

Original Research Article

Juvenile Care in Emirati Society in the Era of Digital Transformation: Reality, Challenges, and Strategies for Prevention and Rehabilitation

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Abstract

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Over the past decades, rapid advancements in information and communication technologies have driven a profound digital transformation across modern societies, including justice systems and juvenile care. This study examines juvenile care in Emirati society within the context of digital transformation, focusing on the current reality, key challenges, and strategies for prevention and rehabilitation. The study is based on an analytical review of recent literature and applied studies (2020–2026), alongside an examination of global practices contextualized to the United Arab Emirates. Findings indicate that Emirati institutions have begun adopting digital approaches, including smart assessment tools, digital training programs, and post-release digital monitoring. However, several challenges persist, notably the digital divide, limited institutional integration, data privacy concerns, and a shortage of localized empirical studies. Conversely, digital technologies offer significant opportunities to enhance the quality of juvenile care through artificial intelligence, virtual reality, smart platforms, and digital vocational training programs. Additionally, leveraging international best practices can support the development of more effective interventions. The study concludes that integrating digital technologies into juvenile care systems represents a powerful tool for prevention, rehabilitation, and reintegration, provided that robust regulatory frameworks and supportive policies are in place. It also emphasizes the need for localized empirical research to develop sustainable, context-sensitive programs aligned with the Emirati environment.

Keywords: Digital Justice, Digital Prevention, Digital Rehabilitation, Digital Transformation, Juvenile Care

INTRODUCTION

In recent decades, contemporary societies have undergone a profound structural transformation driven by rapid advancements in information and communication technologies. Digital transformation has thus become a central pillar in the development of social and service systems, including justice systems and juvenile care. This shift has significantly reshaped the nature of social and behavioral challenges, particularly among juveniles, who

are the most engaged with and influenced by digital environments.

In this context, recent literature indicates that digital environments have generated new forms of risk, such as cybercrime, cyberbullying, and online exploitation, placing juveniles at risk of becoming both victims and perpetrators (IJCRT, 2025). Furthermore, studies suggest that excessive internet use may exacerbate psychological

and social problems among juveniles by reinforcing risky behaviors and increasing exposure to digital abuse (Oguine et al., 2024).

At the same time, digital transformation presents a valuable opportunity to enhance juvenile care systems. Research highlights that the use of big data analytics improves early prevention models by enabling more accurate identification of risk factors and shifting from traditional approaches to predictive, evidence-based models (International Journal of Digital Crime, 2025). Moreover, integrating technology into juvenile justice programs has been shown to reduce recidivism rates through improved rehabilitation processes and digital monitoring systems (Mathur et al., 2023).

Additionally, emerging technologies such as virtual reality, smart applications, and wearable devices offer innovative tools for improving assessment and treatment by providing more interactive and personalized interventions (Mertens et al., 2026). The growing emphasis on human-centered digital justice further supports improved access to services and enhanced institutional integration through technology (OECD, 2025).

Despite these opportunities, several studies indicate that juvenile justice and care systems continue to face challenges in adapting to digital transformation. Many practices remain traditional and insufficiently integrated, while technological adoption is constrained by regulatory, cultural, and technical barriers (Lesnick et al., 2024).

Accordingly, this study aims to analyze the current state of juvenile care in Emirati society within the context of digital transformation, explore the challenges associated with digital service integration, and propose effective strategies to enhance prevention and rehabilitation. The significance of this study lies in addressing a critical knowledge gap regarding the integration of digital transformation into juvenile care, while providing a scientific and practical framework to support the development of advanced policies and programs that enhance juvenile protection and promote societal security

Research Problem

Recent studies indicate that, despite advancements, juvenile care systems continue to rely heavily on traditional approaches to prevention and rehabilitation, with limited systematic integration of digital technologies. For instance, Mathur et al. (2023) found that traditional programs are less effective than technology-integrated approaches, which demonstrate greater success in reducing recidivism rates.

Similarly, Mertens et al. (2026) highlight that the use of advanced technologies in the assessment and treatment of juveniles remains limited, despite their significant potential to enhance engagement and therapeutic out-

comes. This reflects a gap between technological capabilities and their practical implementation within institutions.

