

CULTURAL INFLUENCES AND TRANSMEDIA LITERACY: INFORMAL LEARNING AMONG EMIRATI ADOLESCENTS

DR. ELSAYED DARWISH

<https://orcid.org/0000-0001-5338-1335>

elsayed.darwish@zu.ac.ae

College of Communication & Media Sciences, Zayed University
United Arab Emirates

Received: April 16, 2025 / Accepted: September 2, 2025

doi: <https://doi.org/10.26439/contratexto2025.n44.7864>

ABSTRACT. This study explores the digital engagement and transmedia literacy of Emirati adolescents using a qualitative-dominant mixed-methods approach. By analyzing information gathered from surveys ($n = 1,346$), digital diaries, workshops, and interviews, the researchers discovered a significant disconnect between informal digital learning and formal education. Seventy-five percent of participants engaged in content creation, whether through active or hybrid means, while 25 % primarily consumed content passively. Only 15 % felt their digital skills were recognized in academic settings; 60 % reported no recognition, and 25 % remained uncertain. Cultural norms, parental oversight, and socioeconomic differences significantly influenced creative autonomy and access, thereby reinforcing educational inequities. Participants demonstrated basic skills in critical evaluation, but they lacked proficiency in transmedia storytelling and ethical decision-making. These findings emphasize the necessity for culturally responsive pedagogies and policies that incorporate informal learning practices while fostering equitable digital citizenship, effectively connecting emergent youth practices with formal educational frameworks.

KEYWORDS: transmedia literacy / informal digital learning / cultural influences / Emirati adolescents / digital citizenship / participatory culture

INFLUENCIAS CULTURALES Y ALFABETIZACIÓN TRANSMEDIA: APRENDIZAJE INFORMAL ENTRE ADOLESCENTES EMIRATÍES

RESUMEN. Este estudio analiza la participación digital y la alfabetización transmedia de adolescentes emiratíes mediante un enfoque mixto con predominio cualitativo. A partir del análisis de datos obtenidos en encuestas ($n = 1.346$), diarios digitales, talleres y entrevistas, los investigadores identificaron una desconexión significativa entre el aprendizaje digital

informal y la educación formal. El 75 % de los participantes realizaba actividades de creación de contenidos, ya sea de manera activa o híbrida, mientras que el 25 % consumía contenidos principalmente de forma pasiva. Solo el 15 % consideraba que sus habilidades digitales eran reconocidas en el ámbito académico; el 60 % afirmó no recibir ningún reconocimiento y el 25 % expresó incertidumbre al respecto. Las normas culturales, la supervisión parental y las diferencias socioeconómicas influyeron de manera notable en la autonomía creativa y el acceso, lo que refuerza desigualdades educativas. Aunque los participantes mostraron competencias básicas de evaluación crítica, eran poco hábiles en narrativas transmedia y en la toma de decisiones éticas. Estos resultados subrayan la necesidad de pedagogías y políticas culturalmente pertinentes que integren prácticas de aprendizaje informal y promuevan una ciudadanía digital equitativa, que conecte de manera efectiva las prácticas emergentes de la juventud con los marcos educativos formales.

PALABRAS CLAVE: alfabetización transmedia / aprendizaje digital informal / influencias culturales / adolescentes emiratíes / ciudadanía digital / cultura participativa

INFLUÊNCIAS CULTURAIS E ALFABETIZAÇÃO TRANSMÍDIA: APRENDIZAGEM INFORMAL ENTRE ADOLESCENTES EMIRADENSES

RESUMO. Este estudo investiga o engajamento digital e a alfabetização transmídia de adolescentes emiradenses por meio de uma abordagem de métodos mistos com predominância qualitativa. A partir da análise de dados obtidos em questionários (n = 1.346), diários digitais, oficinas e entrevistas, os pesquisadores identificaram uma desconexão significativa entre a aprendizagem digital informal e a educação formal. Dos participantes, 75% realizavam atividades de criação de conteúdo, seja de forma ativa ou híbrida, enquanto 25% consumiam conteúdo predominantemente de maneira passiva. Apenas 15% consideravam que suas habilidades digitais eram reconhecidas no ambiente escolar; 60% afirmaram não receber reconhecimento e 25% demonstraram incerteza. Normas culturais, supervisão parental e diferenças socioeconômicas influenciaram de maneira significativa a autonomia criativa e o acesso, reforçando desigualdades educacionais. Embora os participantes apresentassem competências básicas de avaliação crítica, faltavam-lhes habilidades em narrativa transmídia e na tomada de decisões éticas. Os resultados enfatizam a necessidade de pedagogias e políticas culturalmente sensíveis que integrem práticas de aprendizagem informal e promovam uma cidadania digital equitativa, conectando de forma efetiva as práticas emergentes da juventude aos marcos educacionais formais.

PALAVRAS-CHAVE: alfabetização transmídia / aprendizagem digital informal / influências culturais / adolescentes emiradenses / cidadania digital / cultura participativa

INTRODUCTION

New media and transmedia narratives have transformed adolescents from passive consumers to active co-creators (Scolari et al., 2018). This shift is particularly evident in the UAE, where rapid technological development intersects with strong cultural traditions. Research on Emirati high school students uncovers distinct patterns in media engagement (Alaleeli & Al-Najjar, 2020), which challenge Western-centric models of digital literacy, which tend to prioritize individual creativity over communal values. Although 99 % of Emiratis use social media (GMI Research Team, 2024), this widespread access conceals systemic inequities. Consequently, adolescents' informal digital practices often disconnect from formal education, highlighting a gap that current pedagogical frameworks inadequately address. Emirati youth actively navigate a unique cultural landscape shaped by parental oversight and socioeconomic disparities, which influence their transmedia literacy. While these adolescents skillfully blend global digital content with local traditions (Al Jenaibi & Al Mansoori, 2021) and exhibit significant informal digital competencies, formal curricula often fail to connect with their experiences (Kippels & Ridge, 2019).

Pedagogical approaches in the Gulf region frequently neglect the significance of peer-driven learning, which restricts the development of critical competencies (Miladi et al., 2022). Parental controls over time, content, and devices—rooted in entrenched cultural norms—further limit adolescents' autonomy and contribute to self-censorship (Al Jenaibi & Al Mansoori, 2022). This cultural landscape, where heritage intersects with technology, reveals valuable insights into transmedia literacy and highlights the urgent need for culturally responsive digital literacy initiatives.

This study examines how cultural norms, socioeconomic disparities, and parental oversight influence adolescents' transmedia skills, offering recommendations for policy and practice.

LITERATURE REVIEW

Cultural Contexts and Digital Literacy in the UAE

Digital literacy goes beyond technical skills and actively includes critical thinking, ethical participation, and creative expression (Livingstone et al., 2021). This broadened definition is particularly relevant in the UAE, where rapid technological advancements intersect with strong cultural traditions. Although Emiratis have high digital access, they often struggle to achieve transmedia fluency (Alaleeli & Al-Najjar, 2020). Al Ketbi et al. (2025) highlight a consistent gap between the digital competencies that youth acquire informally and those recognized in formal educational settings, exposing curricular limitations. National strategies prioritize coding and cyber safety, yet they frequently overlook the importance of algorithmic literacy and digital storytelling. These trends

highlight the necessity of recalibrating educational approaches to recognize and integrate culturally embedded digital practices.

