones in this transformation was marked by Alan Turing’s article “Computing Machinery and Intelligence,” published in *Mind* in 1950. This seminal work, a cornerstone in the theoretical debates on artificial intelligence, introduced the “Turing Test” as a framework to evaluate whether machines possess the capacity to think and respond in ways akin to humans. Russell and Norvig (2016, pp. 2–3) examine artificial intelligence through four perspectives: thinking like humans, acting like humans, thinking rationally, and acting rationally. The Turing Test centers on the dimension of “acting humanly,” positing that a computer, when equipped with abilities such as natural language processing, knowledge representation, reasoning, and learning, could convey the impression of a human-like mind. This approach underscores the necessity of analyzing the concept not only through its technical aspects but also across cognitive and philosophical dimensions.

Although Alan Turing is recognized as the pioneer of artificial intelligence thought, the term artificial intelligence was first introduced in 1956 during a workshop at Dartmouth College under the leadership of John McCarthy (Coşkun & Gülleroğlu, 2021, p. 949). Subsequent developments spurred new research, as increases in computing power, advances in algorithms, and the exponential growth of data provided significant momentum for AI. Initially examined within academic circles as a theoretically grounded subject, artificial intelligence gradually evolved into practical applications, establishing its presence in everyday life. Indeed, in recent years, it has begun to shape professional practices across a wide spectrum—ranging from natural language processing and

automation to predictive analytics—and has transformed processes in diverse fields, from manufacturing to the service sector, and from healthcare to customer relations. The communication sector, which constitutes the focus of this study, may likewise be regarded as a significant domain affected by this transformation.

In contemporary society, the communication sector—now one of the most crucial components of social, economic, and public functioning—has far surpassed its original role of merely facilitating interpersonal interaction. Indeed, the U.S. Cybersecurity and Infrastructure Security Agency (CISA) defines the communication sector as an inseparable part of the national economy, emphasizing that it underpins the operations of all businesses, public safety organizations, and the functioning of the state (CISA, 2021). Serving as a foundational structure in shaping the social and economic fabric of modern societies, the communication sector not only enables interpersonal exchanges but also ensures the continuity of business operations and fosters the emergence of innovative economic initiatives.

Moreover, the rapid proliferation of communication technologies has facilitated the creation of new occupational domains within the context of digitalization, transformed traditional organizational structures, and expanded the scope of influence across various industries. In this regard, the communication sector encompasses fixed and mobile telecommunication infrastructures, radio and television broadcasting, the production and distribution of digital media content, internet-based publishing and search engines, as well as postal and logistics services (Infrastructure Australia, 2016). As illustrated, the sector possesses a broad scope, representing not merely a domain that provides technological infrastructure but also a multidimensional ecosystem extending from content production to media distribution, from digital broadcasting to data transmission.

Propelled by digital transformation, these domains continue to evolve rapidly, being reshaped by advanced technologies such as artificial intelligence. In summary, the communication sector has transcended its role as a simple conduit for message transmission, transforming into a structure integrated with intelligent systems that contribute to information processing, content analysis, and decision-making processes. Through this transformation, the automation of numerous core functions—particularly content production—has become possible, thereby opening the door to the formation of a new paradigm within the field of communication.

In order to comprehensively assess the impacts of artificial intelligence within the communication sector, subcategories representing the field's diverse dimensions have been examined individually. In this context, telecommunications, media and broadcasting, digital media and communication, as well as postal and logistics services have been analyzed to reveal the concrete manifestations of AI integration.

2.1 Telecommunications

The concept of telecommunications derives from the French term *télécommunication* and is defined by the Turkish Language Association as “the transmission of all kinds of information such as messages, signals, and symbols through telephone, radio, optical, or similar electromagnetic systems.” In its simplest sense, telecommunications denotes “communication from a distance.” In today's world, however, the concept extends beyond a mere technical definition, functioning as a strategic infrastructural element that influences all spheres of social, economic, and cultural life. This form of communication has eliminated barriers to the flow of information in the globalization process, accelerating interaction among societies and substantially overcoming spatial obstacles to information access.

Historically, due to the high costs associated with infrastructural requirements, telecommunication services were provided for many years under state monopolies. Yet, from the final quarter of the twentieth century onward, privatization processes gained momentum with the aim of enhancing efficiency and stimulating investment. As a result of this transformation, the sector witnessed significant increases in both service diversity and profitability rates, driven by heightened competition (Kabaklarlı & Işıcık, 2020, p. 35). Today, the telecommunications sector, empowered by the opportunities afforded by artificial intelligence technologies, not only enhances the speed and quality of communication but also redefines the scope and nature of the services themselves.

From the commercial introduction of 3G in 2001 to the widespread adoption of 5G in 2020, mobile internet and data services underwent remarkable development; the massive volume of data generated within the communication ecosystem has provided a natural and high-quality resource for the advancement of artificial intelligence in the field of communication (Ouyang *et al.*, 2021, p. 2). In the telecommunications sector, AI

facilitates the development of faster and more powerful chips, enabling engineers to envision and design products—such as wearable smartphones—that extend the concept of personal digital assistants to new dimensions. Moreover, system designers integrate these new chips with advanced AI techniques to construct more efficient, resilient, and effective communication networks. As can be observed, the telecommunications sector, having acquired strategic significance throughout its historical evolution, now consolidates this importance with advanced technologies such as AI and 5G, thereby transcending its role as a mere medium of information transmission to emerge as a dynamic field at the very center of digital transformation and the global communication ecosystem.

2.2 Media and broadcasting

With the acceleration of digitalization, the applications of artificial intelligence technologies in media and broadcasting have expanded substantially, laying the groundwork for profound structural transformations in traditional media. For instance, within the conventional news production chain, processes of data collection, processing, and reporting—which could previously require hours or even days—can now be completed within minutes through AI-supported systems, while content is disseminated to online audiences at a significantly lower cost and much greater speed. Applications such as automated text generation, image analysis, voice recognition, and personalized content recommendation systems not only accelerate production processes but also redefine the modes of news presentation and the dynamics of audience–reader interaction. These developments have generated new spheres of debate, extending beyond the operational mechanisms of media institutions to encompass the ethical, economic, and societal dimensions of journalism.

Among the technologies employed in the publishing industry, artificial intelligence stands out as one of the most effective tools capable of integration across diverse domains and sectors. The rapid advancement of AI capabilities in recent years has markedly increased both business interest and investment appetite. Although artificial intelligence has become an indispensable component of production and service processes in many industries, its adoption within media and broadcasting organizations remains at

a developmental stage. This situation indicates that the sector faces not only significant opportunities but also structural and cultural obstacles that must be addressed (Scarpino *et al.*, 2020, p. 4).

Indeed, the integration of artificial intelligence into media and broadcasting management entails both noteworthy opportunities and substantial challenges. On the one hand, it offers advantages such as accelerating content production processes, enhancing accessibility through techniques like automated subtitling and real-time translation, and strengthening audience engagement via analytics and personalized content recommendation systems. On the other hand, high costs, technical complexities, concerns regarding data privacy, institutional resistance to change, shortages of qualified human resources, and uncertainties surrounding regulatory frameworks constitute critical barriers to this transformation. Consequently, the adaptation of AI applications within media systems necessitates a balanced and strategic approach—one that not only manages the attendant risks but also leverages the technology's potential to the fullest, thereby facilitating the development of innovative and sustainable production models. In this regard, understanding professional perspectives on the integration of artificial intelligence into the broadcasting sector contributes not only to the evaluation of technical and operational dimensions but also to a comprehensive assessment of the ethical, economic, and societal implications (Rostamian & Kamreh, 2024, p. 23). In summary, the opportunities and challenges associated with the use of artificial intelligence in media broadcasting may be outlined as follows:

Table 1

Applications and Challenges of Artificial Intelligence in Media and Broadcasting

Applications of Artificial Intelligence in Media and Broadcasting	Challenges of Artificial Intelligence Utilization in Media and Broadcasting
<p>Automated Content Production: The rapid and cost-effective generation of news articles, script drafts, as well as video and audio content.</p> <p>Personalized Broadcasting Experience: Developing content recommendation systems by analyzing viewer or listener preferences.</p> <p>Advanced Visual and Audio Processing: Automated subtitling, multilingual translation, voice recognition, noise reduction, and quality enhancement.</p>	<p>Ethical and Reliability Issues: The proliferation of deepfake technology and the generation of fabricated content.</p> <p>Employment Risk: The potential of automation to diminish certain professional roles.</p> <p>Algorithmic Biases: The influence of flawed or biased training data on content recommendations.</p>

Content Moderation and Security: Detecting and removing harmful, false, or inappropriate content.

Audience Analytics: Optimizing broadcasting strategies through the analysis of user interaction data.

Virtual Anchors and Artificial Influencers: Delivering creative content through virtual characters, deepfake-based anchors, and digital influencers.

Data Privacy and Security: The collection of data required for personalization giving rise to privacy concerns.

Technical and Cost Barriers: High investment costs, infrastructural deficiencies, and the need for specialized personnel.