In the same vein, a study published in the *International Journal of Digital Crime (2025)* suggests that the adoption of big data in preventing juvenile delinquency is still in its early stages, particularly in environments where digital infrastructure is not fully developed. Moreover, Oguine et al. (2024) emphasize that digital environments may exacerbate risks faced by juveniles, underscoring the need for specialized digital strategies for early detection and preventive intervention.

Although research on digital transformation in justice systems is increasing, OECD (2025) argues that achieving comprehensive digital justice requires a fundamental redesign of systems and services, rather than merely adding technological tools to traditional frameworks.

Research Gap

Based on the above, the research gap can be identified as follows:

- Limited studies addressing the comprehensive integration of digital transformation within juvenile care systems
- Scarcity of applied research focusing on digital services as tools for prevention and rehabilitation
- Lack of context-specific studies in the UAE examining the practical implementation of advanced technologies in juvenile care

Accordingly, the research problem is formulated in the following main question: How can digital transformation and digital services be effectively utilized to develop juvenile care systems in Emirati society in ways that enhance prevention and rehabilitation amid contemporary digital challenges?

Research Questions

The main question is further divided into the following sub-questions:

1. What is the theoretical framework of juvenile care in the digital age, and how does digital transformation influence juvenile behavior?
2. What roles do family, community, and digital institutions play in preventing juvenile delinquency in digital environments?
3. What are the strategies for digital rehabilitation and reintegration of juveniles in the context of digital transformation?
4. What are the key challenges and future opportunities associated with the use of digital services in juvenile care within Emirati society?

RESEARCH METHODOLOGY

Descriptive-Analytical Approach

The study employs a combined descriptive-analytical and foresight approach. It examines the current state of juvenile care in Emirati society amid digital transformation, analyzes relevant literature and previous studies, and interprets the relationship between digital technologies, juvenile behavior, and prevention and rehabilitation programs. In addition, the study anticipates future trends in digital services, including artificial intelligence and predictive analytics, to draw scientific conclusions and practical recommendations that advance the field

Literature review

Juvenile Care in the Era of Digital Transformation

Concept of Juvenile Care

Juvenile care refers to a set of policies and programs aimed at protecting minors from delinquency while ensuring their rehabilitation and reintegration into society (Shammaa, 2021; Al-Anzi, 2023). It encompasses social, psychological, educational, and legal dimensions, reflecting a balance between protection and reform. In Western literature, juvenile care is often framed within restorative justice, emphasizing rehabilitation over punishment and safeguarding juveniles' rights (Goldson & Muncie, 2020).

Traditional studies (Siegel & Welsh, 2018; Shoemaker, 2018) indicate that juvenile delinquency results from complex interactions between individual, familial, and societal factors, requiring comprehensive intervention models. Based on the above, it can be argued that these studies provide a strong theoretical foundation; however, they remain largely confined to traditional contexts and overlook the digital dimension, limiting their relevance in explaining contemporary behavioral patterns.

Digital Transformation and Its Impact on Juvenile Behavior

Digital transformation has significantly reshaped youth experiences, particularly in technologically advanced contexts such as the UAE. Research indicates that intensive digital engagement may increase distraction and reduce real-world interaction, potentially contributing to risky online behaviors (Al Ali & Faraj, 2023). UAE-based findings also reveal that exposure to cyberbullying and harmful online content is associated with lower levels

of social adjustment among juveniles (Khalifa Youth Research, 2024).

At the global level, digital environments are recognized as dual-impact spaces that offer opportunities for learning and communication while simultaneously introducing risks such as digital addiction and online misconduct (Livingstone & Stoilova, 2021). Similarly, studies on cyber behavior (Hinduja & Patchin, 2015; Oguine et al., 2024) confirm that digital exposure can amplify behavioral risks in the absence of effective supervision. Based on the above, it can be argued that the digital environment represents a dual-impact space, which necessitates the integration of digital prevention skills into juvenile care programs.

Digital Deviance Among Juveniles

Digital deviance refers to unlawful or socially unacceptable behaviors conducted through digital platforms, such as cyberbullying, hacking, and online fraud (Holt et al., 2020). These behaviors are characterized by their borderless nature, difficulty of detection, and wide-ranging psychological and social impact (Ngo & Jaishankar, 2022).

