doi: 10.18863/pgy.1716091

Digitalization and Technostress: Psychosocial Effects and Artificial Intelligence Supported Intervention Opportunities

Dijitalleşme ve Teknostres: Psikososyal Etkiler ve Yapay Zekâ Destekli Müdahale Olanakları



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ABSTRACT

Rapid digitalization is profoundly transforming individuals' lifestyles and work patterns, bringing the phenomenon of technostress to the forefront as a critical factor impacting psychosocial well-being. The constant evolution of technology and the deep integration of digital tools into daily life give rise to anxiety, burnout, occupational insecurity, cognitive overload, and digital dependency. The widespread adoption of remote working and online education, particularly during the pandemic, has made these issues even more visible and intensified the pressure to keep pace with accelerating digital transformation. While artificial intelligence, a cornerstone of this digitalization process, offers significant benefits in the workplace — such as increased speed, efficiency, and personalized service delivery — it simultaneously introduces psychosocial risks including job insecurity, digital addiction, loss of work-life boundaries, and ethical concerns. Technostress manifests in multifaceted negative outcomes: at the individual level through emotional exhaustion and decision-making difficulties; at the family level through disrupted communication and work-family conflict; and at the societal level through social isolation, digital inequality, and the widening digital divide. This review aims to comprehensively analyze the psychosocial effects of digitalization and technostress on individuals, families, and society, while proposing artificial intelligence-assisted, human-centered, and ethically sensitive intervention strategies.

Keywords: Technostress, digitalization, artificial intelligence

ÖZ

Hızla ilerleyen dijitalleşme, bireylerin yaşam tarzlarını ve çalışma biçimlerini köklü biçimde dönüştürürken, psikososyal iyilik hâlini olumsuz etkileyen teknostres olgusu giderek daha fazla öne çıkmaktadır. Teknolojinin sürekli yenilenmesi ve dijital araçların günlük yaşama derinlemesine entegrasyonu; kaygı, tükenmişlik, mesleki güvensizlik, bilişsel aşırı yüklenme ve dijital bağımlılık gibi önemli sorunlara yol açmaktadır. Özellikle pandemi döneminde yaygınlaşan uzaktan çalışma ve çevrimiçi eğitim uygulamaları, bu sorunları daha görünür kılmıştır. Dijital dönüşümün hızına yetişme zorunluluğu, teknostresin şiddetini artıran yeni faktörler ortaya çıkarmakta; aynı zamanda bu dönüşümün temel bileşenlerinden biri olan yapay zekâ, iş yaşamında hız, verimlilik ve kişiselleştirilmiş hizmet sunumu gibi avantajlar sağlarken, iş güvencesizliği, etik riskler ve dijital bağımlılık gibi psikososyal tehditleri de beraberinde getirmektedir. Teknostres; bireysel düzeyde duygusal tükenme ve karar verme güçlüğü, aile düzeyinde iletişim kopukluğu ve iş-aile çatışması, toplumsal düzeyde ise sosyal izolasyon, dijital uçurum ve eşitsizlikler gibi çok katmanlı olumsuz sonuçlar doğurmaktadır. Bu derleme çalışması; dijitalleşme ve teknostresin birey, aile ve toplum üzerindeki psikososyal etkilerini çok boyutlu bir bakışla incelemeyi ve yapay zekâ temelli çözüm önerileri sunmayı amaçlamaktadır.

Anahtar sözcükler: Dijitalleşme, teknostres, yapay zekâ

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Received: 09.06.2025 | Accepted: 03.08.2025

Introduction

Today, digitalization has emerged as a significant transformation process that radically alters individuals' lifestyles and work dynamics, while reshaping the social structure. Digital transformation, which gained momentum particularly during the pandemic period, has increased the integration of technological tools into our daily lives. The widespread adoption of practices such as remote work, online education, and digital communication has created a constant need for access to digital environments. With technological advances, the functioning of organizations has also changed, reflecting a transition to the Fourth Industrial Revolution, which brings profound and wide-ranging shifts in how people learn and work (Molino et al., 2020). This process has been associated with increased psychosocial stress, burnout, and anxiety as individuals strive to adapt to technological innovations (Tarafdar et al. 2007, Ragu-Nathan et al. 2008).