Resistance to Change: Internal cultural barriers and the slow pace of adopting new technologies.

Source: AI World Journal, 2025.

2.3 Digital media and communication

Breaking away from traditional dynamics, digital media has assumed a user-centered, interactive, and accelerated structure in communication practices, and under the influence of artificial intelligence technologies, it has transcended existing patterns to acquire a new dimension. Indeed, through tools such as mobile applications, online broadcasting, internet-based news outlets, and social media platforms, limitless content has begun to be produced. At the same time, consumers/users, with the aid of AI-powered algorithms, have increasingly personalized these contents, tailoring them according to their own interests.

The use of artificial intelligence in digital media provides significant opportunities for the sector. Personalization manifests itself not only in content consumption but also in targeted advertising practices, thereby enhancing user engagement while simultaneously increasing the revenue potential of media organizations. Moreover, AI-based analytical systems generate deeper insights into audience behavior and make strategic contributions to decision-making processes. Consequently, media institutions are able to adopt more deliberate, data-driven approaches in content planning (Nasser & Abu-Naser, 2024, p. 1). As can be observed, the opportunities offered by AI in digital media production constitute a critical turning point for the communication sector. Surpassing its role as a mere creative tool, artificial intelligence emerges as a transformative element that enhances efficiency in content production processes, optimizes design, and reshapes modes of communication.

Despite these positive developments, the integration of artificial intelligence into digital media also gives rise to significant debates. In particular, ethical issues such as

algorithmic biases, privacy violations, and lack of transparency are extensively discussed at both academic and sectoral levels. The potential of AI to reproduce existing social prejudices or to infringe upon user data renders its careful and balanced application imperative. Accordingly, maximizing the benefits of AI in digital media necessitates not only capitalizing on opportunities but also managing these risks responsibly (Nasser & Abu-Naser, 2024, p. 1). Indeed, it would be reductive to interpret these developments merely as technological advancement or progress. Their broader implications must also be considered from the perspective of social benefit and responsibility, especially given the profound impact they exert on the communication sector.

The potential of technology to enhance service efficiency and support sustainability is indisputable; however, the capacity of the workforce to adapt to this transformation, the management of ethical concerns, and the preservation of a human-centered service approach are equally critical. Moreover, these issues pertain not only to current employees in the sector but also to communication faculty students who will take on professional roles in the future. Indeed, in the age of artificial intelligence, the transformation of professions directly shapes students' career expectations and, consequently, their levels of professional anxiety. Therefore, focusing on the concept of professional anxiety in the subsequent theoretical framework provides a natural transition toward the research objective of this study.

3 THE CONCEPT OF PROFESSIONAL ANXIETY AND DIGITALIZATION

The concept of anxiety is defined as “a distressing feeling arising from the fear that something troubling or adverse may occur; thought, worry, concern, apprehension, grief” (TDK, 2025). Similarly, according to Strongman (1995, p. 4), anxiety is an emotional state experienced as a sense of unease, the source of which cannot be clearly identified. Anxiety is thus characterized by its association with uncertainty and by its disturbing effect on the individual. The tendency to experience anxiety may vary depending on the circumstances in which individuals find themselves. While a person may feel intense anxiety in a particular situation, they may not experience such emotions in another. In other words, the level of anxiety fluctuates according to the situations encountered and the surrounding conditions (Gerçek, 2018, p. 299). In sum, anxiety is a

dynamic phenomenon shaped by individuals' responses to different situations and contexts. Within this framework, the reflection of such anxiety on career choices and professional life brings forth the concept of "professional anxiety."

Professional life constitutes one of the domains in which individuals experience anxiety most intensely. Core sources of such anxiety include the ability to secure employment, adapt to work, maintain job security, and manage economic conditions. A profession represents the status and area of expertise acquired through education and experience, with each profession encompassing distinct challenges and responsibilities. This diversity also differentiates the types of anxiety experienced. For instance, while a construction worker's anxiety may center on occupational safety, that of a trader may be directed toward the balance of profit and loss (Uludağ *et al.*, 2014, p. 78). In the contemporary context, however, the factors shaping professional anxiety extend beyond traditional working conditions. At this juncture, it can be argued that uncertainties surrounding job security have intensified, while new concerns regarding the future of professions have simultaneously emerged.

The process of digitalization introduces a range of risk factors that may directly or indirectly affect individuals. While research in the fields of management and information systems predominantly emphasizes the opportunities digitalization offers for economic growth, efficiency, and innovation, the literature in clinical and social sciences also highlights its potential adverse effects. In particular, uncertainties concerning the outcomes of rapid changes induced by digitalization—and how these outcomes may influence individuals' employment prospects or private lives—can heighten levels of anxiety among workers. In this regard, the unpredictability generated by digitalization fosters feelings of apprehension, unease, and insecurity, thereby laying the groundwork for professional anxiety to acquire new dimensions (Teepe, 2023, p. 2).

Moreover, as digitalization accelerates, the sources of professional anxiety are no longer confined to uncertainties about job security; rather, they extend to new domains such as anxieties surrounding artificial intelligence (Yaşar & Karagucuk, 2025), the necessity of adapting to software systems (Li *et al.*, 2025), experiences of "upward social comparison" during job-seeking processes on social media (Jin *et al.*, 2024), stress stemming from role pressure and information overload (Zhang, 2025), and the anxiety patterns associated with the intensive use of digital tools (Puente-Torre, 2025). As can be

observed, alongside the opportunities afforded by digitalization, the uncertainties and adaptation imperatives it engenders have given rise to new forms of professional anxiety among individuals. In particular, the rapid integration of artificial intelligence technologies into work processes not only transforms existing modes of employment but also generates new concerns regarding future labor market opportunities.

4 EMPLOYMENT AND FUTURE ANXIETY IN THE AGE OF ARTIFICIAL INTELLIGENCE

In today's technological era, the impact of artificial intelligence on labor markets has become the subject of intense debate at both academic and societal levels. On the one hand, concerns are mounting that AI applications may lead to employment contraction, underemployment, and unemployment; on the other hand, advocates contend that AI technologies support business processes and generate new areas of employment. This dual perspective necessitates that enterprises develop strategies aimed at enhancing productivity while simultaneously restructuring the balance of existing work. In particular, labor-saving technological transformations and AI-based systems reinforce the potential for machines to substitute human labor across multiple sectors, thereby deepening anxieties about the future (Özbek, 2024, pp. 256–257). The rapid development of AI technologies, especially in the domain of generative artificial intelligence, renders uncertainties in labor markets even more visible. For employees, the risks extend beyond the possibility of job loss to encompass evolving job descriptions and heightened skill expectations, all of which constitute new sources of anxiety. While this transformation intensifies concerns over job security, it also imposes a continual obligation on employees to acquire new skills and remain up to date. The reconfiguration of traditional occupational roles by AI is engendering profound changes in professional life and has emerged as a major factor fueling future-oriented anxieties (Zheng & Zhang, 2025, p. 2).

The effects of artificial intelligence on labor markets are not confined to theoretical discussions; empirical evaluations reveal that job losses are already occurring and that such trends may exacerbate anxieties in the future. For instance, according to David Autor, automation has reduced employment particularly in vocational and technical domains, while the Jobs and Skills Australia dataset provides a clear distinction

between occupations that are secure and those at risk in the face of AI (Jen, 2025; JSA, 2025). Similarly, Goldman Sachs forecasts modest short-term increases in unemployment, whereas McKinsey's global projections estimate that between 400 and 800 million workers will be required to reskill (Sachs, 2025; Sassen98, 2023). More radical perspectives underscore that AI will transform the majority of occupations within the next few decades, pointing to a dynamic that intensifies professional anxieties about the future (Spirllet, 2025). Taken together, these studies demonstrate that AI and digital transformation do not merely generate opportunities in labor markets but also engender substantial uncertainties. Therefore, understanding professional anxiety in the age of artificial intelligence necessitates an approach that extends beyond economic indicators, incorporating individuals' lived experiences of uncertainty, insecurity, and the pressures of adaptation.

Undoubtedly, uncertainties regarding the future of employment in the age of artificial intelligence generate anxiety not only for current employees but also for young individuals who have yet to enter the workforce. Students, in particular, must navigate the processes of career choice and professional planning while simultaneously accounting for the transformations that digitalization and artificial intelligence are expected to bring to working life. This indicates that the factors influencing professional anxiety among students are shaped not only by personal competencies but also by the uncertainties surrounding the rapidly evolving future of the labor market.

5 FACTORS INFLUENCING PROFESSIONAL ANXIETY AMONG STUDENTS

Career choice is regarded as one of the most critical and challenging decisions individuals encounter in their lives. Young people, when faced with the need to select among numerous potential career paths, often experience information overload, which can lead to heightened levels of anxiety (Azhenov *et al.*, 2023, p. 1). The early years of university education, in particular, coincide with the transition from adolescence to adulthood, a period characterized by intensified psychological vulnerabilities and uncertainties. The internal conflicts, ambiguities, and decision-making difficulties experienced by students during this developmental stage can directly influence their levels of professional anxiety (Bozkurt, 2004, p. 53). Accordingly, the developmental

characteristics of students, coupled with the burdens associated with career choice, occupy a central place among the primary determinants of professional anxiety.