Recent studies indicate that weak parental digital supervision and limited critical digital skills are associated with a higher likelihood of such behaviors (Salem, 2023). Furthermore, digital environments create new opportunities for deviance, allowing juveniles to engage in misconduct without spatial or temporal constraints (IJCRT, 2025). It can be argued that, despite their importance, these studies focus primarily on diagnosing risks without sufficiently linking them to institutional care and rehabilitation systems, which limits their practical applicability.

Institutional and Legal Framework in the UAE

Federal Law No. (6) of 2022 on juvenile delinquents and those at risk establishes a modern legal framework that emphasizes rehabilitation, protection of rights, and avoidance of stigmatization. It guarantees procedural safeguards, including legal representation, confidentiality, and consideration of the juvenile's age and circumstances.

Although the law does not explicitly address digital procedures, its provisions implicitly ensure data protection and privacy within digital contexts. Additional legislation, such as the Child Rights Law (2016) and the Cybercrime Law (2012), further strengthens protection against digital risks. In light of this, it can be argued that this legal framework represents an advanced foundation; however, it requires further legislative development, particularly in relation to digital investigations and the

protection of digital rights.

The Role of Family, Society, and Digital Institutions in Prevention

Concept of Prevention

Prevention involves proactive strategies aimed at reducing the likelihood of juvenile delinquency through early intervention and risk analysis (Farrington et al., 2021). In the UAE context, preventive approaches increasingly incorporate digital awareness and family guidance (Al Ali & Faraj, 2023). Based on the above, prevention can be viewed as a continuous, multi-level process that extends into the digital environment.

Role of the Family

The family represents the primary environment for socialization and plays a crucial role in shaping both behavioral and digital norms. Studies indicate that weak parental supervision increases exposure to digital risks (Salem, 2023), whereas effective guidance enhances safe digital engagement (Livingstone & Stoilova, 2021). It can be argued that digital transformation requires a shift from traditional control-based supervision to a more positive, guidance-oriented model of digital parenting.

Role of Society and Educational Institutions

Community institutions contribute to prevention by strengthening social cohesion and promoting digital awareness. In the UAE, youth initiatives increasingly rely on digital platforms to deliver preventive programs (Khalifa Youth Research, 2024). Schools also play a key role by integrating digital literacy and safety into curricula (Abdulaziz, 2022). It can be argued that integrating digital tools with traditional institutional roles enhances preventive effectiveness and helps bridge the gap between digital generations.

Role of Governmental and Digital Programs

Government institutions in the UAE have adopted digital awareness campaigns, online platforms, and training programs targeting youth. Studies show that digital preventive programs enhance self-regulation and reduce risky behaviors (Whittaker et al., 2022; OECD, 2025). Based on this, digital programs can be considered a strategic complement to traditional interventions rather than a substitute for them.

Digital Rehabilitation and Reintegration Strategies

Concept of Digital Rehabilitation

Rehabilitation and reintegration aim to correct behavior and facilitate productive societal participation. Digital transformation enhances these processes through improved assessment, monitoring, and personalized interventions (Mertens et al., 2026).

Digital Rehabilitation Strategies

Digital tools support rehabilitation through assessment technologies, training platforms, vocational programs, and post-release monitoring (Nisser et al., 2024). It can be argued that these tools represent a qualitative shift in understanding juvenile behavior and improving opportunities for successful reintegration.

Digital Restorative Justice

Digital platforms facilitate mediation and reconciliation while ensuring confidentiality (Bahriya & Haroun, 2021). It can be argued that this approach strengthens the human-centered dimension of rehabilitation programs.

Challenges of Digital Rehabilitation

Challenges include the digital divide, privacy concerns, and the need for professional training. This, in turn, requires the development of clear regulatory frameworks before expanding large-scale implementation.

Future Challenges and Opportunities

Key Challenges

Major challenges include limited institutional integration (OECD, 2025), the digital divide (Nguyen & Balakrishnan, 2023), privacy concerns (Smith et al., 2024), and the lack of applied studies. It can be argued that these challenges reflect the need to build an integrated and coherent digital ecosystem.