As digitalization increasingly influences both business processes and social life, research highlights that the growing digital interaction and constant connectivity can adversely affect individuals' psychological well-being. In particular, dependence on technological tools, concerns about job insecurity, and the pressure to remain constantly updated are identified as key factors contributing to technostress (Ayyagari et al. 2011). According to the 2020 e-survey report titled Living, Working and COVID-19 by Eurofound—an Ireland-based organization focused on improving living and working conditions in Europe—the impact of digitalization on the social structure became more pronounced with the expansion of remote working during the pandemic (Bejaković 2021).

In recent years, the concept of technostress—also known as digital stress—has gained increasing attention in academic research. Driven by the rapid changes brought about by digitalization, technostress directly affects psychosocial well-being at both the individual and societal levels. The concept emphasizes that the use of digital technologies in routine occupational settings can not only yield benefits but also generate a variety of negative emotional responses, contributing to stress (Bernburg et al. 2025). This highlights the importance of carefully weighing the risks posed by the integration of digital technologies against their advantages.

This review article has two primary aims. First, it explores the phenomenon of technostress—which has intensified due to the digital transformation accelerated by the pandemic—by examining its psychosocial impacts at the micro, mezzo, and macro levels in the context of digitalization. Second, it evaluates both the current and potential contributions of artificial intelligence technologies—key products of digitalization—in managing these negative effects. Accordingly, the study provides a multidimensional perspective on the mental, social, and professional risks that digitalization poses to individuals. It also analyzes the role of artificial intelligence-based support models in addressing these challenges. By examining the effects of technostress on individuals, relational networks, and institutional systems through an interdisciplinary lens, this review aims to make a novel contribution to the field by offering a comprehensive evaluation of the psychological and social dimensions of digital transformation.

The Concept of Digitalization and Technostress

The proliferation of the Internet, advanced wireless technologies, and mobile communication networks has radically transformed daily routines and life practices (Hoffman et al. 2004). This process has brought the concept of digitalization to the forefront. Digitalization refers to the process of converting, processing, and distributing information in a digital format, thereby altering the lifestyles, working methods, and social interactions of individuals and institutions. While digitalization and technological advancements create new means of communication and networking, the increasing volume of data and constant connectivity can lead to stress and pressure, negatively impacting social life and family relationships (Rosen and Samuel 2015).

The availability of information in digital environments enables data to be digitized, stored, and processed across various platforms. This process is considered a comprehensive transformation that encompasses the digitalization of both data sources and business processes through the transfer of analog information into computerized systems (Karakaş et al. 2009, Baloğlu 2023). Digital communication and media

infrastructures have led to new configurations in many areas of social life (Brennen and Kreiss 2016) and have gained momentum through ongoing technological advances since the Industrial Revolution. This transformation, which began with mainframe computer systems and time-sharing applications in the 1950s, took a new turn with the spread of personal computers in the 1970s and further accelerated with the global expansion of the internet in the 1990s (Brynjolfsson and Hitt 2003). The advent of the internet marked a major leap in digitalization, enabling the transition from isolated information processing to interconnected, network-based systems (Dilmen 2007, Acun 2020).

Today, innovations such as mobile technologies, cloud computing, artificial intelligence, data analytics, and the Internet of Things (IoT) continue to deepen digitalization, allowing individuals uninterrupted access to the internet. Cloud computing enables decentralized yet secure data storage, while artificial intelligence and data analytics are employed to optimize business processes, support strategic decision-making, and develop predictive models (Marston et al. 2011, Brynjolfsson and McAfee 2014). In particular, the concept of Industry 4.0 has redefined production processes through digitalization, outlining a methodological shift from machine-based to digital-based manufacturing (Oztemel and Gursev 2020).

This technological transformation not only reshapes individual life but also alters corporate structures, business operations, social interactions, economic activities, and cultural dynamics. While the widespread adoption of digitalization offers new opportunities across various domains, it also brings along negative consequences, notably technostress.

The concept of technostress was first introduced by Craig Brod (1984), who defined it as a modern disease of adaptation resulting from the inability to cope healthily with new computer technologies. In his book Technostress: The Human Cost of the Computer Revolution, Brod emphasizes that challenges in adapting to technological changes generate psychological stress in individuals. The rapid pace of technological advancement and the widespread use of digital tools expose individuals to an ever-increasing flow of information, continuous communication, complex systems, and digital interruptions. In the literature, "technostress" is used to describe the psychological pressure, anxiety, and tension experienced during the process of learning and adapting to new technologies (Ragu-Nathan et al. 2008, Ayyagari et al. 2011, Salanova et al. 2013).

