The UPI-UPSI International Conference 2025
"Transforming Education in the Digital Era to Prepare Adaptive and Competitive Global Citizens"
Volume 1, Edisi 1, 2025
Open Access: https://proceedings.upi.edu/upi-upsi

The Influence of Social Media and Digital Citizenship on Early Adolescents' Career Maturity: A Systematic Literature Review with Mini Research Insights

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ABSTRACT

In the current digital era, early adolescents have made social media an integral part of their daily lives, influencing their career exploration and planning processes. However, the abundance of information without adequate digital citizenship skills can lead to confusion and impede career maturity. This study aims to analyze a critical contribution to the effort of "Transforming Education in the Digital Era to Prepare Adaptive and Competitive Global Citizens". This research employs a Systematic Literature Review (SLR) to synthesize the roles of Social Media (MedSos) and Digital Citizenship in relation to the Career Maturity of early adolescents. The urgency of this SLR is supported by preliminary research (a Focus Group Discussion with 12 Grade IX students) which indicates problematic career maturity among students: 80% of participants experience a high level of confusion in career planning, a dependency on Social Media (TikTok/Instagram) as their primary informal source of career information, and a conflict between self-autonomy and parental compliance in decision-making. The SLR will analyze how Digital Citizenship moderates the influence of Social Media to facilitate effective career exploration. This study recommends the integration of Digital Citizenship education into Career Guidance to foster adaptive students with autonomous career planning, in line with the main objective of the conference.
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ARTICLE INFO

Article History:
Submitted/Received 19 Nov 2025
First Revised 21 Dec 2025
Accepted 4 Jan 2026
First Available online 10 Jan 2026
Publication Date 10 Jan 2026

Keyword:
Career Guidance, Career Maturity, Digital Citizenship, Early Adolescents, Social Media

1. INTRODUCTION

Educational transformation in the digital era is an inevitability, demanding a fundamental paradigm shift. This shift extends beyond pedagogical and technological aspects to encompass how we prepare the younger generation to face future complexities. Aligned with the main theme of the UPI-UPSI 2025 International Conference, "Transforming Education in the Digital Era to Prepare Adaptive and Competitive Global Citizens," this research endeavors to provide a critical contribution regarding one of the most fundamental aspects of adolescent development: career maturity.

Amidst massive digital disruption, the adolescent process of future planning is no longer linear. The digital landscape, particularly social media, has emerged as a new arena that simultaneously offers opportunities and challenges in the formation of career identity. Therefore, understanding the dynamics between social media, digital competence, and career maturity becomes crucial for designing relevant and effective educational interventions.

1.1. The Context of the Digital Era and Early Adolescent Development

The digital era has fundamentally altered the developmental landscape of early adolescents, especially junior high school students. They are 'digital natives' whose daily lives are inseparable from gadgets and internet connectivity. Social media platforms such as TikTok, Instagram, and YouTube are no longer mere communication tools; they have evolved into the primary ecosystem for socialization, self-validation, identity formation, and information exploration. Various studies confirm that these platforms play a central role in adolescents' psychosocial development, influencing how they perceive themselves, interact with peers, and understand the world around them (Andriani & Putri, 2021; Susanto, 2021).

In the context of career development, social media serves as a primary window for adolescents to observe various professions, lifestyles, and potential educational paths they might never encounter through conventional means. Content themed "a day in my life as a...", alumni testimonials, and scholarship information circulates daily, making social media the most accessible source of career information.

1.2. Career Maturity as a Crucial Developmental Task

Career maturity is a psychological construct referring to an individual's readiness to make appropriate and realistic career decisions commensurate with their developmental stage. This is not merely about selecting a single profession but is an ongoing process encompassing several crucial dimensions: planning, exploration, self-understanding, knowledge of the world of work, and decision-making (Wahyuni, 2023).

According to Donald Super's career development theory, early adolescents, particularly Grade IX junior high school students (ages 14-15), are in the Exploration Stage. At this stage, their primary task is to begin crystallizing interests, testing various roles, and exploring diverse educational and occupational choices to clarify their vocational self-concept (Super, 1990). Career maturity at this stage is a critical foundation for a smooth transition to the next educational level and for long-term career planning. Failure to achieve adequate career maturity in this phase can result in confusion, unrealistic choices, and future career dissatisfaction.

1.3. The Social Media Paradox: Information Source vs. Confusion Source

Herein lies the central problem of this study. Social media presents a paradox: on one hand, it is a boundless and democratic source of career information ; on the other, it potentially fosters confusion, disinformation, and impulsive decision-making. Information presented is often shallow, fragmented, and highlights a profession's glamorous image rather than its actual challenges. Platform algorithms, designed for engagement, frequently serve content that is popular or viral, not necessarily what is most relevant or accurate for an individual's needs.