In this context, it is essential to recognize that anxiety may manifest in different forms. Unexpected problems encountered in daily life can trigger state anxiety, while the persistence of such feelings over time may evolve into trait anxiety. For instance, exam stress or sudden uncertainties, the recurrence of academic failures, the continuity of communication problems, or negative responses to criticism may contribute to the development of enduring anxiety (Başar & Sezen, 2023, p. 3). Therefore, when evaluating professional anxiety, both developmental characteristics and the qualitative nature of anxiety must be considered.

However, beyond developmental factors, the professional anxieties of university students are also shaped by structural barriers they face following graduation. Students encounter significant uncertainties regarding the job search process, securing employment, and planning future career paths. The misalignment between labor market demands and higher education programs hinders graduates' ability to utilize their skills effectively. Moreover, the human resource policies of many organizations tend to prioritize short-term outcomes over long-term development, thereby constraining the career advancement of recent graduates. In addition, a considerable proportion of graduates may perceive themselves as inadequate in positioning within the labor market, managing career progression, or negotiating during job interviews—factors that can diminish self-efficacy and professional self-confidence. Consequently, students' professional anxiety stems not only from individual or psychological factors but also from structural and environmental barriers (Azhenov *et al.*, 2023, p. 2).

Building upon the circumstances outlined above, the rapid development of AI-based systems and digital transformation has introduced a new dimension that intensifies students' anxieties regarding career choice and professional planning. Uncertainties about job security, skill mismatches, and the necessity of continuous relearning have become more pronounced under the influence of artificial intelligence. As a result, students must contend not only with existing challenges but also with the risks that technological transformation may pose in the future. Recent studies demonstrate that anxieties related to artificial intelligence directly influence students' career orientations. Research findings indicate that AI-related anxiety can negatively affect students' career decisions; however,

career adaptability plays a mitigating role in alleviating these adverse effects (Duan *et al.*, 2025).

Other findings indicate a direct relationship between students' unemployment anxiety and their anxiety regarding artificial intelligence, with these two factors reinforcing one another. Indeed, a study conducted among university students revealed a moderate positive correlation between AI anxiety and unemployment anxiety (Uçar *et al.*, 2025). Furthermore, students' attitudes toward artificial intelligence and their levels of literacy in the field significantly influence the relationship between professional self-efficacy perceptions and job-search anxiety, whereby positive attitudes and competencies function to reduce anxiety levels (Li *et al.*, 2025).

At the same time, some research demonstrates that AI anxiety does not yield exclusively negative outcomes; rather, it may serve as a motivational factor. For example, in the study by Chen, Hu, and Wei (2024), students who reported high levels of AI anxiety but also possessed strong AI self-efficacy were able to convert this anxiety into learning motivation and exhibited greater proactivity in their self-development. In this regard, students' knowledge of AI tools and the support policies provided by universities are of critical importance. While a substantial proportion of students express a desire to improve themselves in the age of artificial intelligence, institutional unpreparedness often proves inadequate in channeling this aspiration (Thomson *et al.*, 2024).

Finally, the warnings of economist Tyler Cowen reinforce this picture. Cowen argues that universities are falling short in preparing students for an AI-oriented labor market, thereby exacerbating professional and psychological anxieties among young people (Spirlet, 2025). Taken together, existing research demonstrates that AI anxiety exerts multidimensional effects on students' career decisions and perceptions of their professional futures, with these effects being shaped by individual adaptation strategies and institutional support mechanisms.

6 RESEARCH INFORMATION

6.1 Purpose and significance of the research

The study aims to examine the levels of professional anxiety among communication faculty students in the age of artificial intelligence. Fundamentally, the research seeks to reveal how the transformations brought about by digitalization and AI applications in the labor market influence students' anxieties concerning their future professional lives. In this regard, students' concerns regarding job security stemming from artificial intelligence, uncertainties about career trajectories, and perceptions of their own competencies to practice their professions were assessed through a structured survey form.

The significance of this research lies not only in its theoretical discussion of the concept of professional anxiety but also in its direct examination of the lived experiences of communication faculty students. Furthermore, the limited number of studies addressing how the relationship between artificial intelligence and the labor force is perceived within the context of education underscores the originality of this study. Identifying the anxieties experienced by students will contribute to the ability of educational institutions to adapt their curricula in line with contemporary labor market requirements and to support students in shaping their professional orientations in a more informed and sustainable manner.

6.2 Population and sample

The population of the research consists of undergraduate students enrolled in communication faculties across Turkey. Since it was not feasible to reach the entire population, the sample was drawn from the communication faculties of four universities located in Istanbul. Accordingly, students from Istanbul Topkapı University, Marmara University, Istanbul University, and Istanbul Bilgi University were included in the study.

The rationale for selecting these universities lies in their representation of diverse institutional structures, encompassing both public and foundation universities, as well as the fact that Istanbul constitutes one of the most prominent hubs of the communication

sector in Turkey. This selection thereby enabled a comparative evaluation of students' professional anxieties across different socio-economic and institutional contexts.

A total of 377 students voluntarily participated in the study. The participants were selected from the population through a convenience sampling method, and the data obtained provide significant insights into students' demographic characteristics as well as their levels of professional anxiety in the age of artificial intelligence.

6.3 Limitations of the research

The sample of this study was limited to communication faculty students from four universities located in Istanbul. Therefore, the findings reflect only the perspectives of students from the selected institutions and cannot be generalized to the entire population of communication faculty students.

Moreover, the data were collected exclusively through a survey form. Since qualitative methods were not employed, the ability to provide deeper insights into students' anxieties remains constrained. Finally, as the research was conducted within a specific timeframe, it does not capture how the rapid advancements in artificial intelligence technologies may influence students' perceptions of anxiety in the future.

6.4 Research method

This research is a descriptive study based on a quantitative research method, designed to examine communication faculty students' levels of professional anxiety, perceptions, and adaptability in the age of artificial intelligence. Within the scope of the study, the relationships among perceptions of AI, professional anxiety, and professional adaptability were assessed, as well as differences according to various demographic variables. Quantitative research, within the boundaries of the positivist paradigm, seeks to obtain objective and controlled knowledge. In this context, data collected from large samples are evaluated through statistical analyses to yield valid and reliable results (Garip, 2023, p. 2). One of the most frequently employed techniques in quantitative research is the survey method. Conducted through pre-structured questions, this approach involves administering questions directly related to the research problem and internally

consistent in design to participants (Bekman, 2022, p. 251). The data collection instrument used in this study was a structured questionnaire developed by the researchers. The questionnaire was prepared online via Google Forms and administered between August 1–20, 2025. Prior to its full implementation, a pilot study was conducted with 25 participants, after which the number of items was reduced from 31 to 27 based on the feedback received, thereby yielding the final version of the questionnaire.

Prior to implementation, ethical approval was obtained from the Scientific Research and Publication Ethics Committee of Istanbul Topkapı University (Decision No: 2025/19, Date: 23.07.2025), and participants provided informed consent voluntarily through an online consent form.

The questionnaire consisted of three sections. The first section included questions related to participants' demographic information, while the second and third sections comprised a total of 27 items designed to measure participants' perceptions of artificial intelligence, levels of professional anxiety, and capacities for professional adaptability. These items were scored on a five-point Likert scale ranging from “Strongly Disagree (1)” to “Strongly Agree (5).”

During the data collection process, all questions were made mandatory, and participants were allowed to respond only once. The average completion time for the survey was approximately 10 minutes, with no time limits imposed. After the removal of outliers, a dataset suitable for analysis was obtained.

6.5 Data collection instruments

In this study, the data were analyzed using the IBM SPSS 25.0 software package, with the level of significance set at $p < 0.05$. Descriptive statistics were calculated for each item on the scale included in the survey form, and frequency and percentage distributions of categorical variables were presented in tabular form. To examine the distributional properties of the scale items, the Kolmogorov-Smirnov test was applied. The results indicated that the data did not follow a normal distribution ($p < 0.05$). Consequently, non-parametric analysis methods were employed. The Mann-Whitney U test was used to investigate differences between two groups, while the Kruskal-Wallis test was applied for comparisons involving more than two groups. In addition,

Spearman's correlation analysis was conducted to identify relationships among variables. Based on these analyses, differences in levels of professional anxiety and adaptability were examined according to selected demographic variables, and the relationships between positive perceptions of artificial intelligence, professional anxiety, and professional adaptability were tested.

Cronbach's Alpha reliability test was applied to assess the internal consistency of the scales. Furthermore, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity were conducted to evaluate construct validity, and the results confirmed the suitability of the data for factor analysis. Subsequently, exploratory factor analysis was performed for factors with eigenvalues greater than 1.

7 FINDINGS

7.1 Reliability analysis (Cronbach's Alpha)

To assess the reliability of the scale, the Cronbach's Alpha coefficient was calculated. For the scale measuring perceptions of artificial intelligence, the Cronbach's Alpha coefficient was found to be 0.765, indicating that the survey demonstrated a good level of reliability (Cronbach's Alpha ≥ 0.70). To test the construct validity of the scale, Exploratory Factor Analysis (EFA) was conducted. In order to determine the suitability of the data for factor analysis, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity were applied.