Over time, technostress has been examined from multiple perspectives and linked to concepts such as technophobia, cyberphobia, computerphobia, computer anxiety, computer stress, and negative attitudes toward technology. In general, technostress may cause individuals to feel restless, fearful, and tense when interacting with digital technologies, potentially leading to psychological burnout and cognitive overload in the long term. As a result, individuals may face difficulties in both professional and personal contexts, with a reduced capacity to learn and use technology effectively (Wang et al. 2008).

Especially in business life, technostress has negative effects on employee productivity, mental health and work-life balance (Tu et al. 2008). For example, employees often encounter problems such as: "Loss of the latest version of a saved document", "Anxiety about the need to respond to urgent e-mails and messages", "Accessibility of people via e-mail or message outside of working hours", "Moving the work home, turning the house into a place where the work continues instead of a resting area". The intensity of such interruptions can turn into an unmanageable source of stress in the corporate context, leading to psychological and physical health problems among employees in the long run (Tu et al. 2005). Tarafdar et al. (2007) discussed technostress in five main dimensions:

- 1. Techno-Workload: With the widespread use of digital tools, the workload has increased and the necessity of being constantly online puts pressure on individuals.
- 2. Techno-Occupation: The blurring of the boundaries between work and private life, the interruption of individuals' personal lives by work requirements.
- 3. Techno-Complexity: The necessity of adapting to rapidly changing technologies and the learning difficulties and technical complexity encountered in this process.

- 4. Techno-Uncertainty: The difficulty of adapting to constantly evolving and renewing digital systems and the feeling of uncertainty created by this situation.
- 5. Techno-Insecurity: The impact of technological advances on the professional competencies of employees and the concern of job loss caused by this situation.

These dimensions directly affect the psychosocial well-being of individuals, especially in digitalized working environments, and require a comprehensive handling of digitalization and technostress.

Psychosocial Effects of Digitalization and Technostress

The digitalization process affects the cognitive, emotional and social functionality of individuals in a multidimensional way. In this context, technostress poses significant risks to psychological well-being. Exposure to ever-changing digital technologies can trigger stress responses in individuals, causing anxiety, burnout, and adjustment problems. These effects are observed in a wide range from individual life to family relations, from social dynamics to business life. Therefore, the psychosocial consequences of digitalization need to be addressed in a multi-level manner. In this section, these effects will be examined at the micro, mezzo and macro levels, which are three basic levels: in the context of the individual, family and society.

Micro Level: Reflections on Individual Life and Psychological Processes

The process of digitalization profoundly affects not only individuals' daily routines but also their cognitive and emotional functioning. The continuous and rapid flow of information creates cognitive overload, leading to issues such as distraction, decision-making difficulties, and mental fatigue. According to Sweller's (1988) Cognitive Load Theory, the excessive influx of information into working memory negatively impacts learning and decision-making processes (Kiraz 2021). This can be considered one of the main psychological components of technostress.

The increase in online interactions may lead to a lack of face-to-face communication and a sense of emotional disconnection in individuals' social relationships. Notably, the generational gap between digitally native youth and older adults with limited digital adaptation poses a significant challenge in adjusting to the digitalization process. Digitalization also introduces numerous new concepts into daily life, such as big data, artificial intelligence, open data, data mining, cybersecurity, hacker culture, hyperlinks, and the Internet of Things (Olcay 2018). While digital communication enables continuous connection in virtual environments despite physical solitude, this often prevents individuals from devoting adequate time to building deep and meaningful relationships. Consequently, digital addiction and emotional dissatisfaction—especially among younger generations—can be triggered.

The desire to remain constantly connected in digital environments fuels a type of anxiety referred to as FOMO (Fear of Missing Out). This behavior, when combined with digital addiction tendencies, heightens anxiety levels. The compulsive need to stay online—particularly among young adults—leads to social comparison, approval-seeking, and questioning of self-worth. These dynamics are critical factors that directly affect individual psychological well-being and must be considered in psychological support interventions. Fors (2010) emphasizes that digitalization reshapes individuals' perceptions of the world, of themselves, and of what it means to be human.

The effects of technostress on decision-making processes challenge the model of the rational individual as proposed in classical economics. Ariely (2010) argues that individuals frequently make irrational decisions due to information overload, emotional stimulation, or environmental pressure—factors that can negatively influence long-term psychological well-being.