Social Media: Tool and Challenge

Social media acts as both a catalyst and a complication in adolescent learning. It stimulates creativity, encourages collaboration, and enhances access to information, but it also amplifies misinformation and algorithmic bias (Shin, 2022). Emirati adolescents rely heavily on these platforms for informal learning, particularly in areas such as digital well-being and health information (Barqawi et al., 2023; Mohamed et al., 2024). Nevertheless, schools often neglect to teach social media literacy, leaving students vulnerable to uncritical engagement. Without structured guidance, adolescents frequently turn to peer networks, which can reinforce cycles of misinformation (Tahat et al., 2023).

Transmedia Literacy and Informal Learning

Transmedia literacy now encompasses the ability to navigate and create content across multiple platforms (Scolari et al., 2018). Unlike traditional media literacy, it actively promotes emphasizes participatory culture and collaborative meaning-making (Jenkins et al., 2015). Emirati youth actively showcase these competencies through storytelling, video remixing, and adapting content for TikTok, YouTube, and Instagram (Estebanell-Minguell et al., 2021; Masanet et al., 2019). However, formal education frequently overlooks these informal skills highlighting global concerns over the disconnect between students' lived experiences and school-based curricula (Tomblason, 2024).

Cultural Mediation of Digital Participation

Cultural norms, particularly family expectations and gender roles, significantly shape adolescents' digital practices. Parents actively mediate their children's platform use, screen time, and content choices (Miladi et al., 2022). Online adaptations of traditional forums, such as the "Majlis," foster culturally relevant discussions among youth (Al Shaibah, 2024). However, these norms often restrict creative autonomy, especially for girls who frequently experience stricter oversight (Al Jenaibi & Al Mansoori, 2022). To promote innovation while adhering to ethical standards, educational initiatives must respond to these cultural contexts (Boyd, 2014).

Algorithmic Literacy and Ethical Risks

Grasping how platforms shape digital experiences is essential as content increasingly relies on algorithms. Emirati adolescents frequently lack a foundational understanding of how algorithms influence visibility, which makes them vulnerable to misinformation (Farooq et al., 2024; Shin & Kee, 2023). While policymakers emphasize cyber safety, they rarely address algorithmic transparency and verification (Pennycook et al., 2021). Scholars

advocate for integrating fact-checking strategies and ethical use of Artificial intelligence into the curriculum to counter passive media consumption (Risteska, 2023).

Socioeconomic and Gender Disparities

Despite the widespread availability of digital resources, significant digital inequality persists across socioeconomic and gender lines. Lower-income students encounter infrastructural barriers, including outdated devices and unstable connectivity (Awofeso et al., 2019). In contrast, their affluent peers enjoy enrichment opportunities and faster internet access (Van Deursen & Van Dijk, 2019). Additionally, gender expectations shape online behavior: boys frequently engage in content creation and gaming, while girls tend to prioritize privacy and adopt a more cautious approach to participation (Livingstone & Sefton-Green, 2016). Addressing these disparities requires the implementation of inclusive, equity-focused strategies that promote the development of transmedia literacy.

Media Literacy Framework

Media literacy encompasses the ability to access, analyze, create, and evaluate digital content in a manner that promotes critical engagement. In the UAE, adolescents face unique challenges posed by regulation and misinformation; therefore, they must cultivate both media and algorithmic literacy to participate meaningfully in digital environments (Risteska, 2023).

Cultural-Historical Activity Theory (CHAT) offers a critical framework for analyzing these dynamics, positioning digital participation as the result of interactions between individual agency and culturally mediated practices (Engeström, 2014). Parental mediation, institutional constraints, and cultural expectations actively shape the digital behaviors of Emirati adolescents, creating a balance between innovation and tradition.

Participatory Culture Theory further explains how digital platforms actively promote collaborative content creation, peer learning, and the practice of remixing (Jenkins, 2006; Jenkins et al 2015). Emirati youth actively engage in transmedia storytelling across Instagram, TikTok, and YouTube; however, formal education rarely acknowledges or assesses these competencies. This oversight highlights the significant disconnect between students' lived digital experiences and the frameworks presented in their curricula.

Digital citizenship enhances this model by emphasizing the importance of safe, ethical, and informed digital engagement in digital spaces. National initiatives, such as the UAE Media Office (2021), advocate for a comprehensive approach to digital education that prioritizes privacy, literacy in addressing misinformation and ethical considerations. These perspectives provide a strong foundation for understanding how Emirati adolescents develop and apply transmedia skills, underscoring the necessity for culturally responsive and critically engaged media literacy programs.

Thematic and Cultural Analytical Framework

This study employs an integrated analytical framework that combines thematic analysis with cultural interpretation to investigate the digital behaviors of Emirati adolescents. The analysis is organized around seven interrelated themes:

1. **Creative Transmedia Practices:** Adolescents actively engage in content creation across platforms such as TikTok, YouTube, and Instagram. Their involvement in activities like fan fiction, video editing, and storytelling demonstrates fundamental transmedia competencies (Jenkins & Ito, 2022; Livingstone & Third, 2017; Scolari et al., 2018).
2. **Informal Learning Strategies:** Participants actively develop digital skills by engaging in self-directed exploration and collaborating with peers. However, formal education often overlooks these informal pathways (Scolari et al., 2018).
3. **Intersection with Formal Education:** This study analyzes the intersection of informal competencies with academic settings, revealing a persistent disconnect between students' lived experiences and their recognition within the curriculum (Livingstone & Third, 2017).
4. **Cultural Influences on Digital Practices:** Norms, values, and societal expectations actively shape adolescents' online engagement. Parental controls, gender roles, and religious values significantly influence their choice of platforms and the content they create (Barqawi et al., 2023).
5. **Barriers and Challenges:** Participants identify constraints such as censorship, self-monitoring, and anxiety stemming from digital surveillance that inhibit their full creative participation in digital cultures.
6. **Skill Development and Collaborative Learning:** Engaging in peer networks and collaborative projects actively fosters transmedia learning. Additionally, informal mentoring and teamwork enhance the cultivation of adaptive digital literacies.
7. **Privacy, Ethical Engagement, and Digital Citizenship:** This theme directly addresses concerns related to privacy, misinformation, and ethical considerations. It examines how students navigate digital risks with varying levels of ethical awareness and decision-making (UAE Media Office, 2021).

In addition to thematic analysis, the study employs cultural analysis to investigate how these digital behaviors reflect broader societal frameworks (Deacon et al., 2021). This approach illustrates how Emirati adolescents navigate the intersection of tradition and global digital culture. It effectively explains how their transmedia practices strike a balance between innovation and cultural continuity.

RESEARCH QUESTIONS

Primary Research Question

In what ways do Emirati adolescents develop and apply transmedia literacy within the socio-cultural, educational, and technological context of the UAE?

Secondary Research Questions

RQ2: How do informal learning strategies facilitate the acquisition and refinement of digital skills among Emirati adolescents?

RQ3: How do adolescents' transmedia practices intersect with formal education, and what challenges and opportunities arise in integrating them into curricula?

RQ4: In what ways do cultural norms, parental expectations, and societal regulations influence adolescents' digital engagement, learning, and creative autonomy?

RQ5: How does socioeconomic status influence Emirati adolescents' access to digital tools and their development of advanced transmedia literacy?

RQ6: How do Emirati adolescents navigate ethical challenges in digital spaces, and which strategies effectively enhance their ethical decision-making?

RQ7: What gender-based differences exist in transmedia literacy, and how do these differences influence digital engagement and skill development?

RQ8: What are the educational policy implications of the findings in the UAE?