7.2 Construct validity of the scale on perceptions of artificial intelligence (Factor Analysis)

Table 2

Results of the KMO and Bartlett's Test of Sphericity

Scale	KMO	Bartlett's Test of Sphericity χ^2 (sd)	p
Scale on Perceptions of Artificial Intelligence	0,798	1398,220 (351)	0,0001

Upon examining the table, the KMO value for the scale on perceptions of artificial intelligence was found to be 0.798, and Bartlett's test of sphericity was determined to be significant ($\chi^2(351) = 1398.220$; $p < 0.001$). These results indicate that there is an adequate level of correlation among the variables and that the data are suitable for factor analysis.

As a result of the factor analysis, factors with eigenvalues greater than 1 were identified, and the percentages of total variance explained by these factors are presented in Table 3 below.

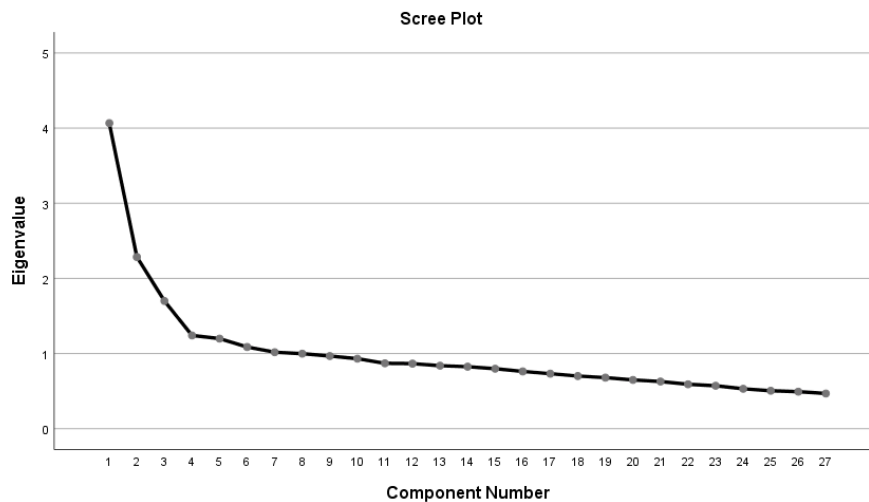
Table 3

Percentages of Total Variance Explained by the Factor Analysis of the Variable on Perceptions of Artificial Intelligence

Scale	Factor	Eigenvalue	Variance Explained (%)	Cumulative Variance (%)
Scale on Perceptions of Artificial Intelligence	Factor1	4,067	11,334	11,334
	Factor2	2,285	7,782	19,116
	Factor 3	1,700	6,481	25,597
	Factor 4	1,241	6,026	31,622
	Factor 5	1,199	5,267	36,889
	Factor 6	1,087	5,020	41,909
	Factor 7	1,018	4,742	46,651

The scale items were examined using the PCA method with Varimax rotation, and seven factors with eigenvalues greater than 1 were identified. These factors explained 11.334%, 7.782%, 6.481%, 6.026%, 5.267%, 5.020%, and 4.742% of the variance, respectively. In total, the cumulative variance explained was found to be 46.651%. In scale development and validation studies conducted within the field of communication sciences, a variance explanation level of 40% and above is generally considered acceptable. Therefore, the results obtained here exceed the acceptable threshold for construct validity, indicating that the factor structure of the scale is robust.

To provide a visual representation of the number of factors, the Scree Plot graph is presented in Figure 1 below.

Figure 1*Scree plot graph*

Upon examining the Scree Plot graph, it is observed that the curve levels off after the inflection point. This indicates that a seven-factor structure is appropriate. To determine under which factors the items were grouped, the Varimax rotation method was employed, and the resulting loading values are presented in Table 4.

Table 4*Rotated Component Matrix*

Item No	Factor						
	1	2	3	4	5	6	7
I often think that the course of my professional future is uncertain.	0,675						
I am concerned about finding employment in the communication sector after graduation.	0,592						
Even if I specialize in my field, I fear being unable to secure a job.	0,577						
The future of the communication sector does not inspire optimism in me.	0,567						
The development of artificial intelligence applications may render my professional competencies obsolete.	0,537						

I believe that the widespread adoption of artificial intelligence applications in the communication sector negatively affects my employment prospects.	0,503	
I am of the opinion that artificial intelligence technologies may diminish the prestige of professions in the communication sector.	0,492	
My confidence in being able to successfully plan a career after graduation is weak.	0,428	0,402
I believe that the demand for human labor in the communication sector is gradually declining.	0,427	
I believe that I can adapt to the transformations taking place in the communication sector.	0,682	
I am ready for continuous learning in order to sustain my profession in the future.	0,606	
I take the necessary actions in response to changing job definitions in the communication sector.	0,540	
Artificial intelligence should serve not as an obstacle but as a guiding force in my professional development.	0,505	
I strive to acquire new skills in order to become a part of the communication sector.	0,453	
The education I am receiving at university helps me prepare for the professional changes brought about by artificial intelligence.		0,721
I perceive artificial intelligence in the communication sector not as an assistant, but as a competitor.		0,660
The incorporation of artificial intelligence into professional production processes in the communication sector makes me uncomfortable.		0,502
I adapt easily to new technologies.		0,633
I continuously improve myself in order to work collaboratively with artificial intelligence.		0,576

The development of artificial intelligence excites me.	0,557
The use of artificial intelligence in the communication sector influences my expectations of the field.	0,402
I believe that the content generated through artificial intelligence in the communication sector lacks a strong human dimension.	0,609
I believe that artificial intelligence will bring about significant transformations in the communication sector.	0,526
In the communication sector, artificial intelligence is used solely in technical processes.	0,707
The use of artificial intelligence in the communication sector supports creative processes.	0,675
I consider myself to be keeping up with technological developments due to my professional responsibilities.	0,721
Artificial intelligence technologies lead me to question the very nature of the communication sector.	0,575

In Factor 1, the loading of the first nine items reflects participants' concerns about employment and the perceived negative impact of artificial intelligence on job opportunities. Factor 2, with five items, represents anxieties regarding employment prospects and the belief that the presence of artificial intelligence reduces the demand for human labor. Factor 3, comprising three items, captures perceptions of artificial intelligence as a competitor and the discomfort associated with its integration into professional processes. Factor 4, with four items, illustrates tendencies toward self-improvement, adaptability to technological developments, excitement about AI advancements, and optimistic expectations. Factor 5, represented by two items, reflects hopeful attitudes toward adapting to new developments and acquiring new skills. Factor 6, also composed of two items, highlights the view of artificial intelligence as a guiding and developmental force. Finally, Factor 7, with two items, expresses participants' willingness to follow technological developments and remain open to continuous learning.

These findings reveal that the scale is capable of measuring not only negative perceptions but also positive orientations. Accordingly, the factor structure demonstrates a balanced representation of both concerns and opportunities associated with artificial intelligence in the communication sector. After identifying the factors to which the items belong, the groups of items representing each subdimension are presented in the table below.

Table 5

Item List For Each Factor

Factor	Number of Items	Items
Factor 1	9	1-9
Factor 2	5	10-14
Factor 3	3	15-17
Factor 4	4	18-21
Factor 5	2	22-23
Factor 6	2	24-25
Factor 7	2	26-27

Upon examining Table 5, it is evident that the scale consists of a total of 27 items grouped under seven distinct factors. Factor 1, comprising nine items, emerges as the most substantial dimension, indicating that it represents the core structure of the scale. Factors 2, 3, and 4 contain a moderate number of items (three to five each), which can be considered acceptable in terms of measurement power. By contrast, Factors 5, 6, and 7 include only two items each, which may pose psychometric limitations; this suggests the need for strengthening these dimensions in future studies through the addition of new items. Nevertheless, the current factor structure demonstrates coherence and captures the subject matter within a multidimensional framework. This distribution supports both the reliability and construct validity of the scale. Consequently, through its different factors, the instrument holistically reflects participants' employment-related anxieties, perceptions of artificial intelligence, adaptability, and openness to professional development.

Reliability analysis was conducted for each group of items corresponding to the identified factors. Cronbach's Alpha coefficient was used as the basis for this analysis. The Alpha value is a widely employed statistical method for assessing the reliability of a scale. The table below presents the Alpha values for each subdimension.

Table 6*Cronbach's Alpha Values for the Subscales*

Factor	Number of Items	Cronbach's Alfa
Factor 1	9	0,467
Factor 2	5	0,664
Factor 3	3	0,461
Factor 4	4	0,259
Factor 5	2	0,378
Factor 6	2	0,275
Factor 7	2	0,306

With the exception of Factor 2, all other subscales yielded Cronbach's Alpha values below 0.60. In particular, the values for Factors 4, 5, 6, and 7 were markedly low (ranging from 0.259 to 0.378), indicating weak internal consistency. The low Alpha coefficients for Factors 5, 6, and 7 can largely be attributed to their comprising only two items each. More critically, despite including nine items, Factor 1 also produced a relatively low Alpha value (0.467), which further highlights limitations in internal consistency within this subdimension.