Doronina (1995), who examined the various components of technostress, noted that individuals often experience anxiety in their interactions with technology. These concerns include fear of misusing or damaging technological devices, feelings of inadequacy due to a lack of knowledge, difficulties in adapting to new technologies, and either excessive trust or distrust in technology.

Tu et al. (2005) suggest that technostress may lead to job dissatisfaction, burnout syndrome, and even the intention to leave employment over time. Similarly, Berg-Beckhoff et al. (2017) found that exposure to digital stimuli and pressure to adapt to complex technologies can trigger emotional fatigue, which is a core element of burnout. These findings suggest that technostress is not merely a temporary stress response but can evolve into a more persistent and deeply rooted condition referred to as digital burnout.

In addition, the widespread use of technology has contributed to the emergence of digital addiction symptoms. Young (1998) identified internet addiction as a new clinical disorder and emphasized its negative impact on individual psychology, social relationships, and quality of life. As the use of social media continues to rise, individuals may exhibit traits such as low conscientiousness and high narcissism, which further compromise psychological well-being (Kuss and Griffiths 2011). Excessive use of the internet and smartphones has led to a condition referred to as techno-dependency. This phenomenon exacerbates technostress and undermines individuals' psychological resilience (Young 2015).

Mezzo Level: Reflections on Family Communication and Interaction

Digital transformation not only transforms individuals' social lives, working patterns and communication styles, but also radically changes family relations and interpersonal interaction processes. In this context, the processes of creating, transferring, storing, and analyzing digital data have the potential to shape individuals' life practices and affect relational dynamics (Brennen and Kreiss 2016). The integration of information and communication technologies into daily life not only transforms the way individuals interact with the outside world, but also leads to significant changes in family relations. Digital addiction and the constant pressure to be online weaken face-to-face communication between family members and can cause socio-emotional bonds to be damaged.

Yalçın and Begenirbaş (2021) revealed that technostress has a significant effect on work-family conflict. Although the flexibility offered by digitalization has the potential to increase family interaction, the necessity of being online all the time reduces the quality time individuals spend together. Ayyagari et al. (2011) highlight that the constant accessibility of mobile technologies can cause interventions and interruptions in family life. In a longitudinal study by Chelsey (2005), it was found that mobile phones blur the boundaries between work and home. For both men and women, the transfer of work to the family (home) was associated with negative mood and low family satisfaction. Carlotta et al. (2017) found that digitalization has negative effects on work-family balance; It has been revealed that it leads to an increase in technological stress and a weakening of individuals' professional commitment.

In terms of romantic relationships, Tammisalo and Rotkirch (2022) stated that romantic relationships are the type of relationship that suffers the most from digitalization due to the impact of relationship-specific stressors such as infidelity. In a study by Coyne et al. (2011) examining individuals' digital interactions, it was found that 38% of respondents reported sending messages or emails during a conversation with their partner, which led to increased distraction and conflict, weakening relationships. Mazmanian et al. (2005) also revealed that in environments where employees with mobile devices are expected to respond quickly to work e-mails, spouses feel uncomfortable with this situation and see this situation as an intervention in the relational space (McDaniel and Bruess 2013).

Macro Level: Social Interaction, Business Life, and Reflections on Organizational Structures

Beyond physical spaces, new communication networks established in virtual environments are reshaping the forms of social interaction. As stated in Castells' (1996) concept of the "network society," digital communication tools accelerate the flow of information and restructure interpersonal relationships. Digital transformation has led to significant changes in work life; it has brought applications such as remote and flexible working models and online collaboration to the agenda. However, these practices may cause a decrease in face-to-face communication, increased social isolation, and psychological wear and tear. Brynjolfsson and McAfee (2014) emphasize that digital transformation not only adds flexibility to

business processes but also creates new psychological risks such as job insecurity, digital fatigue, and anxiety about professional competence.

The continuous use of digital tools increases stress levels in employees; by blurring the boundaries between work and private life, it raises the risk of burnout in the long term. For example, with individuals' use of digital media, perceptions of physical space change and forms of social participation transform. Drucker and Gumpert (2012) highlight that people now complete many activities in the digital environment that they perform in the physical world. Social interactions requiring face-to-face communication are being replaced by social media posts, and events that require physical participation are moving to online platforms.