RQ9: How can an integrated framework effectively bridge informal digital practices, self-directed creativity, and peer collaboration with formal education to enhance transmedia literacy and academic outcomes, while addressing technological and pedagogical barriers?

Research Methodology and Design

This study examines the influence of cultural, social, and technological factors on transmedia literacy among Emirati adolescents. By providing a localized analysis of informal learning and digital practices, it actively contributes to global discussions surrounding youth digital literacy—particularly in non-Western contexts (Scolari et al., 2018). Furthermore, the research aligns with the UAE Vision 2030 by directly addressing national priorities in digital transformation and education reform (Government of the United Arab Emirates, 2025).

This study employed a convergent parallel mixed-methods design (Creswell & Plano Clark, 2017), which combined qualitative and quantitative approaches. Researchers collected data simultaneously and analyzed it separately before integrating the results

to deliver a comprehensive interpretation. This qualitative-dominant design facilitated a deep contextualization of adolescents' digital experiences while maintaining empirical generalizability.

Researchers collected quantitative data through two surveys to evaluate digital engagement, literacy levels, and awareness of misinformation. The first survey ($n = 980$) assessed media usage patterns and literacy skills using Likert-scale and multiple-choice questions. Specifically, media usage patterns were measured using an 8-item, 5-point Likert scale (1 = Never to 5 = Always) adapted from the works of Alaleeli and Al-Najjar (2020) and Scolari et al. (2018).

This scale exhibited strong internal consistency in a pilot test with Emirati adolescents, achieving a Cronbach's α of .82. Researchers assessed digital literacy skills using a 12-item, 5-point Likert instrument that encompassed the dimensions of Access, Analyze, Create, and Evaluate. This instrument was based on the media literacy framework established by Livingstone & Blum-Ross (2020). Confirmatory factor analysis supported the intended four-factor structure, yielding an overall Cronbach's $\alpha = .88$.

The second survey, which included 366 ($n = 366$) participants, examined transmedia practices and critical evaluation competencies. Researchers measured transmedia practices using a 7-item, 5-point Likert scale (1 = Never to 5 = Always) based on the validated transmedia literacy instrument developed by Scolari et al. (2018). Exploratory factor analysis conducted with the UAE sample confirmed unidimensionality, with factor loadings ranging from .58 to .75 (loadings .58-.75; $\alpha = .84$) and a Cronbach's of .84. Researchers assessed Critical Evaluation Competencies through a 6-item, 5-point Likert scale, adapted from Pennycook et al. Attention-to-Accuracy scale (2021) and Risteska's media-ethics measures (2023). Pilot exploratory factor analysis (EFA) indicated a single factor structure (loadings $\geq .60$) with satisfactory reliability ($\alpha = .80$). All multiple-choice items, such as platform use and verification strategies, were custom-developed for this study's thematic framework and reviewed by a panel of UAE media education experts to ensure content and cultural validity. Researchers applied descriptive statistics, chi-square tests, t-tests, ANOVA, and regression models using SPSS to analyze the data.

The qualitative strand of this study included 28 participatory workshops ($n = 28$), along with digital diaries, in-depth interviews, and netnographic observations. Conducted in four UAE cities—Al Ain, Mamzar, Khalifa, and Shakhbout— from February to March 2024, these workshops engaged 1,346 students. Each workshop lasting between 60 and 90 minutes began with a brief welcome and a reminder of confidentiality. Participants then took part in an icebreaker activity where they named their favorite digital platform and a skill they had learned from using it.

Facilitators introduced one of four transmedia themes—electronic gaming, artificial intelligence, social media, or misinformation—using relatable examples and initiating a discussion on students' prior experiences. In small teams, students engaged in hands-on

activities tailored to the theme: designing a culturally grounded game character, critiquing an AI-generated video for bias, creating a social-media story adapted for different audiences, or fact-checking a viral post. Each team dedicated 20 minutes to producing a transmedia project using tools like tablets, Canva templates, or verification worksheets.

A guided reflection allowed participants to compare these activities with school assignments, identify barriers to creative expression, and explore how family and cultural norms shaped digital choices. Facilitators concluded the workshops by summarizing key insights and expressing gratitude to the participants. Additionally, researchers monitored post-workshop digital behaviors through netnographic observation on TikTok, Snapchat, and YouTube.

Digital diaries capture the daily digital activities, learning strategies, and platform usage of adolescents over the course of one week. Several participants actively submitted their diaries online and engaged in discussions following the workshops, thereby providing valuable longitudinal insight into their behaviors.

We conducted twenty-eight in-depth interviews with selected workshop participants to explore key themes in greater detail, focusing on peer learning, content creation, and experiences related to misinformation and AI tools.

Sampling Strategy

To ensure diversity in gender, age, and digital proficiency, researchers employed a convenience sampling approach. The resulting sample achieved a nearly gender-balanced representation, comprising 51 % female and 49 % male participants. This group spanned three age categories: early adolescence (ages 12-14), middle adolescence (ages 15-16), and late adolescence (ages 17-18). We classified participants into three engagement types: active creators, hybrid users, and passive consumers. For reporting clarity, researchers defined “content creators” as the combined total of active creators and hybrid users (active + hybrid = 75 %), while “passive consumers” account for the remaining (25 %), primarily engaging in content consumption.

DATA ANALYSIS

Researchers analyzed the quantitative data using SPSS, employing both descriptive and inferential techniques. Descriptive statistics offered a foundational overview of the media usage patterns, digital literacy levels, and critical-evaluation competencies among Emirati adolescents.

Chi-square tests examined the associations between categorical variables, including gender, socioeconomic status (low, middle, high), and engagement type (creator versus consumer). This analysis enabled researchers to identify significant differences in platform usage and transmedia practices across various demographic

groups. Independent-samples t-tests compared mean scores on continuous measures (e.g., digital literacy proficiency, algorithmic awareness) between two distinct groups (e.g., male vs. female; active creators vs. passive consumers). This comparison enabled researchers to determine the statistical significance of differences in skill levels.

Researchers conducted one-way ANOVA to assess variation in mean transmedia literacy and critical-evaluation scores across three or more independent groups, such as age cohorts (12-14, 15-16, and 17-18 years) and socioeconomic tiers. This analysis evaluated the developmental and economic influences on digital competencies. Finally, researchers employed multiple regression models to quantify the predictive relationships between key independent variables—such as informal learning intensity, parental oversight, and socioeconomic status—and outcome measures, including advanced transmedia skills and ethical decision-making. This model also controlled for potential confounding factors such as age and gender.

We coded qualitative data such as interview transcripts, workshop observations, and digital diary entries using a thematic approach following Saldaña's (2021) framework, enhanced by AI-assisted tools for pattern identification. First, researchers cleaned and automatically transcribed all texts, subjecting them to natural language processing (NLP) analyses that flagged high-frequency keywords, sentiment cues, and semantic clusters related to our seven core themes (e.g., informal learning, media use, cultural influences). Human coders then reviewed the AI-generated code suggestions, reclassifying ambiguous items and resolving contradictions across sources through cultural interpretation. We applied Cultural-Historical Activity Theory to enrich our analysis in areas where AI outputs proved insufficient.

While AI-driven visualizations shaped the overall theme structure, the researcher defined sub-themes and finalized the organization of themes independently, thereby ensuring both analytic efficiency and cultural rigor.