Future Opportunities

Opportunities include artificial intelligence for predictive analysis (Berk, 2020), digital support platforms (OECD, 2025), digital learning programs (Jones & Cook, 2023), and international cooperation (UNODC, 2023). It can be argued that maximizing these opportunities requires a

careful balance between technological innovation and ethical considerations.

Section Conclusion

Digital transformation presents both challenges and opportunities. Based on the above, it can be concluded that the success of juvenile care systems in the digital era depends on the integration of technology, policy frameworks, and human-centered rehabilitation approaches.

RESEARCH FINDINGS AND DISCUSSION

Current State of Juvenile Care under Digital Transformation

Results indicate that UAE institutions have made tangible progress in incorporating digital technologies into certain care programs. However, integration levels vary among agencies, and gaps remain in linking data with digital services. These findings align with OECD (2025), which emphasizes the need to redesign digital justice systems for inclusivity and integration, and resonate with global studies (Berk, 2020) on the importance of combining data and interventions.

Challenges in Implementing Digital Services for Juvenile Care

Key challenges identified include the digital divide, weak institutional integration, privacy concerns, and the lack of applied studies. These align with Smith et al. (2024) regarding the protection of juveniles' digital data and Nguyen & Balakrishnan (2023) on inequalities in access to digital resources.

Digital Rehabilitation and Reintegration Strategies

Results reveal that interactive digital programs, smart assessment tools, digital vocational training, and post-release digital follow-up significantly enhance rehabilitation outcomes and reintegration. This corroborates findings by Mertens et al. (2026) and Nisser et al. (2024), highlighting that digital interventions strengthen positive engagement and reduce recidivism.

Future Opportunities for Enhancing Juvenile Care in the Digital Era

Findings indicate key opportunities in AI-driven predictive analytics, digital monitoring platforms, e-learning, and

international collaboration for knowledge exchange. These align with recent studies on digital justice and prevention (OECD, 2025), showing that effective utilization of these opportunities requires clear policies and continuous institutional support.

Research Gap Addressed

Despite global literature advancements, the study identified a lack of applied research in the UAE context linking digital transformation with the effectiveness of juvenile care and rehabilitation programs. This research provides a practical, nationally relevant contribution.

Practical and Forward-Looking Recommendations

Develop an Integrated Digital Infrastructure for Juvenile Care

Create a centralized platform linking justice, education, health, and social service data to support risk analysis, early intervention, and coordinated service delivery.

Bridge the Digital Divide and Ensure Equal Access

Provide essential digital literacy training for all juveniles, ensure equitable access to devices and educational/rehabilitation applications, and promote safe and positive digital engagement.

Implement Innovative Digital Rehabilitation Programs with Privacy Safeguards

Utilize interactive digital tools—such as virtual reality, smart applications, and educational games—to enhance critical thinking, positive behavior, vocational skills, and ethical handling of data, supported by continuous professional training.

Leverage International Expertise and Encourage Applied Research

Adopt scientifically validated international models adapted to the UAE context, promote cross-border digital collaboration, and support local applied research to evaluate the effectiveness of digital tools in juvenile care and rehabilitation strategies.

Future Vision

Digital transformation can establish a comprehensive and

intelligent juvenile care system in the UAE, enhancing prevention, rehabilitation, reintegration, and reducing recidivism, provided there is sustained institutional support and clear national policies.

CONCLUSION

This study witnessed significant shifts in understanding the juvenile care landscape in the UAE amid digital transformation. The four sections of the research demonstrated that integrating digital technologies into prevention and rehabilitation programs presents a substantial opportunity to enhance the quality of services for juveniles, yet it faces structural, ethical, and technical challenges. The study concludes that digital transformation is not merely an additional tool but a fundamental element reshaping juvenile care practices, from early assessment, prevention, rehabilitation, reintegration, to post-release follow-up. Moreover, findings suggest that digital rehabilitation strategies and digital restorative justice can reduce recidivism and effectively support juvenile reintegration into society, provided that supportive policies and a comprehensive regulatory framework are in place.

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