The primary reason for the low Cronbach's Alpha coefficients observed in certain subscales lies in the limited number of items and the fact that the factor structure of the scale remains at an early stage of development. In the case of Factors 5, 6, and 7—each consisting of only two items—this outcome is to be expected. By contrast, the overall Cronbach's Alpha value for the entire scale falls within an acceptable range. Thus, the low alpha values do not entirely invalidate the functional adequacy of the scale structure. Nevertheless, future research should consider increasing the number of items and strengthening the construct validity of the subscales, which may serve as a pathway to enhancing the overall reliability of the instrument.

The descriptive statistics for each item of the artificial intelligence perception scale included in the survey are presented in the table below.

Table 7*Descriptive Statistics for the Artificial Intelligence Perception Scale*

Items	Simple Size	Median	Q1-Q3	Min.	Maks.
I believe that artificial intelligence will bring about significant transformations in the communication sector.	377	4,00	3-4	1	5
Artificial intelligence technologies lead me to question the very nature of the communication sector.	377	3,00	3-4	1	5
The inclusion of artificial intelligence in professional production processes within the communication sector makes me uncomfortable.	377	3,00	3-4	1	5
I perceive artificial intelligence in the communication sector not as an assistant but as a competitor.	377	4,00	4-5	1	5
In the communication sector, artificial intelligence is employed solely in technical processes.	377	3,00	2-4	1	5
I believe that the content produced through artificial intelligence in the communication sector lacks a strong human dimension.	377	3,00	3-4	1	5
The use of artificial intelligence in the communication sector influences my expectations of the field.	377	3,00	3-4	1	5
The development of artificial intelligence excites me.	377	3,00	3-4	1	5
The use of artificial intelligence in the communication sector supports creative processes.	377	4,00	4-5	1	5
I am concerned about finding employment in the communication sector after graduation.	377	3,00	2-4	1	5
I believe that the widespread adoption of artificial intelligence applications in the communication sector negatively affects my chances of finding employment.	377	3,00	3-4	1	5

I believe that the demand for human labor in the communication sector is gradually diminishing.	377	3,00	3-4	1	5
Even if I specialize in my field, I am afraid of not being able to find a job.	377	3,00	3-4	1	5
I believe that the course of my professional future is uncertain.	377	3,00	3-4	1	5
The future of the communication sector does not give me hope.	377	3,00	3-4	1	5
The advancement of artificial intelligence applications may render my professional qualifications obsolete.	377	3,00	3-4	1	5
My confidence in being able to successfully plan a career after graduation is weak.	377	3,00	3-4	1	5
I believe that artificial intelligence technologies may diminish the prestige of professions in the communication sector.	377	3,00	3-4	1	5
I continuously improve myself in order to be able to work alongside artificial intelligence.	377	3,00	3-4	1	5
I adapt easily to new technologies.	377	3,00	3-4	1	5
The education I am receiving at the university helps me prepare for the professional changes brought about by artificial intelligence.	377	4,00	3,5-5	1	5
I believe that I can adapt to the transformations taking place in the communication sector.	377	3,00	3-4	1	5
I strive to acquire new skills in order to become a part of the communication sector.	377	3,00	3-4	1	5
Artificial intelligence should not hinder my development but rather guide it.	377	3,00	3-4	1	5
I take the necessary actions in response to changing job descriptions in the communication sector.	377	3,00	3-4	1	5
I believe that I keep track of technological developments due to my professional responsibilities.	377	3,00	3-4	1	5

I am prepared to engage in continuous learning in order to pursue my profession in the future.	377	3,00	3-4	1	5
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The majority of participants' responses to the scale items were concentrated around median values of 3 and 4. This distribution indicates that participants generally approach artificial intelligence with a moderate degree of concern and caution, while simultaneously maintaining a sense of optimism. Notably, items such as "I believe that artificial intelligence will bring about significant transformations in the communication sector" and "The education I am receiving at the university helps me prepare for the professional changes brought about by artificial intelligence" yielded a median value of 4, reflecting participants' strong awareness and acknowledgment of these issues. Conversely, items with a median value of 3 suggest more ambivalent and heterogeneous attitudes, particularly in areas related to professional uncertainty or perceiving AI as a competitor.

Furthermore, the interquartile range (Q1–Q3) clustering predominantly between 3 and 4 demonstrates that most respondents selected options between "neutral" and "agree." The presence of minimum and maximum values spanning the full 1–5 scale highlights the diversity of individual perceptions across all items. Overall, the findings suggest that participants acknowledge the transformative impact of artificial intelligence in the communication sector and display a relatively positive orientation toward acquiring new skills and adapting to change, yet persistent uncertainty and anxiety regarding their professional futures remain evident. The frequency and percentage distributions of categorical variables are presented in the following table.

Table 8

Frequencies and Percentage Values for Categorical Variables

Variable	Category	Frequency	Percentage (%)
Gender	Female	195	51,7
	Male	182	48,3
Age	18-24 years	377	100
	25-34 years	0	0
	35-44 years	0	0
	45-54 years	0	0
	55+ years	0	0
Institution of Enrollment	Marmara University	101	26,8

	Istanbul University	83	22
	Istanbul Topkapı University	118	31,3
Department	Istanbul Bilgi University	75	19,9
	Cartoon and Animation	35	9,3
	Digital Game Design	37	9,8
	Journalism	36	9,5
	Visual Communication Design	33	8,8
	Halkla İlişkiler ve Tanıtım	40	10,6
	Public Relations and Advertising	32	8,5
	Radio, Television, and Cinema Advertising	42	11,1
	New Media and Communication	50	13,3
			72
Employment Status	No	277	73,5
	Yes	100	26,5
Year of Study	Undergraduate Year 1	77	20,4
	Undergraduate Year 2	55	14,6
	Undergraduate Year 3	135	35,8
	Undergraduate Year 4	110	29,2
Level of Interest in Artificial Intelligence Technologies	No interest at all.	22	5,8
	Little interest.	42	11,1
	Moderate interest.	112	29,7
	Interested.	134	35,5
	Highly interested.	67	17,8
Level of Competence in Artificial Intelligence and Digital Technologies	I have no knowledge.	27	7,2
	I have basic knowledge.	85	22,5
	I have intermediate knowledge.	160	42,4
	I have advanced knowledge.	71	18,8
	I have expert-level knowledge.	34	9
Opinion on the Reliability of Artificial Intelligence Applications	Not reliable at all.	14	3,7
	Not reliable.	39	10,3
	Moderately reliable.	162	43
	Reliable.	138	36,6
	Completely reliable.	24	6,4
Opinion on the Importance of Human Intervention in the Reliability of Artificial Intelligence Applications	There is no need for human intervention at all.	14	3,7
	Human intervention is not necessary.	29	7,7
	Moderately necessary for human intervention.	115	30,5
	Human intervention is necessary.	140	37,1
	Human intervention is absolutely necessary.	79	21

When the gender variable is examined, the survey included 195 female and 182 male participants. Females accounted for 51.7%, while males represented 48.3% of the respondents.

When the age variable is considered, all participants in the survey—100%—fell within the 18–24 age range.

When the institution of enrollment variable is examined, 26.8% of the respondents were students at Marmara University, 22% at Istanbul University, 31.3% at Istanbul Topkapı University, and 19.9% at Istanbul Bilgi University.

When the department variable is examined, 9.3% of the participants were enrolled in Cartoon and Animation, 9.8% in Digital Game Design, 9.5% in Journalism, 8.8% in Visual Communication Design, 10.6% in Public Relations and Publicity, 8.5% in Public Relations and Advertising, 11.1% in Radio, Television, and Cinema, 13.3% in Advertising, and 19.1% in New Media and Communication.

When the employment status variable is examined, it was found that 73.5% of the students were not employed, while 26.5% were employed.

When the year of study variable is examined, it was determined that 20.4% of the students were first-year undergraduates, 14.6% were second-year, 35.8% were third-year, and 29.2% were fourth-year undergraduates.

When the level of interest in artificial intelligence technologies is examined, it was found that 5.8% of the students had no interest at all, 11.1% had little interest, 29.7% had moderate interest, 35.5% were interested, and 17.8% were highly interested.

When the level of competence in artificial intelligence and digital technologies is examined, it was determined that 7.2% of the students had no knowledge, 22.5% had basic knowledge, 42.4% had intermediate knowledge, 18.8% had advanced knowledge, and 9% possessed expert-level knowledge.

When students' perceptions of the reliability of artificial intelligence applications are evaluated, 3.7% considered them not reliable at all, 10.3% not reliable, 43% moderately reliable, 36.6% reliable, and 6.4% completely reliable.

When opinions regarding the importance of human intervention in the reliability of artificial intelligence applications were assessed, 3.7% of the students stated that human intervention is not necessary at all, 7.7% believed it is not necessary, 30.5%

considered it moderately necessary, 37.1% viewed it as necessary, and 21% indicated that it is absolutely necessary.