The researcher performed line-by-line coding of workshop transcripts, digital diaries, and interview transcripts, assigning descriptive codes to each meaningful unit of text (e.g., "YouTube tutorials," "parental monitoring," "self-censorship"). The initial codes were compiled into a preliminary codebook, in which each code was clearly defined and exemplified by relevant quotes. Subsequently, the researchers grouped the codes under the study's seven thematic categories to explore the relationships among concepts.

In a second analytical pass, they applied cultural-context coding to interpret how participants' responses reflected Emirati norms (e.g., family expectations, gender roles) in accordance with Cultural-Historical Activity Theory. Two researchers independently coded a 20 % subsample, achieving substantial agreement (Cohen's $\kappa = .82$) after consensus meetings refined the code definitions and resolved discrepancies. Finally, the researchers organized the codes into overarching themes that directly addressed the research questions, ensuring rigorous representation of individual experiences and broader cultural influences.

The researchers obtained ethical approval from the relevant research authorities and secured both parental consent and participant assent. The research team anonymized all data and conducted netnographic observations without collecting any personal identifiers.

Mixed-Methods Integration and Triangulation Strategy

This study employed a convergent parallel mixed-methods design, collecting quantitative data through surveys and qualitative data via interviews, workshops, digital diaries, and netnographic observation. Researchers analyzed these data sets separately before integrating them to generate joint inferences. The surveys offered a broad overview of digital literacy, platform use, and learning patterns, while the qualitative analyses provided interpretive depth and cultural context. The study achieved triangulation by thematically aligning evidence across the five sources within a unified analytical framework that included codebook harmonization and joint displays. This approach facilitated cross-validation, identified convergence and divergence between the different strands, and enhanced the credibility and cultural sensitivity of the interpretations.

Table 1
Key quantitative findings on Emirati adolescents' transmedia and informal learning practices

Indicator	Percentage	Description
Participants who create content (active + hybrid)	75	Share original content on YouTube, TikTok, and Instagram. The remaining 25% engage as consumers only.
Algorithmic literacy among creators (vs. passive users)	20	The share of creators meeting the literacy threshold was 20 percentage points higher than passive users.
Reliance on informal learning	70	Learned skills through peers, tutorials, or independent exploration.
Recognition of digital skills by schools	15 / 60 / 25	15% felt digital skills were recognized, 60% reported no recognition, 25% were uncertain/neutral.
Parental influence on behavior	68	Reported that family and cultural norms shaped online behavior.
Awareness of digital ethics	65	Reported an understanding of fact-checking and data privacy.
Personal device access (SES gap)	40 vs 75	Access was only 40% among low-income students versus 75% among affluent peers.

Note: "Content creators" refers to active and hybrid participants (75 %); "passive" refers to primarily consumers (25 %). Algorithmic literacy refers to meeting the predefined literacy threshold (see Methods); the 20 reported is an absolute percentage-point gap between creators and passive users. Digital ethics reflects self-reported understanding of fact-checking and data privacy. SES categorization (low/middle/high) is defined in Methods. Percentages are rounded; some rows present comparisons and therefore do not sum to 100. Overall sample *n* = 1,346 (Survey 1: *n* = 980; Survey 2: *n* = 366). Results

This section outlines the findings derived from both quantitative surveys and qualitative insights, providing a detailed analysis of the factors that influence transmedia literacy and digital behaviors among Emirati adolescents. The results are organized according to the study's thematic framework, addressing key dimensions such as informal learning, formal education, cultural influences, socioeconomic factors, ethical considerations, gender dynamics, policy implications, and the integration of digital literacy into educational frameworks.

Transmedia Literacy Cultivation: Exploring How Emirati Adolescents Develop and Apply Digital Competencies

Quantitative findings reveal a robust informal learning ecosystem among Emirati adolescents. More than 80% of participants exhibit core digital competencies—such as multimedia production, tool adaptation, and collaboration—while 75 % actively produce content (both active and hybrid) on platforms like YouTube, TikTok, and Instagram (see Table 1). Notably, active content creators demonstrate proficiency in creative production and algorithmic literacy that is 20 percentage points higher than that of passive users, indicating a strong link between digital participation and advanced skill development. However, only 15 % of participants report applying these competencies in academic settings, thereby highlighting a significant gap between curricula and student practices.

Qualitative insights enrich our understanding of creative processes, identifying them as spontaneous, expressive, and culturally embedded. One participant articulated, “I always share what I consider ‘cool stuff’ on Instagram and TikTok” (workshop 03, female, age 16), highlighting a playful engagement with these platforms. Another participant remarked, “I like experimenting with video editing and remixing content from different platforms” (interview 07, male, age 15), reflecting an iterative and self-guided approach to creativity. The sentiment expressed by a participant, “Sharing my artwork on social media gives me a sense of belonging and fuels my creativity” (digital diary 04, female, age 14), illustrates the emotional and social dimensions of participation. As one adolescent noted, “Creating my own digital collage is my way of expressing individuality” (workshop 09, male, age 17), signaling that digital storytelling serves as a mode of self-expression.

Collaboration stands out as a fundamental transmedia competency among Emirati adolescents. One participant stated, “I use WhatsApp and Snapchat to communicate with my teammates” (interview 02, male, age 16). Another participant noted, “During a project, I created a website and an Instagram account to share educational content” (digital diary 06, female, age 15).

These integrated findings illustrate that Emirati adolescents have developed advanced transmedia skills through informal channels, influenced by their cultural and social contexts. However, the disconnect between these skills and formal education remains unresolved.

Informal Learning Strategies: Self-Directed and Peer-Based Digital Skill Development

Emirati adolescents actively develop digital competencies through self-directed exploration and collaboration with peers. Quantitative data indicate that many students utilize digital tools—ranging from search engines for fact-checking to AI applications for synthesizing information—to enhance their learning beyond the classroom. Nearly 70 % of respondents credit their growth in digital skills to peer collaboration and iterative feedback.

Qualitative responses further reinforce these patterns of self-directed learning. One participant emphasized, “I rely on YouTube tutorials to learn new skills on my own time” (interview 01, female, age 15), highlighting her commitment to independent learning. Another participant shared, “When my friends and I have a project, we search online together and exchange ideas” (workshop 05, male, age 16). A third student remarked, “Online tutorials and WhatsApp groups help me quickly grasp new concepts” (digital diary 02, female, age 14) without waiting for school lessons. Similarly, another student explained, “Using online forums to troubleshoot problems has become an essential part of my learning process,” (interview 04, female, age 17) further emphasizing the critical role that digital resources play in their education.

These insights highlight that independent inquiry, peer collaboration, and access to digital communities play a central role in adolescents’ informal learning. However, formal educational contexts rarely acknowledged these competencies.

Bridging the Gap: The Intersection of Transmedia Practices and Formal Education

Quantitative findings indicate a significant disconnect between the informal development of transmedia competencies and their acknowledgment in formal education. Only 15 % of students report that their digital creativity, cultivated on platforms like YouTube and TikTok, receives recognition from teachers. This lack of acknowledgment suggests that educational institutions systematically undervalue skills acquired through peer-driven and digital means. Consequently, this suggests that traditional pedagogical frameworks inadequately accommodate the capabilities developed through self-directed and collaborative learning, thereby marginalizing student innovation.

Qualitative insights highlight a significant disconnect by emphasizing structural, cultural, and pedagogical barriers. Students express dissatisfaction with curricula that neglect their digital lives. One participant stated, “We use innovative strategies on platforms like YouTube and TikTok-like multimedia storytelling and collaborative content creation—but our school rarely includes these in the curriculum” (workshop 05, female, age 16). Another participant remarked, “I learn so much from experimenting online, but at school, we only follow traditional lectures that do not value creative digital expression” (interview 04, male, age 15). These reflections underscore a persistent mismatch between dynamic digital learning and static classroom models.