Preliminary findings from our qualitative mini-research (FGD) with 12 Grade IX students confirm this paradox. We found a "massive confusion," with approximately 80% of students lacking a clear plan despite daily information exposure. Furthermore, we identified a "dependence on social media" as the primary information source, often unbalanced by validation efforts or seeking information from more formal, structured sources. This phenomenon is not merely an information access issue but a symptom of a foundational skills gap required to navigate the digital information ecosystem.

1.4. Digital Citizenship as a Moderating Competency

To overcome this paradox and fill the aforementioned skills gap, this research introduces the concept of Digital Citizenship as a crucial moderating variable. Digital citizenship is more than just the technical ability to use technology ; it encompasses a set of competencies, norms, and ethics for participating in the digital world intelligently, responsibly, and safely (Ardi & Hidayat, 2020). Its dimensions include digital literacy (the ability to find, evaluate, and critically use information), digital ethics (understanding digital footprints and appropriate online behavior), digital security (protecting oneself from online risks), and digital participation (using technology for civic and social engagement).

In the context of career maturity, digital citizenship functions as a cognitive and ethical "filter". It equips adolescents with the ability to differentiate between credible and hoax information, analyze bias in the content they consume, and proactively seek in-depth information from diverse sources (Pratama & Sari, 2022). With this competency, adolescents can transform social media from a source of confusion into a powerful and focused career exploration tool.

1.5. Study Purpose and Urgency

Based on the preceding background, the primary objective of this article is to analyze the influence of social media on early adolescents' career maturity and to propose the moderating role of digital citizenship as an essential competency. This analysis is based on a synthesis from a systematic literature review, strengthened by empirical findings from qualitative mini-research. This study holds high urgency as it directly answers challenges posed in the conference sub-theme "Social Media, Youth Identity, and Digital Citizenship". By integrating these three variables, this article not only identifies problems but also offers a practical solution framework for guidance and counseling services in schools. It is hoped that the findings from this study can become a basis for developing adaptive career guidance models in the digital era, ultimately contributing to the creation of global citizens capable of planning their futures autonomously and competitively.

2. METHOD

This study adopts a mixed-methods approach using an **exploratory sequential design**. It combines a **Systematic Literature Review (SLR)** as the primary method for synthesizing existing research evidence with a **qualitative case study** (mini-research) to provide empirical context and a deeper understanding of the phenomenon. The qualitative mini-research was implemented first to explore and identify key contextual themes related to student career maturity, the results of which then guided a broader, more systematic thematic synthesis of the literature.

2.1. Research Design: Systematic Literature Review (SLR)

The SLR was conducted to comprehensively identify, evaluate, and synthesize all relevant research evidence concerning the relationship between Career Maturity, Social Media, and Digital Citizenship in the adolescent population. The main literature corpus analyzed consists of 60 journal articles, books, and relevant digital sources. This SLR process was executed through the following methodological stages:

(i) Formulation of Research Questions: This study was guided by key questions, including: (a) How does social media influence the various dimensions of career maturity in early adolescents? (b) What are the risks and opportunities that social media offers in the adolescent career exploration process? (c) How can digital citizenship competence moderate the influence of social media on career maturity?

(ii) Literature Search Strategy: Literature searches were conducted on academic databases (e.g., Google Scholar, SAGE Journals, ScienceDirect) and other credible sources using keywords such as "career maturity", "social media", "digital citizenship", "adolescents", and their Indonesian equivalents. A list of 60 existing URLs formed the core of the analyzed corpus.

(iii) Inclusion and Exclusion Criteria: Inclusion criteria covered studies published in the last 10 years, focusing on adolescent populations (12-18 years), and discussing at least two of the three main variables. Studies that were irrelevant, of low methodological quality, or focused on adult populations were excluded.

(iv) Thematic Synthesis Process: Data extracted from each selected study were then analyzed using thematic synthesis. This process involved coding data, identifying recurring themes, and grouping these themes into a coherent conceptual framework to answer the research questions.

2.2. Research Design: Qualitative Mini-Research

To provide an empirical grounding and rich local context, a qualitative mini-research study with a case study design was conducted. The methodology of this mini-research is detailed as follows:

(i) Participants: Study participants consisted of 12 (twelve) Grade IX students from various classes at SMPN 1 Ciawigebang, Kuningan Regency. Participants were selected purposively to obtain a variation of backgrounds and views. Participant first names include: Muhammad Ilham, Fazri Adi, Alika, Nadila, Faiz, Taufiq, Ai Siti, Fadilah, Nur Azmi, Dila, Fathurrohman, and Fahmi.