The frequency table presenting the responses to the multiple-choice question regarding the use of artificial intelligence tools is provided below.

Table 9

Frequency Table on the Use of Artificial Intelligence Tools

	N	Percentage
Canva, DALL-E, MidJourney, Adobe Firefly, Runway ML	147	18,7
ChatGPT, Mistral AI, DeepSeek, Gemini, Claude, Grammarly, Jasper AI, Bard, Bing AI Chat	209	26,6
SPSS, Python, Tableau, Flourish, DataRobot, RapidMiner	99	12,6
Turnitin, Copyleaks, GradeScope	97	12,4
Siri, Alexa, Google Assistant, Cortana	174	22,2
I do not use any artificial intelligence tools.	59	7,5
Total	785	100,0

According to the analysis findings from the frequency table on the use of artificial intelligence tools, the group of tools most frequently employed by participants consists of ChatGPT, Mistral AI, DeepSeek, Gemini, Claude, Grammarly, Jasper AI, Bard, and Bing AI Chat, with a usage rate of 26.6%. The second most frequently used group, comprising Siri, Alexa, Google Assistant, and Cortana, stands at 22.2%, indicating the widespread diffusion of AI applications into everyday life and practical routines. Visual production tools such as Canva, DALL-E, MidJourney, Adobe Firefly, and Runway ML account for 18.7%, underscoring the prominent role of AI in visual content creation.

On the other hand, data analysis tools including SPSS, Python, Tableau, Flourish, DataRobot, and RapidMiner represent 12.6%, while academic control and evaluation tools such as Turnitin, Copyleaks, and Gradescope are used by 12.4% of participants—suggesting that while these applications are less common, they serve as functional instruments within specialized domains. Notably, 7.5% of respondents reported not using

any AI tools, highlighting that AI awareness and adoption have not yet reached all individuals equally.

The comparison of professional anxiety levels between female and male students is presented in the table below.

Table 10

Comparison of Professional Anxiety Levels by Gender Variable

Gender	Sample Size	Mean Rank	Sum of Ranks
Female	195	188,32	36722,50
Male	182	189,73	34530,50
Total	377		
Test Statistic	Value		
Mann-Whitney U	17612,50		
Wilcoxon W	36722,50		
Z	-0,126		
p value	0,900		

According to the findings of the Mann–Whitney U test, there was no statistically significant difference between female (188.32) and male (189.73) participants in terms of occupational anxiety levels ($U = 17,612.5$, $p = 0.900 > 0.05$). This result indicates that gender does not constitute a determining variable in shaping students' levels of occupational anxiety. In other words, no meaningful difference was observed between female and male respondents regarding their perceived levels of occupational anxiety.

The table below presents the comparison of occupational anxiety levels across students' year of study (from first to fourth year) in order to examine whether there are statistically significant differences between class levels.

Table 11

Comparison of Occupational Anxiety Levels by Year of Study

Year of Study	Sample Size (N)	Mean Rank
Undergraduate Year 1	77	185,92
Undergraduate Year 2	55	176,53

Undergraduate Year 3	135	192,56
Undergraduate Year 4	110	193,03

Kruskal Wallis $H=1,082$; $sd=3$; $p=0,781$

According to the findings of the Kruskal–Wallis test, no statistically significant difference was observed in students' occupational anxiety levels across year of study ($H(3) = 1.082$, $p = 0.781 > 0.05$). An examination of the mean ranks indicates that third- and fourth-year undergraduate students reported relatively higher levels of occupational anxiety compared to the other cohorts. However, this difference was not statistically significant.

The comparison of whether there is a significant difference in occupational anxiety levels according to the level of interest in artificial intelligence is presented in the table below.

Table 12

Comparison of Occupational Anxiety Levels by Level of Interest in Artificial Intelligence

Year of Study	Sample Size (N)	Mean Rank
No Interest	22	154,82
Low Interest	42	199,10
Moderate Interest	112	203,22
Interested	134	179,94
Highly Interested	67	188,24

Kruskal Wallis $H=5,390$; $sd=4$; $p=0,250$

An examination of the Kruskal–Wallis test results reveals that there is no statistically significant difference in occupational anxiety levels among students with varying levels of interest in artificial intelligence ($H=5.390$; $df=4$; $p=0.250 > 0.05$). Analysis of mean ranks indicates that students with a moderate level of interest in AI reported the highest occupational anxiety scores ($\bar{X}=203.22$), whereas those with no interest in AI exhibited the lowest scores ($\bar{X}=154.82$). However, these differences are not statistically significant.

The table below presents whether there is a statistically significant difference in occupational anxiety levels between students who use artificial intelligence tools and those who do not.

Table 13

Comparison of Occupational Anxiety Levels Based on the Use of Artificial Intelligence Tools

Gender	Sample Size (N)	Mean Rank	Sum of Ranks
Non-Users	59	175,51	10355
Users	318	191,50	60898
Total	377		
Test Statistic	Value		
Mann-Whitney U	8585		
Wilcoxon W	10355		
Z	-1,038		
p-value	0,299		

According to the results of the Mann-Whitney U test, no statistically significant difference was found between the occupational anxiety levels of students who use artificial intelligence tools (191.50) and those who do not (175.51) ($U=8585$, $p=0.299 > 0.05$). This finding indicates that the use of artificial intelligence tools is not a determining factor in students' occupational anxiety levels. In other words, there is no significant difference in occupational anxiety between students who reported using AI tools and those who did not.

The tables below present the relationships between: the level of positive perception toward artificial intelligence and the occupational anxiety levels of communication faculty students; the level of positive perception toward artificial intelligence and students' levels of occupational adaptability and preparedness; and the relationship between occupational anxiety levels and the occupational adaptability and preparedness of communication faculty students.

Table 14

The relationship between the level of positive perception toward artificial intelligence and the occupational anxiety levels of communication faculty students

Variables	Occupational Anxiety	Positive Perception of Artificial Intelligence
Occupational Anxiety	1	
Positive Perception of Artificial Intelligence	0,084	1

According to the findings of the Spearman correlation analysis, no statistically significant relationship was found between communication faculty students' level of positive perception toward artificial intelligence and their level of occupational anxiety ($r=0.084$; $p=0.103 > 0.05$). In other words, displaying a positive attitude toward artificial intelligence does not reduce the occupational anxiety levels of communication faculty students.

Table 15

The Relationship Between Positive Perception of Artificial Intelligence and the Occupational Adaptation and Preparedness Levels of Communication Faculty Students

Variables	Occupational Adaptation and Preparedness	Positive Perception of Artificial Intelligence
Occupational Adaptation and Preparedness	1	
Positive Perception of Artificial Intelligence	0,149**	1

** Statistically Significant ($p < 0,01$).

An examination of the Spearman correlation analysis results revealed a positive, weak, and statistically significant relationship between the level of positive perception of artificial intelligence and the occupational adaptation and preparedness levels of communication faculty students ($r = 0.149$; $p = 0.004 < 0.05$). In other words, as the level of positive perception of artificial intelligence increases, students' occupational adaptation and preparedness also increase.

Table 16

The Relationship Between Occupational Anxiety Level and Occupational Adaptation and Preparedness of Communication Faculty Students

Variables	Occupational Adaptation and Preparedness	Occupational Anxiety
Occupational Adaptation and Preparedness	1	
Occupational Anxiety	-0,006	1

According to the results of the Spearman correlation analysis, no statistically significant relationship was found between students' occupational anxiety levels and their levels of occupational adaptation and preparedness ($r = -0.006$; $p = 0.902 > 0.05$).

The comparisons of occupational anxiety levels based on perceptions of the future of the communication sector, as well as based on perceptions of viewing artificial intelligence as a competitor, are presented in the tables below.

Table 17

Comparison of Occupational Anxiety Levels Based on Perceptions of the Future of the Communication Sector

Level of Agreement	N	Mean Rank
Strongly Disagree	8	14,75
Disagree	42	130,98
Neutral	317	197,03
Agree	9	311,28
Strongly Agree	1	374,00

Kruskal Wallis $H=56,645$; $sd=4$; $p=0,0001$

Upon examining the results of the Kruskal-Wallis test, a statistically significant difference was identified in students' occupational anxiety levels based on their responses to the statement "The future of the communication sector does not give me hope" ($H=56.645$; $df=4$; $p=0.0001 < 0.05$).

An examination of the mean ranks reveals that students who strongly agreed with the statement "The future of the communication sector does not give me hope" exhibited

the highest levels of occupational anxiety (mean rank = 374.00), whereas those who strongly disagreed demonstrated the lowest levels of anxiety (mean rank = 14.75). Accordingly, the findings indicate that students who hold a pessimistic view of the future of the communication sector experience greater levels of career-related anxiety.