Students perceive themselves as active learners rather than passive recipients of information. Several advocate for the integration of digital tools into academic projects to improve engagement. One student remarked, "If teachers let us use TikTok for projects, I think I would enjoy school more" (workshop 06, female, age 17). Another student expressed, "I'd love to work on a real project that helps people instead of just doing regular schoolwork" (workshop 08, male, age 16). In summary, Emirati adolescents demonstrate advanced transmedia literacy acquired through informal and peer-based learning; however, these valuable skills remain largely unrecognized within educational settings.

Cultural Influences on Digital Engagement: The Role of Norms, Parental Expectations, and Societal Regulations

Quantitative data demonstrates that cultural influences significantly shape digital engagement among Emirati adolescents. Sixty-eight percent of respondents attribute their platform choices and content creation strategies to parental guidance, which is grounded in broader societal expectations. Consequently, familial oversight and communal ethics play a pivotal role in shaping digital literacy, instilling ethical awareness and social responsibility in online behaviors.

Qualitative data offer deeper insights into these dynamics. Many students actively monitor their online activity in anticipation of family or community judgment. One participant stated, "I always think about how my family and community will view my posts" (workshop 04, female, age 17), illustrating the internalized cultural lens that shapes their online expression. Another participant observed, "My parents are always checking what I do online, but my brother has way more freedom" (workshop 07, female, age 16), revealing the gendered dimensions of digital oversight—a theme echoed by several other participants.

A student stated, "I have two Instagram accounts—one for my family and another where I post freely" (digital diary 03, female, age 15). This strategy reflects an active negotiation between personal identity and cultural expectations. Furthermore, recurrent sentiments such as "All my family members are always checking what I do online, but my brother has way more freedom" (interview 09, female, age 15), highlight the ongoing gender-based constraints influenced by societal norms and family surveillance.

These reflections indicate that cultural values and parental control actively promote ethical digital behavior while constraining creative expression. A participant expressed, "At home, we are always reminded to be respectful in our online interactions, reflecting our cultural values" (interview 02, male, age 16). Such insights highlight that adolescents' digital practices occur within a framework of collective responsibility and moderated autonomy.

The Digital Divide: Socioeconomic Disparities in Access to Technology and Transmedia Literacy

Quantitative data reveal a significant digital divide among Emirati adolescents. The sample in this study shows a device-access gap of 35 percentage points, with only 40 % of low-income students reporting access to personal devices compared to 75 % of their affluent peers (see Table 1). These disparities in access restrict participation in advanced content creation and transmedia learning.

Qualitative accounts substantiate these observations. One student remarked, “I wish I had my laptop at home; I have to share with my siblings,” which underscores the issue of resource scarcity (interview 03, female, age 15). Another student shared, “I cannot always do my homework because our Wi-Fi does not work well” (digital diary 07, male, age 14), while a third noted, “I want to learn video editing, but I just watch tutorials because I do not have a laptop” (workshop 06, female, age 16). Additionally, a student remarked, “Not everyone in my class has a reliable laptop or internet” (Interview 04, male, age 15), and another stated, “Sometimes I feel left out because I do not have the latest tech” (digital diary 05, female, age 14). One student elaborated, “I miss out on online resources because my internet connection is unstable at home” (interview 02, male, age 16).

Students have voiced frustration regarding the lack of recognition for the skills they acquire through informal learning. One student remarked, “My creative digital projects often go unnoticed in school, even though I learn so much online” (workshop 08, female, age 17). Others echoed this sentiment: “I use Instagram for art inspiration, but we never discuss that in school” (digital diary 09, female, age 15), and “We use WhatsApp for group work, but teachers expect everything on paper” (workshop 05, male, age 16). Another student noted, “I learned to code from YouTube, but in school, we use outdated software” (interview 07, male, age 15).

Structural barriers significantly exacerbate these disparities. Rigid curricula and conventional assessment models frequently overlook students’ digital competencies. One participant stated, “Traditional assessments prioritize academic skills over digital practices” (interview 06, female, age 16), while another remarked, “Rigid structures further widen the gap” (workshop 04, male, age 15).

Cultural dynamics actively influence access to digital media. As one student articulated, “Cultural values and expectations in the UAE shape how we engage with digital media” (workshop 09, female, age 16). Another participant commented, “If we used TikTok or Instagram in class, learning would be more fun and interactive” (interview 08, female, age 15). These perspectives underscore how digital tools can bridge the gap between informal and formal learning.

Navigating Ethical Challenges: Privacy, Misinformation, and Responsible Digital Citizenship

Quantitative findings indicate that Emirati adolescents possess foundational ethical awareness in digital spaces. Sixty-five percent recognize the importance of verifying content and protecting personal data. Furthermore, 69 % use Google for fact-checking, 66.8 % evaluate the recency of stories, and 59.8 % engage in cross-checking images. However, these behaviors reflect a reactive rather than a systematic approach to digital ethics. Although awareness is apparent, the prevalence of consistent ethical practices remains limited.

Qualitative reflections highlight a gap between intention and behavior among students. One student stated, "I know I should fact-check, but I do not have time" (digital diary 08, female, age 14). Another student remarked, "I just trust what my friends share without checking" (interview 09, male, age 15). These responses illustrate fragmented ethical practices that lack critical depth.

Privacy management reveals a significant tension among students regarding their digital identity. While 78.4 % express that they "Think twice before sharing personal images," students actively implement personalized strategies to safeguard their online presence. For instance, one student stated, "I use a private account because I do not want my parents to see everything" (workshop 06, female, age 16). Another remarked, "I never post my location in real-time—better to be safe" (interview 03, male, age 16). Additional insights included, "I do not use my real name online" (digital diary 04, female, age 15), and "I know how to make my account private, but I do not understand how apps use my data" (workshop 07, male, age 17). These statements illustrate a proactive approach to privacy, despite uncertainties about data usage in digital spaces.

Concerns surrounding consent and boundaries emerged prominently among participants. One student articulated, "I asked my friend to take down a picture, but she refused" (interview 05, female, age 16). Another stated, "If it is not something I would say in real life, I do not post it" (interview 06, male, age 17). Several students adopted defensive habits: "Sometimes I delete things, so I do not get in trouble" (digital diary 02, male, age 14), while another noted, "I do not add people I do not know—there are too many fake accounts" (workshop 08, female, age 15).

The issue of misinformation further complicates ethical navigation. One participant confessed, "Sometimes I share information without verifying it and later regret it" (netnography, user 03). Another added, "I learned how to check if a site is fake from YouTube, but schools should teach that too" (interview 01, female, age 15).

Additionally, students expressed broader concerns about privacy and information reliability. One stated, "I am worried who can access my private posts" (digital diary 06, female, age 14), while another remarked, "There is so much misinformation online—it is

hard to know what is real” (workshop 09, male, age 16). A further participant commented, “I am constantly concerned about how online platforms use my data” (interview 10, female, age 16.)

These reflections indicate that while adolescents exhibit ethical awareness—particularly regarding fact-checking, privacy, and sharing—their responses often remain reactive and inconsistent.