Technostress reduces employees' productivity and leads to job dissatisfaction. Studies by Ragu-Nathan et al. (2008) and Tarafdar et al. (2007) reveal that technostress increases feelings of burnout in individuals and decreases job satisfaction. Similarly, Ayyagari et al. (2011) explain the negative effects of technostress on job performance and well-being by examining the cognitive and psychological pressures created by technological developments on employees. Yener (2018), on the other hand, emphasizes that technostress reduces job performance through burnout.

The effects of digitalization and technostress can be observed in different sectors. For example, the education sector has also been impacted by this transformation, gaining a different dimension especially during the COVID-19 pandemic with the implementation of remote learning models. Hodges et al. (2020) emphasize that online education creates psychological challenges such as lack of social interaction, digital fatigue, and loss of motivation. In a meta-analysis study by Means et al. (2010), the effects of online learning on efficiency and student satisfaction were examined, highlighting the necessity of using appropriate pedagogical approaches in digital learning environments for students to succeed.

While the digital economy generates positive effects through productivity gains (achieving more output or results with fewer resources such as time, effort, cost, etc.) and contributes to global economic growth, it also brings social and environmental sustainability issues to the agenda (Linkov 2018). Data published by the Pew Research Center (2018) show that the obligation to be constantly online and excessive dependence on digital tools weaken individuals' social ties and lead to digital inequalities within society. These findings reveal that the effects of digital transformation on work life and organizational structures should be addressed carefully.

In conclusion, while digital transformation provides flexibility and innovations in work life, it also brings risks such as job insecurity, technostress, and social isolation. Especially, inequalities in access to digital tools have made the concept of the "digital divide" more visible. Individuals with low income, the elderly, or those living in rural areas remain disadvantaged in accessing technological opportunities, increasing the risk of social exclusion (Cosmo 2020). Furthermore, differences in digital literacy levels cause serious inequalities in individuals' access to information, utilization of public services, and participation in employment opportunities. In this context, digital transformation leads to the reshaping of the social structure while also raising new debates concerning social justice and equal opportunity principles. The negative effects of digitalization and technostress on individuals, families, and society once again highlight the need for psychosocial interventions in this field. In this regard, it is important for mental health professionals to play an active role in coping with the challenges brought by digitalization.

Artificial Intelligence-Supported Psychosocial Interventions for the Effects of Digitalization and Technostress

In today's digital world, developing technologies and artificial intelligence increasingly occupy a significant place in all areas of life. This situation creates both substantial opportunities and challenges for all occupational groups. Mental health professionals should also benefit from the opportunities offered by artificial intelligence and develop more effective and sustainable intervention strategies by leveraging digital transformation from a multidisciplinary perspective. Problems such as social isolation, information overload, and digital addiction caused by digitalization negatively affect individuals' psychosocial health

and lead to technostress. Although attempting to eliminate the effects of digitalization and technostress with artificial intelligence–supported solutions may seem contradictory, artificial intelligence can be both part of the problem and a potential solution. Therefore, experts should mitigate the negative effects of technology and help individuals adapt to digital transformation through counseling, training, and support programs. Solutions such as personalized recommendation systems, mood-tracking algorithms, and digital counseling platforms have become effective tools for both preventive and supportive psychological interventions. These approaches, which integrate technology in an ethical and human-centered way without excluding it, play an important role in protecting mental health in the digital age.

Artificial intelligence refers to computerized systems that can perform physical tasks and cognitive functions and make decisions without explicit human instructions (Kaplan and Haenlein 2019). Today, Al typically refers to narrow artificial intelligence applications that focus on specific tasks—for example, Facebook's facial recognition technology or Siri's voice recognition functions. In addition to applications that play an important role in diagnosis, treatment, and risk estimation by providing clinical decision support in the health sector, innovative intervention examples are being developed in psychosocial practices (Pan 2016, López–Robles et al. 2019, Romero–Brufau et al. 2020). Subfields such as emotional informatics explore the use of Al in psychological support and counseling processes. In this way, it is possible to alleviate experts' workloads, speed up cooperation processes, and identify at-risk groups (Goldkind 2021, Reamer 2023).

Examples include the therapeutic chatbot Woebot, which simulates therapeutic conversations using natural language processing (NLP) and learned responses, remembers previous sessions, and provides advice on users' mood challenges. Similarly, Wysa helps users cope with stress by using techniques such as cognitive behavioral therapy, meditation, and breathing exercises. Additionally, Pyx Health is an application developed to communicate with individuals experiencing chronic loneliness; PTSD Coach focuses on managing symptoms of post-traumatic stress disorder, especially for soldiers and veterans (Reamer 2023). Digital applications add new dimensions to psychosocial service and intervention delivery in light of these technological developments (Başcıllar et al. 2022).