Table 18

Comparison of Occupational Anxiety Levels According to the Perception of Viewing Artificial Intelligence as a Competitor

Level of Agreement	N	Mean Rank
Strongly Disagree	8	10,94
Disagree	42	119,82
Neutral	317	202,34
Agree	9	186,83
Strongly Agree	1	309,00

Kruskal Wallis $H=49,851$; $sd=4$; $p=0,0001$

According to the results of the Kruskal-Wallis test, the differences in students' occupational anxiety levels based on their level of agreement with the statement "I perceive artificial intelligence in the communication sector not as an assistant but as a competitor" were found to be statistically significant ($H=49.851$; $df=4$; $p=0.0001<0.05$).

Examining the mean ranks reveals that students who strongly agreed with the statement "I perceive artificial intelligence in the communication sector not as an assistant but as a competitor" exhibited the highest levels of occupational anxiety (mean rank = 309.00). Conversely, those who strongly disagreed reported the lowest levels of anxiety (mean rank = 10.94). In sum, students who view artificial intelligence as a competitor tend to experience higher levels of occupational future anxiety.

8 DISCUSSION AND CONCLUSION

This study examined the levels of professional anxiety among communication faculty students in the age of artificial intelligence, evaluating the implications of digitalization and technological transformation on education and employment. The

findings reveal that students' concerns are not limited solely to the fear of unemployment but also encompass uncertainties stemming from the transformative effects of artificial intelligence technologies on professional roles. Notably, while some students perceive AI as a rival and a source of threat, a significant portion demonstrates motivation for adaptation, continuous learning, and self-development. This dual pattern indicates that perceptions of AI involve not only anxiety but also an opportunity-oriented perspective. The results are consistent with the findings of Ülkü *et al.* (2025) and Akçakanat (2024), which highlight a positive relationship between AI-related anxiety and concerns about the future and unemployment. Particularly, the anxieties of communication students regarding the transformation of their professions due to digitalization and automation align with findings reported in the literature (Güllüpunar & Tunca, 2022; Summak, 2022).

The data indicate a moderate relationship between students' unemployment anxiety and their anxiety toward artificial intelligence, suggesting that technological uncertainties directly exacerbate employment-related concerns. At the same time, students who perceive AI as an auxiliary rather than a rival scored higher on measures of professional adaptation. This finding highlights that a positive perception of AI strengthens individual development, motivation, and adaptive skills. However, the low reliability values observed in some sub-factors of the scale suggest that students' perceptions of AI are multidimensional and inherently complex.

The study further revealed variations based on demographic factors. In particular, students approaching graduation exhibited higher levels of anxiety, which can be attributed to the growing uncertainties surrounding the job search process. In contrast, students at the beginning of their academic journey tended to display more learning-oriented and self-development-focused attitudes. Thus, the findings demonstrate that professional anxiety varies according to the stage of study and individual adaptive capacity.

Nevertheless, the research findings indicate that students' levels of professional anxiety did not differ significantly by gender. In other words, being male or female does not appear to be a determining factor in shaping students' professional anxiety. This result suggests that professional anxiety is more closely associated with individual, environmental, and structural factors, while gender alone does not constitute a statistically significant variable influencing anxiety levels.

Another significant finding of the study is that students' attitudes and anxiety levels may vary depending on their departments and faculties. This outcome aligns with the results reported by Takıl, Erden, and Sarı Arasil (2022), which demonstrated that anxiety levels can differ across students from various faculties. In particular, it appears that for communication faculty students, the transformative impact of digitalization on professional values plays a decisive role in shaping their levels of professional anxiety.

An important finding of the study is that students who perceive artificial intelligence as a competitor exhibit higher levels of professional future anxiety. This suggests that students believe technological advancements not only transform work processes but also directly influence their perceptions and expectations about the future. Moreover, they tend to view the potential substitution of their professions by AI systems as a threat, thereby heightening uncertainties related to job security and career planning. This result is also consistent with the existing literature, as studies by Kim and Kim (2024) and Lin and Parker (2025) similarly demonstrate that artificial intelligence intensifies job insecurity and psychological pressure.

In conclusion, the professional anxiety levels of communication faculty students in the age of artificial intelligence exhibit a multidimensional structure. These anxieties are not solely grounded in perceptions of threat but also shape students' motivation and willingness to learn. Accordingly, universities need to update their curricula and develop policies that will enable students to cope with professional uncertainties while also acquiring AI-assisted skills. Indeed, the OECD (2024) report demonstrates that AI may disrupt the nature of jobs in white-collar and higher-educated groups, thereby intensifying competitive and substitution pressures in the professions targeted by students. In this context, students should be supported not only with technical competencies but also with psychosocial resilience and career adaptability skills to ensure accurate career orientation. Universities, career centers, and relevant public institutions should collaborate to provide guidance services that alleviate students' AI-related professional anxieties, while partnerships with industry representatives should prepare them for evolving labor market demands. In this way, the anxieties generated by artificial intelligence can be constructively transformed into innovative opportunities.

In light of the findings, several recommendations can be made for researchers seeking to conduct similar studies in the future. First, incorporating courses on AI literacy,

data analysis, and digital media tools—whether compulsory or elective—into university curricula would enhance students’ competencies in the field. Additionally, guidance programs developed within career centers could help students better understand the role of AI in the labor market and manage the anxieties that may arise in this process. Expanding practical training opportunities such as workshops, internships, and project-based applications would also allow students to reinforce their theoretical knowledge through concrete experiences. Future research could contribute significantly to the field by strengthening scale items, replicating studies with larger samples across different universities, and employing qualitative methods to examine students’ anxieties in greater depth. Finally, comparative assessments of communication faculty students’ perceptions of AI across different countries would provide valuable insights into both shared global concerns and context-specific differences.

DECLARATIONS

Ethics approval and consent to participate

Ethical approval for this study was obtained from the Scientific Research and Publication Ethics Committee of Istanbul Topkapı University (Decision No: 2025/19, Date: 23.07.2025), and the study was conducted in accordance with the Declaration of Helsinki. Informed consent was obtained from all participants.

HUMAN ETHICS AND CONSENT TO PARTICIPATE

This study was conducted in accordance with the Declaration of Helsinki. Human Ethics and Consent to Participate declarations: applicable as all participants provided informed consent.

LIST OF ABBREVIATIONS

AI: Artificial Intelligence

SPSS: Statistical Package for the Social Sciences

IRB: Institutional Review Board

DATA AVAILABILITY STATEMENT

The data that support the findings of this study were collected physically from participants and are not publicly available due to privacy and ethical restrictions. The data consist of survey responses obtained from students of the Faculties of Communication at Istanbul Topkapı University, Marmara University, Istanbul University, and Istanbul Bilgi University. The data may be available from the authors upon reasonable request and with permission from the relevant institutions.

INFORMED CONSENT STATEMENT

Written informed consent was obtained from all participants between 1 and 25 August 2025. The consent process followed the ethical guidelines approved by the institutional ethics committee. Participants were informed about the purpose of the research, data confidentiality, and their right to withdraw at any stage. Data were collected from students of the Faculties of Communication at Istanbul Topkapı University, Marmara University, Istanbul University, and Istanbul Bilgi University.

AUTHOR CONTRIBUTION STATEMENT

Author 1 contributed to the conceptualization, research design, data collection, and manuscript writing (55%). Author 2 contributed to data analysis, interpretation, and manuscript revision (45%). Both authors approved the final version of the manuscript.

REFERENCES

- Agrawal, A., Gans, J. S., & Goldfarb, A. (2017). What to expect from artificial intelligence. *MIT Sloan Management Review*, 58(3), 1–9.
- AI World Journal. (2025). *The future of AI in media broadcasting: TV, radio, streaming media, and influencers*. <https://aiworldjournal.com/report-the-future-of-ai-in-media-broadcasting-tv-radio-streaming-media-and-influencers/>