Gendered Digital Practices: Exploring Differences in Transmedia Literacy Among Emirati Adolescents

Quantitative data clearly demonstrate significant gender disparities in transmedia practices among Emirati adolescents. Seventy percent of male students actively participate in interactive content creation—including gaming, coding, and multimedia production—whereas only 50 % of female students do so, resulting in a 20 % participation gap. The study’s sample composition (68.5 % male, 31.5 % female) underscores the gendered nature of digital engagement, with male students benefiting from greater exploratory freedom while their female counterparts navigate more restrictive cultural boundaries.

Female students tend to prioritize privacy and display heightened caution regarding misinformation. In contrast, male students engage more interactivity, particularly in gaming contexts (Miladi et al., 2022).

Qualitative reflections reveal the cultural underpinnings of these differences. Female participants often face tension between self-expression and societal expectations. One participant noted, “On social media, I keep one account for family and another where I can share content more freely,” illustrating adaptive strategies (digital diary 02, female, age 15). Another participant commented, “Girls are taught to be more reserved online, which affects how we engage with content compared to boys” (workshop 05, female, age 16).

Male students experience fewer constraints and enjoy greater freedom to explore their interests. One student articulated this distinction, stating, “My male friends are into competitive gaming and modding, while I prefer curating and sharing photos,” which highlights the varying digital interests and autonomy between genders (interview 08, male, age 16). Another student remarked, “There is a clear difference: Boys experiment freely in gaming, and girls focus more on visual expression,” effectively capturing the divide (workshop 07, male, age 17).

These differences lead to divergent skill trajectories. Male students typically acquire advanced technical skills through experimentation, whereas female students cultivate proficiency in privacy management and curated self-presentation.

Educational Policy Implications: Integrating Informal Digital Competencies into Formal Curricula

Quantitative findings demonstrate a significant disconnect between adolescents' informal digital skills and their formal education. Only 15 % of students report that their self-directed competencies—particularly in content creation and collaboration—receive recognition within the curriculum. In contrast, over 75 % of participants actively engage in these practices outside of school, while 57.4 % continue to perceive traditional classroom methods as more effective than digital tools. This disparity underscores the limited capacity of formal education to incorporate informal learning experiences.

Qualitative reflections further reinforce this gap. One student remarked, "Our educational system overlooks the digital competencies we develop on our own, missing a chance to enrich our learning experience" (interview 04, female, age 15). Another participant expressed, "I wish our educators embraced our favorite digital platforms by receiving proper training to integrate them seamlessly into lessons" (workshop 06, male, age 16). A third student added, "Incorporating platforms like TikTok or Instagram into our lessons would make learning more interactive and engaging" (digital diary 07, female, age 14).

Towards an Integrated Framework: Bridging Informal Digital Practices with Formal Education in the UAE

The quantitative data illustrate a significant disconnect between the informal digital competencies Emirati adolescents develop and the limited recognition of the skills in formal education. While more than 75 % of students actively participate in content creation and peer collaboration, only 15 % report that their skills receive acknowledgment in school curricula. Additionally, only 57.4 % of students express a preference for digital tools over traditional methods, indicating a misalignment between their actual digital practices and the pedagogical approaches employed in schools.

Qualitative insights reveal students' frustrations. One participant remarked, "I learn so much from experimenting online, but at school, we only follow traditional lectures that do not value creative digital expression" (interview 05, male, age 16). Another student observed, "Although I find digital tools useful, I sometimes feel that traditional classroom methods are more structured and effective," thus emphasizing the necessity for blended learning approaches (workshop 04, female, age 15).

Students also underscored the importance of teacher preparedness. One student stated, "Our teachers rarely use the digital tools we love; they should receive training on how to blend them with traditional lessons" (digital diary 06, female, age 14). Another added, "Our schools fail to recognize the digital skills we acquire outside class, thereby missing an opportunity to enhance our overall learning" (interview 07, male, age 17).

The demand for integration of digital skills into the curriculum is evident. One student remarked, "It would be great if our school curriculum acknowledged the digital skills we acquire outside class and built on them." At the same time, another student expressed a similar idea, 'I dream of a school system where digital creativity is valued as much as traditional subjects' (interview 10, female, age 16).

DISCUSSION

This study reveals a persistent disconnect between the informal digital practices of Emirati adolescents and the recognition of these practices within formal education. The quantitative findings indicate substantial engagement among students: 75 % are involved in content creation, 70 % in peer collaboration, and 65 % in demonstrating ethical awareness. However, only 15 % report that their educational curriculum acknowledges these competencies (see Table 1). Qualitative insights further illuminate this issue, showing how cultural expectations, parental oversight, and socioeconomic disparities influence digital learning experiences. The researchers analyzed these results through the frameworks of Participatory Culture (Jenkins, 2006), Cultural Historical Activity Theory (CHAT) (Engeström, 2014), and the Digital Divide to explain the mechanisms behind the observed patterns.

Participatory Culture and Informal Learning

The extensive use of digital platforms for creative expression and skill development substantiates Jenkins' (2006) participatory culture model. Emirati youth do not remain passive consumers; they actively engage in producing, remixing, and collaborating across various media. The data in this study reveal a significant emphasis on peer-based learning and creative expression, aligning with Scolari et al.'s (2018) assertion that self-directed transmedia practices are vital for skill development beyond formal education. However, the minimal integration of these practices into curricula reflects Livingstone and Sefton-Green's (2016) critique regarding the sluggish adaptation of formal education to digital realities. Furthermore, Kippels & Ridge (2019) contend that the lack of such integration jeopardizes student innovation, further marginalizing their creative capacities. The reliance on peer networks and self-directed learning bolsters theories of informal, socially situated education (Ito et al., 2013), underscoring the urgent need to connect these practices with structured pedagogies.

Regarding the scalability of peer-to-peer learning, the findings indicate that the effectiveness of peer networks varies across contexts and largely hinges on enabling conditions such as adequate infrastructure, supportive platform policies, and professional development for teachers that focuses on facilitating and assessing collaborative production. In lower-resource or more restrictive contexts, uptake is constrained by device scarcity, unstable connectivity, time constraints, and assessment protocols, alongside culturally specific norms.

Cultural and Gendered Mediation

Engeström's (2014) CHAT framework elucidates how sociocultural tools—such as mobile devices, social norms, and family expectations—mediate adolescents' digital engagement. Adolescents actively self-regulate their online activities to conform with communal values, using dual accounts or adopting cautious online personas. These practices exemplify Engeström's concept of moderated autonomy, wherein individuals constantly negotiate their agency within sociocultural constraints. The findings build on the work of Al Jenaibi and Al Mansoori (2022) by demonstrating how Emirati youth navigate the interplay of cultural values and digital creativity, placing digital literacy within a framework of collective responsibility.

Gender emerged as a critical determinant of digital autonomy. Male students reported greater freedom to explore gaming, coding, and multimedia, while female students exhibited more caution and managed their privacy more carefully. Specifically, girls frequently adopted dual personas online to balance creativity with social propriety, reflecting broader gender expectations in the Gulf region. These patterns align with Livingstone & Blum-Ross (2020) notion of "double binds" in digital parenting, illustrating the constant navigation between cultural conservatism and global media influences. Furthermore, this study corroborates the findings of Al Jenaibi and Al Mansoori (2021) and Miladi et al. (2022) regarding gendered participation in Gulf digital cultures, and resonates with Boyd's (2014) research on young women's online safety practices.