(ii) Data Collection Procedure: Primary data was collected through a Focus Group Discussion (FGD) session conducted face-to-face in the school's Guidance and Counseling (BK) Room. This FGD session was held on Tuesday, September 30, 2025, with a duration of approximately 40 minutes. The entire discussion process was guided by the researcher (acting as moderator) and audio-recorded using a

digital sound recorder to ensure data accuracy. The recording was then transcribed verbatim for analysis.

(iii) Instruments: The main instrument used was a semi-structured interview guide designed to explore the dimensions of student career maturity. This guide contained a series of open-ended questions aimed at deeply probing dimensions of career maturity, focusing on key questions related to: (a) future career vision and planning, (b) career exploration resources and activities, (c) self-understanding, and (d) processes and factors in continued schooling decisions.

(iv) Analysis: Verbatim FGD transcripts were analyzed using a thematic narrative analysis approach. The researcher read the transcripts repeatedly to identify patterns, themes, and categories emerging empirically from the data. These themes were then grouped and interpreted to deeply understand the perceptions, experiences, and challenges faced by students regarding their career maturity in the digital age.

3. RESULTS AND DISCUSSION

3.1. Introductory Analytics: Digital Dynamics and Teen Career Maturity

This section presents a deep synthesis of the Systematic Literature Review (SLR) results, integrated with findings from the qualitative mini-research conducted with ninth-grade junior high school students. The analysis focuses on understanding how **social media** influences **early adolescent career maturity**, and how **digital citizenship** plays a role as a moderating competency to strengthen healthy career exploration.

The digital era has changed how adolescents interact with the world of information, including in the realms of education and career. Social media now functions not only as a means of entertainment but also as an **informal learning and self-exploration space**. However, the speed of information flow and algorithmic bias can cause a paradoxical effect: the more information available, the greater the risk of confusion. This phenomenon is the center of analysis in this SLR.

The FGD results from 12 junior high school students revealed that 80% of participants experience confusion in career planning, 75% depend on social media as their main source of career information, and more than half face a dilemma between personal desires and parental wishes. These three patterns align with literature findings highlighting that **social media without strong digital literacy tends to create career identity confusion** (Chen & Lee, 2023; Wahyuni, 2023). To describe this phenomenon systematically, the SLR results group the findings into **four main themes**: (1) Social media as a new career exploration arena, (2) Information overload and career disorientation, (3) Digital citizenship as a moderating competence (renamed from Theme 3/4 mix), and (4) Contextual factors: family support and the role of the BK teacher (a combination of original themes 3 and 4).

3.2. Theme 1 – Social Media as a New Career Exploration Arena

In the last decade, social media has become the **main social space** for teenagers. Platforms like TikTok, Instagram, and YouTube facilitate rapid access to various inspiring content, including professional testimonials, alumni success stories, and job-themed vlogs. Of the 60 articles analyzed, approximately **25% highlight social media's potential** in broadening adolescents' career outlooks (Andriani & Putri, 2021; Chen & Lee, 2023; Zola, 2022).

Chen and Lee's (2023) study confirms that social media allows teenagers to "see the world of work up close" without spatial and temporal boundaries. Teenagers can watch

"a day in my life as a doctor" videos or "how to get a scholarship abroad" and get realistic descriptions of diverse professions. In the Indonesian context, Andriani and Putri (2021) found that adolescents use social media not only for entertainment but also for **self-presentation** and **self-exploration**, both closely related to career identity formation.

FGD findings show a similar pattern: students frequently mentioned TikTok and Instagram as main sources of information about advanced schooling and professions. One student, Ilham, stated he chose SMK Pertiwi because he saw "futsal and scholarship content" from a coach who is also active on social media. This confirms that **career exploration is now shifting from formal guidance to informal digital spaces**.

However, undirected exploration carries risks. According to Super (1990), the exploration stage should be filled with reflective activities that help adolescents test their interests and abilities. Yet, when exploration is done passively or consumeristically, adolescents lose the chance to build deep self-understanding. Therefore, the presence of social media must be accompanied by digital literacy competence for exploration to be meaningful.

3.3. Theme 2 – Information Overload and Career Disorientation

The second theme emerging from the SLR and mini-research is the phenomenon of **information overload** and **career disorientation**. In the FGD interviews, the majority of students admitted to being confused about their direction after junior high school, despite being exposed to diverse inspiring content daily. This indicates an "illusion of knowledge"—where extensive access to information does not always produce better understanding.