- Akçakanat, Ö. (2024). Yapay zekâ kaygısının teknoloji kaynaklı işsizlik endişesi üzerine etkisi: Muhasebe meslek mensupları üzerine bir araştırma. *Afyon Kocatepe Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 26(Özel Sayı), 53–67.
- Arslan, K. (2020). Eğitimde yapay zeka ve uygulamaları. *Batı Anadolu Eğitim Bilimleri Dergisi*, 11(1), 71–88.
- Azhenov, A., Kudysheva, A., Fominykh, N., & Tulekova, G. (2023). Career decision-making readiness among students in the system of higher education: Career course intervention. *Frontiers in Education*, 8, 1–12.
- Başar, M. A., & Sezen, G. (2023). Lisansüstü öğrencilerine yönelik mesleki kaygı ölçeği'nin geçerlik ve güvenirlik çalışması. *Mehmet Akif Ersoy Üniversitesi Eğitim Bilimleri Enstitüsü Dergisi*, 11(14), 1–23.
- Bekman, M. (2022). Halkla ilişkiler uygulamalarında nicel araştırma yöntemi: İlişkisel tarama modeli. *Meriç Uluslararası Sosyal ve Stratejik Araştırmalar Dergisi*, 6(16), 238–258.
- Bozkurt, N. (2004). Bir grup üniversite öğrencisinin depresyon ve kaygı düzeyleri ile çeşitli değişkenler arasındaki ilişkiler. *Eğitim ve Bilim*, 29(133), 52–59.
- Chen, C., Hu, W., & Wei, X. (2024). From anxiety to action: Exploring the impact of artificial intelligence anxiety and artificial intelligence self-efficacy on motivated learning of undergraduate students. *Interactive Learning Environments*, 33(4), 1–16.
- CISA. (2021). *Communications sector*. U.S. Cybersecurity and Infrastructure Security Agency. <https://www.cisa.gov/topics/critical-infrastructure-security-and-resilience/critical-infrastructure-sectors/communications-sector>
- Coşkun, F., & Gülleroğlu, H. D. (2021). Yapay zekânın tarih içindeki gelişimi ve eğitimde kullanılması. *Ankara University Journal of Faculty of Educational Sciences (JFES)*, 54(3), 947–966.
- Duan, N., Li, L., & Chen, H. (2025). *Uncertain future? The impact of AI anxiety on career decisions of college students*. SSRN. <https://doi.org/10.2139/ssrn.5164702>
- Garip, S. (2023). Sosyal bilimlerde nicel araştırma geleneği üzerine kuramsal bir inceleme. *International Journal of Social Science Research*, 12(1), 1–19.
- Gerçek, M. (2018). Mesleki kaygı ve kariyer uyumluluğu arasındaki ilişkiler: Öğretmen adayları açısından bir inceleme. *Trakya Üniversitesi Sosyal Bilimler Dergisi*, 20(2), 297–312.
- Güllüpnar, H., & Tunca, L. (2022). Dijitalleşmeye dayalı olarak gazetecilik öğrencilerinin yaşadıkları meslek kaygıları üzerine bir araştırma. *Gümüşhane Üniversitesi İletişim Fakültesi Elektronik Dergisi*, 10(2), 1019–1045.

- Infrastructure Australia. (2016). *The communications sector: Recent trends and developments*. Australian Government, Department of Infrastructure, Transport, Regional Development and Communications. <https://www.infrastructure.gov.au/sites/default/files/the-communications-sector-recent-trends-and-developments.pdf>
- Jen, S. (2025, August 19). *AI will replace most humans, but then what?* Reuters. <https://www.reuters.com/technology/artificial-intelligence/ai-will-replace-most-humans-then-what-2025-08-19/>
- Jiang, Y., Li, X., Luo, H., Yin, S., & Kaynak, O. (2022). Quo vadis artificial intelligence? *Discover Artificial Intelligence*, 2(4), 1–19.
- Jin, T., Chen, Y., & Zhang, K. (2024). Effects of social media use on employment anxiety among Chinese youth: The roles of upward social comparison, online social support and self-esteem. *Frontiers in Psychology*, 15, 1–10.
- JSA. (2025, August 14). *Jobs and Skills Australia report finds automation will transform work but protect manual and service roles*. The Guardian. <https://www.theguardian.com/business/2025/aug/14/ai-artificial-intelligence-jobs-cleaning-construction-hospitality-australian-report>
- Kabaklarlı, E., & Işıcık, Ş. (2020). Türkiye telekomünikasyon sektörüne genel bakış. *Aksaray Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 12(1), 35–42.
- Kim, B. J., & Kim, M. J. (2024). How artificial intelligence-induced job insecurity shapes knowledge dynamics: The mitigating role of artificial intelligence self-efficacy. *Journal of Innovation & Knowledge*, 9(4), 1–16.
- Li, R., Ouyang, S., & Lin, J. (2025). Mediating effect of AI attitudes and AI literacy on the relationship between career self-efficacy and job-seeking anxiety. *BMC Psychology*, 13, Article 454.
- Lin, L., & Parker, K. (2025, February 25). *U.S. workers are more worried than hopeful about future AI use in the workplace*. Pew Research Center. <https://www.pewresearch.org/social-trends/2025/02/25/u-s-workers-are-more-worried-than-hopeful-about-future-ai-use-in-the-workplace/>
- McCarthy, J. (2004). *What is artificial intelligence?* <http://www-formal.stanford.edu/jmc/>
- McCorduck, P. (1977). History of artificial intelligence. *IJCAI*, 2, 952–954.
- Nasser, B. S. A., & Abu-Naser, S. S. (2024). Artificial intelligence in digital media: Opportunities, challenges, and future directions. *International Journal of Academic and Applied Research (IJAAR)*, 8(6), 1–10.
- OECD. (2024). *Who will be the workers most affected by AI? Artificial intelligence and the future of skills*. OECD Publishing.

https://www.oecd.org/content/dam/oecd/en/publications/reports/2024/10/who-will-be-the-workers-most-affected-by-ai_fb7fcccd/14dc6f89-en.pdf

- Ouyang, Y., Wang, L., Yang, A., Shah, M., Belanger, D., Gao, T., Leping, W., & Zhang, Y. (2021). The next decade of telecommunications artificial intelligence. *Networking and Internet Architecture*, 6, 1–50.
- Özbek, A. (2024). Muhasebe meslek mensuplarının yapay zekâ kaygılarının gelecekte istihdam edilebilirlik algıları üzerine bir çalışma. *Alanya Akademik Bakış*, 8(1), 254–267.
- Puente-Torre, P., Delgado-Benito, V., Rodríguez-Cano, S., & García-Delgado, M. Á. (2025). The impact of technology on anxiety management in university students. *Behavioral Sciences*, 15(3), 1–13.
- Rostamian, S., & Kamreh, M. M. (2024). AI in broadcast media management: Opportunities and challenges. *AI and Tech in Behavioral and Social Sciences*, 2(3), 21–28.
- Russell, S., & Norvig, P. (2016). *Artificial intelligence: A modern approach* (3rd ed.). Pearson Education.
- Sachs, G. (2025). *How will AI affect the global workforce?* Goldman Sachs. <https://www.goldmansachs.com/insights/articles/how-will-ai-affect-the-global-workforce>
- Scarpino, P., Manfrè, A., & Lunini, C. (2020). *AI solutions in broadcasting companies*. NTT Data. <https://www.nttdata.com/jp/ja/-/media/nttdatajapan/files/services/ai/ai-solutions-in-broadcasting-companies.pdf>
- Spirlet, T. (2025a, July). *An AI researcher says most jobs will be wiped out by 2045 — but sex workers, politicians, and sports coaches will survive*. Business Insider. <https://www.businessinsider.com/ai-wipe-out-most-jobs-2045-few-still-survive-researcher-2025-7>
- Spirlet, T. (2025b, August). *We're producing a generation of students who will feel they 'don't fit' in the AI world, economist Tyler Cowen warns*. Business Insider. <https://www.businessinsider.com/economist-tyler-cowen-warns-students-unprepared-for-ai-economy-2025-8>
- Strongman, K. T. (1995). Theories of anxiety. *New Zealand Journal of Psychology*, 24(2), 4–10.
- Summak, M. E. (2022). Ön lisans ve lisans düzeyinde halkla ilişkiler öğrenimi gören öğrencilerin mesleki kaygı düzeylerinin incelenmesi. *Selçuk Üniversitesi Sosyal Bilimler Meslek Yüksekokulu Dergisi*, 25(2), 719–726.

- Takıl, N., Erden, N. K., & Sarı, A. B. (2022). Farklı meslek grubu adaylarının yapay zekâ teknolojisine yönelik kaygı seviyesinin incelenmesi. *Balıkesir Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 25(48), 343–353.
- Teepe, G. W., Glase, E. M., & Reips, U. (2023). Increasing digitalization is associated with anxiety and depression: A Google Ngram analysis. *PLOS ONE*, 18(4), 1–15.
- Thomson, S. R., Pickard-Jones, B. A., Baines, S., & Otermans, P. C. J. (2024). The impact of AI on education and careers: What do students think? *Frontiers in Artificial Intelligence*, 7, 1–15.
- Türk Dil Kurumu Sözlükleri (TDK). (2025). <https://www.tdk.gov.tr>
- Uçar, M., Çapuk, H., & Yiğit, M. F. (2025). The relationship between artificial intelligence anxiety and unemployment anxiety among university students. *Work*, 80(2), 701–710.
- Uludağ, G., Taşdöven, H., & Dönmez, M. (2014). Polis adaylarının mesleki kaygı düzeylerinin çeşitli değişkenler açısından incelenmesi. *Atatürk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 18(2), 75–94.
- Ülkü, T., Uçan Özcan, S., & Polatçı, S. (2025). Yapay zekâ kaygısının gelecek kaygısı ve yenilikçi davranışlar üzerindeki etkisi: Üniversite öğrencileri üzerine bir uygulama. *İş ve İnsan Dergisi*, 12(1), 12–25.
- Yaşar, H., & Karagucuk, V. (2025). The effect of artificial intelligence anxiety on career decidedness among students in English-related departments at universities. *Discover Artificial Intelligence*, 5, Article 48.
- Zhang, Q., Dai, W., Chen, J., Gu, Y., & Zhao, Y. (2025). The 'side effects' of digitalization: A study on role overload and job burnout of employees. *PLOS ONE*, 20(4), 1–24.

Authors' Contribution

All authors contributed equally to the development of this article.

Data availability

All datasets relevant to this study's findings are fully available within the article.

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