Algorithmic Literacy and Ethical Practice

The partial awareness of misinformation and privacy risks among adolescents reveals an emerging yet inconsistent level of ethical literacy. While 65 % assert that they recognize the importance of data protection and fact-checking, their practices tend to be reactive rather than systematic. This trend aligns with the findings of Pennycook et al. (2021) and Risteska (2023), which highlight the intention–action gap. Additionally, Livingstone and Third (2017) underscore the global challenge of translating ethical awareness into consistent behavior, thereby rendering these results particularly pertinent to the education reform agenda in the UAE.

Digital Divide and Educational Exclusion In alignment with the second-level digital-divide framework (Van Deursen & Van Dijk, 2019), this study's data reveal that disparities in device ownership and reliable internet connectivity disproportionately impact low-income students. In the current study's sample, researchers found a 35 percentage point gap in access. Forty percent of low-income students reported personal-device access, compared to 75 % of their affluent peers. This discrepancy constrains creative participation and limits meaningful engagement with digital citizenship (see Table 1). These patterns are in line with regional findings indicating that a lack of equity-driven infrastructure and access to devices creates a greater risk of perpetuating educational inequities (Alaleeli & Al-Najjar, 2020; Awofeso et al., 2019).

Curriculum Disconnect and Teacher Readiness

Only 15 % of participants reported that their digital practices received recognition at school, underscoring a persistent disparity between students' lived media experiences and the content delivered in classrooms (see Table 1). Despite government calls for digital transformation, many educators fail to engage effectively with students' informal competencies. This situation aligns with Livingstone and Sefton-Green's (2016) critique of outdated pedagogies and corroborates Kippels & Ridge's (2019) finding that schools in the Gulf-region often lack the necessary scaffolding to facilitate digital inclusion.

Students frequently express frustration with formal education's failure to integrate informal skills. They called for more engaging, blended pedagogies that reflect their lived digital realities. This aligns with Eppard et al.'s (2021) call for culturally responsive pedagogy and Jenkins' (2006) support for project-based learning grounded in youth practices. By incorporating storytelling, digital production, and critical evaluation into curricula, educators can align their approaches with global best practices aimed at bridging the divide between informal and formal learning.

In summary, this discussion places Emirati adolescents' digital practices within established theoretical frameworks and highlights the originality of this study by extending these debates to the Gulf context. By actively integrating concepts from participatory culture (Jenkins, 2006), Cultural Historical Activity Theory (CHAT) (Engeström, 2014), and digital divide frameworks (Van Deursen & Van Dijk, 2019), this study emphasizes both the universal aspects and the cultural specificity of youth transmedia literacy.

This study evaluates digital-learning inclusion, by outlining four measurable success indicators: (1) Curricular alignment—the percentage of course outcomes and units that align with transmedia/digital-literacy competencies, utilizing rubrics for platform-adapted storytelling and verification tasks; (2) Teacher readiness—the proportion of teachers who complete professional development micro-credentials and the rate at which classrooms adopt at least one digitally integrated project within a semester; (3) Equity of access—targets for the device-to-student ratio (e.g., at least 1:1 where feasible), monitoring of school Wi-Fi uptime, and participation in loaner-device programs; (4) Assessment of digital literacies—the pre- and post-gains on validated scales (e.g., algorithmic literacy and accuracy on verification items) alongside rubric scores for student artifacts. Indicators should be reviewed each term to guide instructional support and adjust policies accordingly.

CONTRIBUTIONS AND LIMITATIONS

This study contributes significantly to the fields of digital and transmedia literacy, particularly within non-Western contexts. Its originality stems from both theoretical and methodological frameworks. Theoretically, the study integrates participatory culture,

Cultural-Historical Activity Theory (CHAT), and digital divide frameworks to analyze the digital practices of Emirati adolescents—a novel combination not previously applied in Gulf contexts. Methodologically, this study demonstrates the effectiveness of a culturally contextualized mixed-methods approach that integrates digital diaries, netnography, and participatory workshops. This approach captures informal learning ecologies with greater depth and cultural sensitivity than surveys alone. The triangulated design enhances rigor and fosters methodological innovation within Arab contexts, thereby enriching global media education scholarship with perspectives from underrepresented regions. Moreover, by highlighting the disconnect between adolescents' informal learning practices and formal education systems, the study offers actionable insights for curriculum reform and teacher training.

Despite these contributions, the study presents several limitations. Convenience sampling restricts the generalizability of the findings across the broader Emirati youth population. While the mixed-methods design enhances validity, self-reported data may be influenced by social desirability bias. Moreover, the rapidly evolving nature of digital platforms suggests that some findings could be temporally bound. Lastly, the cross-sectional design fails to capture long-term trajectories of adolescent media practices. Future research should embrace longitudinal approaches, engage more diverse samples, and investigate scalable models for integrating informal learning into formal curricula.

CONCLUSION

Emirati adolescents exhibit advanced digital competencies, shaped by peer collaboration, self-directed learning, and cultural negotiation, yet these skills often go unrecognized by formal education systems. To address this misalignment, reforms must focus on culturally grounded, gender-sensitive, and equity-driven strategies. Educational curricula should validate students' expertise, while policies must ensure equitable access to resources. Additionally, teacher training should emphasize the development of critical digital and ethical literacies. By aligning educational practices with the lived digital realities of youth, the UAE can effectively bridge the informal–formal divide and better prepare its adolescents for an innovation-driven future.

CONFLICT OF INTEREST

The author declares that there are no conflicts of interest that have influenced the content or outcomes of this manuscript.

AUTHOR CONTRIBUTIONS

I confirm that I am the sole author of this manuscript. In accordance with the CRediT Taxonomy (Brand et al., 2015), I was responsible for the conceptualization, methodology,

investigation, formal analysis, and writing the original draft. I was also responsible for review and editing.

ETHICAL STATEMENT

This study is derived from a larger research project. A foundational analysis of the quantitative survey data from this project, focusing on digital media engagement patterns and inequalities, has been published separately in the *Journal of Arab & Muslim Media Research* (Darwish, 2025). This manuscript presents a distinct, qualitative-dominant analysis exploring cultural influences and transmedia literacy, utilizing a unique subset of qualitative data and a different theoretical framework.

REFERENCES

- Al Jenaibi, B. A., & Al Mansoori, A. A. (2022). Use of social media in teaching high school students: A case of United Arab Emirates. *Contemporary Review of the Middle East*, 9(2), 158-183. <https://doi.org/10.1177/23477989211017567>
- Al Ketbi, N., Habes, M., Shaheen, L., Attar, R. W., Tahat, D., & Alhazmi, A. H. (2025). The impact of social media use on tolerance, community peace, and online ethical awareness among adolescents in the United Arab Emirates. *Frontiers in Psychology*, 16, Article 1500727. <https://doi.org/10.3389/fpsyg.2025.1500727>
- Al Shaibah, A. (2024). Transforming traditions: Youth and the digital evolution of the Emirati majlis. *Open Journal of Social Sciences*, 12(9), 478-501. <https://doi.org/10.4236/jss.2024.129028>
- Alaleeli, S., & Al-Najjar, A. (2020). The Arab digital generation's engagement with technology: The case of high school students in the UAE. *Journal of Technology and Science Education*, 10(1), 159-178. <https://doi.org/10.3926/jotse.756>
- Awofeso, N., Gaber, Y., & Bamidele, M. (2019). Determinants of youth engagement with health information on social media platforms in United Arab Emirates. *Health*, 11(2), 249-262. <https://doi.org/10.4236/health.2019.112022>
- Barqawi, H. J., Samara, K. A., Al Chame, H. Q., Al Shyyab, I. M., N., & Almaazmi, M. A. (2023). Emirati adolescents' and young adults' usage of social media for health information. *Children*, 10(10), Article 1636. <https://doi.org/10.3390/children10101636>
- Boyd, D. (2014). *It's complicated: The social lives of networked teens*. Yale University Press.
- Brand, A., Allen, L., Altman, M., Hlava, M., & Scott, J. (2015). Beyond authorship: Attribution, contribution, collaboration, and credit. *Learned Publishing*, 28(2), 151-155. <https://doi.org/10.1087/20150211>