Young people's interest in new technologies and the fact that 97% of them are connected to the internet daily (Pew Research Center 2014) pave the way for internet-based interventions to become attractive and effective for individuals with psychosocial difficulties (Burns and Morey 2008). Such interventions are important in terms of developing supportive relationships, reducing isolation, and providing opportunities for early intervention. For example, some systematic reviews have revealed positive outcomes using artificial intelligence techniques—such as machine learning and natural language processing—in psychosocial case management (Li et al. 2025).

Artificial intelligence applications offer various psychosocial support mechanisms to cope with the stress factors caused by digitalization. These technologies have significant advantages, such as the ability to analyze individuals' mental and physical states, respond quickly in times of crisis, and develop personalized intervention strategies (Gillingham 2019, Grządzielewska 2021, Jacobi and Christensen 2023). Thanks to algorithmic models, solutions specific to individuals' needs can be offered; risk assessments and resource planning can be performed more systematically through data analytics (Kum et al. 2015, Coulthard et al. 2020, Bako et al. 2021).

However, it should not be forgotten that the use of artificial intelligence carries some psychosocial risks. Increasing dependence on technology, decreasing face-to-face interaction, data security breaches, and concerns about adapting to technology are among the factors that increase technostress. Considering the effects of digitalization on individuals' psychological resilience and social functioning, it seems important to structure artificial intelligence-based applications in an ethical and sensitive manner that supports digital well-being.

Preventive Psychosocial Interventions

In the past, it was not foreseen that professionals working in the field of mental health would work so integrated with technology, offer services online, store client data in cloud-based systems, or analyze

individual needs with artificial intelligence-supported tools. However, the rapid development of digitalization has deeply affected psychosocial-based practices and made it almost mandatory to benefit from digital tools in this field.

Artificial intelligence systems can detect problems such as stress, loneliness, cognitive load and technostress that occur in digital environments at an early stage; thus, it contributes to the development of preventive and personalized interventions that support the psychological well-being of individuals.

Ragu-Nathan et al. (2008) conceptualize technostress blockers through three key components:

- 1. Provision of Technical Support: Institutionalized support mechanisms, such as help desks, can prevent stress by providing immediate solutions to users' technical problems.
- 2. Facilitation of Literacy: Training programs that increase Information Technology (IT) literacy, establishing a close relationship with the IT department, and encouraging information sharing among colleagues play a critical role in reducing technological pressure.
- Facilitating Participation: Incentive systems based on usage and process changes that strengthen the adaptation of employees to new technology support active participation in the technological transformation process.

These preventive measures may include different forms of intervention, along with the training and advisory roles of experts. In addition, some studies indicate that exposure to technostress can be prevented and focusing on the positive aspects of technologies is effective in overcoming this situation (Yener 2018). Scaramuzzino and Martinell Barfoed (2023), on the other hand, revealed that Al-powered remote counseling platforms improve work-life balance by optimizing digital communication and information management processes.

In particular, artificial intelligence-supported systems can analyze the emotional state of individuals and offer them special therapy or support suggestions; In this way, it is possible to develop personalized intervention strategies. In addition, thanks to data analytics, case and resource management processes in psychosocial interventions are optimized, so that limited resources can be used more efficiently and risk assessments can be made more accurately (Tarafdar et al. 2010). Artificial intelligence-supported training programs should also be developed in order to facilitate the adaptation of individuals to technology and to increase their digital literacy. The establishment of psychosocial support mechanisms at the group or community level, flexible working models and in-house trainings can play an important role in reducing the effects of technostress.

Therapeutic Psychosocial Interventions

Artificial intelligence-based support systems also offer effective solutions in digitalization and technostress management and psychological recovery processes. In the literature, stress coping strategies are generally divided into two main categories: emotion-focused strategies and problemoriented strategies. According to Monat and Lazarus (1991), problem-oriented coping refers to efforts to improve the stressful employee/environment relationship. For example, individuals experiencing technostress can alleviate this by seeking information, avoiding impulsive actions, and constructively confronting those responsible for their problems. Emotion-focused coping strategies, on the other hand, are aimed at changing thoughts and behaviors in order to alleviate the emotional effects of stress, and although they do not directly change the threatening conditions, they provide temporary relief to the person. These strategies may include monitoring and maintaining breathing techniques and meditation practices through Al-powered mobile applications.

Chiappetta (2017) emphasizes that recognizing such stress situations and supporting training processes of employees plays a critical role in reducing the harmful effects of technostress. Furthermore, the literature shows that the causes and components of technostress are mostly addressed at the individual level, but organizational factors are also important (Sosik and Godshalk 2000). Individuals who cannot keep up with the pace of technological changes have difficulty in performing their tasks by processing

information hastily and ineffectively, which prevents the implementation of creative or innovative intervention strategies (Carlotto et al. 2017).

Therapeutic interventions become feasible through artificial intelligence-supported systems, continuous monitoring of emotional state, creation of personalized support plans, and development of innovative solutions at both individual and institutional levels. Thus, it is seen that psychosocial interventions can be used more effectively in managing the psychological and behavioral problems caused by technostress.

Intervention Suggestions

In the context of today's developments, managing the psychosocial problems that arise with digital transformation is not only with individual efforts; It is understood that it is possible with the joint responsibility of policy makers, practitioners, researchers and technology developers. Human-centered, ethically sensitive and sustainable intervention strategies should be developed without excluding technology. Accordingly, suggestions can be given as follows;

- 1. Frameworks based on ethical principles should be established in artificial intelligence-supported applications; Transparency, accountability, and data security should be prioritized.
- 2. In order to reduce the effects of technostress in individuals, training programs that strengthen digital literacy, digital awareness and psychological resilience should be disseminated.
- 3. Personalized digital support models should be developed, especially for vulnerable groups such as young people, the elderly, migrants and individuals living in rural areas.
- 4. In psychosocial support processes carried out with digital tools, hybrid and flexible models should be preferred without completely replacing face-to-face contact.
- 5. The effects of digitalization on mental health should be monitored through long-term research and social policies should be updated with interdisciplinary approaches.
- 6. In order to combat digital inequalities, technology access policies should be developed and the concept of digital well-being should be considered from a social justice perspective.

In order to protect mental health and psychosocial well-being in the digital age, it is critical to integrate technological developments with an understanding that prioritizes human dignity, equality and social justice. In addition, mental health professionals must take a balanced position between the opportunities and threats posed by the digital age; It should integrate technology with an understanding based on human dignity, justice and welfare.

Conclusion

This review study examined the effects of the digitalization process and artificial intelligence-supported technologies at the individual, family and institutional level from a psychosocial perspective. Accordingly, while revealing that digital transformation offers important advantages such as access to information, acceleration of service processes and personalized intervention opportunities; At the same time, it points out that multidimensional risk areas such as technostress, digital addiction, social isolation, data security concerns, ethical dilemmas and occupational insecurity have emerged.

Digitalization is not only a matter of adaptation to technology as a transformation process that directly affects the cognitive, emotional and social functioning of individuals. This process also represents a shift that requires the rebuilding of psychological resilience, digital awareness, and ethical sensitivity. The effects of a life intertwined with technology on mental health are becoming more and more apparent; The need for new types of support mechanisms is increasing in order for individuals to maintain their quality of life.

Artificial intelligence applications have the potential to meet these needs. Through advanced algorithms, the mental and behavioral states of individuals can be monitored more closely; Psychosocial interventions

can be carried out more quickly, accurately and in a personalized way. However, it should not be forgotten that artificial intelligence brings with it ethical and social problems such as weakening human relations, reducing face-to-face interaction, and violating individual privacy. In this context, the use of technological tools in the field of mental health should be considered not only in terms of functionality, but also from a value-based perspective.

The effects of digitalization on society may vary in different age groups, socioeconomic levels and cultural structures. For this reason, scientific research should include multidimensional analyzes that take into account individual differences. Inequality of access to digital technologies, exclusion of vulnerable groups and differences in technological literacy levels make it difficult for digitalization to be experienced in an egalitarian and fair manner. In this context, the concept of digital well-being is becoming more and more important. Digital well-being should be thought of as an approach that encompasses not only access to technology, but also the ability of individuals to interact with these technologies in a safe, ethical and mentally healthy way.

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Authors Contributions: The author(s) have declared that they have made a significant scientific contribution to the study and have assisted in the preparation or revision of the manuscript

Peer-review: Externally peer-reviewed.

Ethical Approval: This review study does not require ethical clearance.

Conflict of Interest: No conflict of interest was declared.

Financial Disclosure: No financial support was declared for this study..