- Creswell, J. W., & Plano Clark, V. L. (2017). *Designing and conducting mixed methods research* (3rd ed.). Sage.
- Darwish, E. B. (2025). Digital media engagement and literacy among UAE youth: A mixed-methods investigation of usage patterns and digital inequalities. *Journal of Arab & Muslim Media Research*. Advance online publication. https://doi.org/10.1386/jammr_00117_1
- Deacon, D. Pickering, M., Golding, P., & Murdock, G. (2021). *Researching communications: A practical guide to methods in media and cultural analysis* (3rd ed.). Bloomsbury.
- Engeström, Y. (2014). *Learning by expanding: An activity-theoretical approach to developmental research*. Cambridge University Press.
- Eppard, J., Kaviani, A., Bowles, M. & Johnson, J. (2021). EdTech curation: Integrating a culturally relevant pedagogy into educational technology. *Electronic Journal of e-Learning*, 19(6), 516-530. <https://doi.org/10.34190/ejel.19.6.2065>
- Estebanell-Minguell, M., González-Martínez, J., Esteban-Guitart, M., & Serrat-Sellabona, E. (2021). Media profiles and transmedia learning in university students. *International Journal of Learning Technology*, 16(4), 324-339. <https://doi.org/10.1504/IJLT.2021.121369>
- Farooq, A., Salminen, J., Martin, J. D., Aldous, K., Jung, S.-G., & Jansen, B. J. (2024). Exploring social media privacy concerns: A comprehensive survey study across 16 Middle Eastern and North African countries. *IEEE Access*, 12, 147087-147105. <https://doi.org/10.1109/ACCESS.2024.3463869>
- GMI Research Team. (2024). UAE social media statistics 2024. *Global Media Insights*. <https://www.globalmediainsight.com/blog/uae-social-media-statistics-2024>
- Government of the United Arab Emirates. (2025). *UAE national digital government strategy 2025*. <https://u.ae/en/about-the-uae/strategies-initiatives-and-awards/strategies-plans-and-visions/government-services-and-digital-transformation/uae-national-digital-government-strategy>
- Jenkins, H. (2006). *Convergence culture: Where old and new media collide*. NYU Press.
- Jenkins, H., Ito, M., & boyd, d. (2015). *Participatory culture in a networked era: A conversation on youth, learning, commerce, and politics*. Wiley.
- Kippels, S. & Ridge, N. (2019). The growth and transformation of K–12 education in the UAE. En K. Gallagher (Ed.), *Education in the United Arab Emirates: Innovation and transformation* (pp. 37-55). Springer Singapore. https://doi.org/10.1007/978-981-13-7736-5_3
- Ito, M., Gutiérrez, K., Livingstone, S., Penuel, W. R., Rhodes, J., Salen, K., Schor, J., Sefton-Green, J., & Watkins, S. C. (2013). *Connected learning: An agenda for research and design*. Digital Media & Learning Research Hub.

- Livingstone, S. M., & Blum-Ross, A. (2020). *Parenting for a digital future: How hopes and fears about technology shape children's lives*. Oxford University Press.
- Livingstone, S., Mascheroni, G., & Stoilova, M. (2021). The outcomes of gaining digital skills for young people's lives and wellbeing: A systematic evidence review. *New Media & Society*, 25(5), 1176-1202. <https://doi.org/10.1177/14614448211043189>
- Livingstone, S., & Sefton-Green, J. (2016). *The class: Living and learning in the digital age*. NYU Press.
- Livingstone, S., & Third, A. (2017). Children and young people's rights in the digital age: An emerging agenda. *New Media & Society*, 19(5), 657-670. <https://doi.org/10.1177/1461444816686318>
- Masanet, M. J., Guerrero-Pico, M., & Establés, M. J. (2019). From digital native to digital apprentice. A case study of the transmedia skills and informal learning strategies of adolescents in Spain. *Learning, Media and Technology*, 44(4), 400-413. <https://doi.org/10.1080/17439884.2019.1641513>
- Miladi, N. Ben Messaoud, M., Alkhateeb, G., Ashour, A., Al-Mohannadi, H., Fetais, A., Alorfe, A., & Alabidi, F. (2022). Digital youth in Qatar: Negotiating culture and national identity through social media networks. *Journal of Arab & Muslim Media Research*, 15(2), 151-177. https://doi.org/10.1386/jammr_00045_1
- Mohamed, T. I., Zhran, A. R., Osman, N. A. Q., & Badr, A. N. (2024). The role of social media in enhancing adolescents' digital life quality: A survey study in the UAE. *International Journal of Adolescence and Youth*, 29(1), Article 2358081. <https://doi.org/10.1080/02673843.2024.2358081>
- Pennycook, G., Epstein, Z., Mosleh, M., Arechar, A. A., Eckles, D., & Rand, D. G. (2021). Shifting attention to accuracy can reduce misinformation online. *Nature*, 592(7855), 590-595. <https://doi.org/10.1038/s41586-021-03344-2>
- Risteska, A. (2023). Aware and critical navigation in the media landscape: (Un)biased algorithms and the need for new media literacy in the era of artificial intelligence and digital media. *KAIROS: Media and Communications Review*, 2(2), 16-38.
- Saldaña, J. (2021). *The coding manual for qualitative researchers* (4th ed.). Sage.
- Scolari, C. A., Masanet, M.-J., Guerrero-Pico, M., & Establés, M.-J. (2018). Transmedia literacy in the new media ecology: Teens' transmedia skills and informal learning strategies. *El Profesional de la Información*, 27(4), 801-812. <https://doi.org/10.3145/epi.2018.jul.09>
- Shin, D. (2022). How do people judge the credibility of algorithmic sources? *AI & Society*, 37(1), 81-96. <https://doi.org/10.1007/s00146-021-01158-4>

- Shin, D., & Kee, F. K. (2023). Editorial note for special issue on AI and fake news, misinformation, and algorithmic bias. *Journal of Broadcasting & Electronic Media*, 67(3), 241-252. <https://doi.org/10.1080/08838151.2023.2225665>
- Tahat, K., Tahat, D.N., Masoori, A., Habes, M., Alghazo, E., Ketbi, N. (2023). Role of social media in changing the social life patterns of youth at UAE. In Alareeni, B. A. M. & Elgedawy, I. (Eds.), *Artificial intelligence (AI) and finance: Vol. 488. Studies in Systems, Decision and Control*. Springer. https://doi.org/10.1007/978-3-031-39158-3_14
- Tombleson, B. (2024). Transmedia learning: A literature review. *Technology, Pedagogy and Education*, 33(2), 255-269. <https://doi.org/10.1080/1475939X.2024.2310681>
- UAE Media Office. (2021, January 25). *Quality of digital life*. <https://www.mediaoffice.ae/en/news/2021/Jan/25-01/Quality-of-Digital-life>
- Van Deursen, A. J. A. M., & Van Dijk, J. A. G. M. (2019). The first-level digital divide shifts to the second-level. *New Media & Society*, 21(2), 354-375.