This finding aligns with Jones's (2022) report, which states that digital-native adolescents often experience **choice paralysis**—confusion in choosing due to too many options. The study by Twenge, Martin, and Campbell (2018) even shows that excessive exposure to social media can lower psychological well-being and increase career anxiety. In the Indonesian education context, Astuti's (2021) research found that unfiltered information flow makes adolescents easily influenced by popular profession trends without considering their own abilities. This explains why some students in the FGD felt "confused and not yet knowing" even though they frequently watch career content online.

From a career theory perspective, this phenomenon reflects an **imbalance between the cognitive and affective dimensions of career maturity**. Super (1990) explains that career maturity includes self-awareness, knowledge of the world of work, and decision-making ability. If one of these aspects is imbalanced—for example, broad knowledge of the world of work but without self-reflection—then career maturity is difficult to achieve. SLR findings support this argument: adolescents who possess **critical information literacy** skills are more capable of converting digital exposure into meaningful career outlooks (Pratama & Sari, 2022). Therefore, **mastery of digital literacy is not just a technical skill, but part of career maturity itself**.

3.4. Theme 3 – Contextual Factors: Informal Sources, Counselors, and Family

The FGD results show a strong pattern: students place more trust in informal sources such as alumni, upperclassmen, and even futsal coaches compared to the Guidance and Counseling (BK) teacher. This occurs even though the function of career guidance in school is to help students make decisions based on data and self-reflection. This phenomenon is not an isolated case. The SLR results found 15 articles confirming the **decline of the BK Teacher's authoritative role** in the digital era, as students switch to

"micro-influencers" or online social media figures considered more relevant (Hartanto, 2019; Wahyuni, 2023).

Within the SCCT framework (Lent, Brown, & Hackett, 2019), observational learning through social models significantly influences career **self-efficacy**. When these figures come from a close environment, the effect becomes stronger—though not always based on valid information. The role of the guidance counselor must be redefined from an "information transmitter" to a "facilitator of digital career literacy". Wahyuni's (2023) study recommends that BK services be integrated with digital platforms familiar to students, such as creating career tutorial videos on Instagram or TikTok that are packaged educationally. This approach not only bridges the generation gap but also strengthens the relevance of BK services in students' eyes.

Alongside this, conflict between **personal autonomy and parental compliance** is a prominent theme in both the FGD results and the literature. In the interview, most students stated they wanted to choose a school based on their own interests but ultimately followed their parents' choice. This conflict demonstrates typical collectivist cultural dynamics that place family harmony above individual preferences. Hartanto (2019) explains that in the Indonesian context, family plays a role as "significant others" who heavily influence career aspirations.

The SLR also shows that a differential in understanding between parents and children about the digital world of work is becoming a new source of friction. Parents often evaluate internet-based professions (like *content creator* or *e-sport player*) as not serious, while for adolescents, these professions symbolize freedom and creativity. Therefore, **intergenerational digital literacy needs to be strengthened** so that career dialogue within the family can proceed on an equal footing.

3.5. Theme 4 – Digital Citizenship as the Moderating Competency

The SLR synthesis results show that **digital citizenship** is the strongest moderating variable between social media use and career maturity. Of the 60 articles analyzed, 18 discuss dimensions of literacy, ethics, and digital responsibility as determinants of career adaptivity (Ardi & Hidayat, 2020; Pratama & Sari, 2022; Miller, 2023).

Digital citizenship includes four main dimensions:

(i) **Digital literacy** – the ability to find, evaluate, and manage information critically.
(ii) **Digital ethics** – awareness of responsible online behavior.
(iii) **Digital security** – skills to protect privacy and avoid cyber risks.
(iv) **Digital participation** – capability to use technology for social contribution.

When linked to career maturity, these four dimensions become the **soft infrastructure** for modern career exploration. For example, students with high digital literacy can differentiate between valid and manipulative career content. Meanwhile, those with active digital participation can build professional networks from an early age. Miller (2023) asserts that digital citizenship education plays a strategic role in preparing adolescents to become lifelong learners. Integrating digital citizenship values into career guidance can change adolescents' thinking patterns from "information consumers" to "knowledge producers". Thus, students do not just wait for information to come to them, but are capable of proactively seeking, verifying, and reflecting on the information's relevance for themselves.

3.6. Integrative Synthesis: An Adaptive Career Maturity Model in the Digital Age

Based on the mini-research results and SLR synthesis, an **Adaptive Career Maturity Based on Digital Citizenship** conceptual model can be constructed. This model positions **social media** as a catalyst, **digital citizenship** as a moderating filter, and **social support** (family and school) as the supporting context.

Social Media Exposure → (Moderated by Digital Citizenship) → Adaptive Career Maturity, with additional support from **Guidance and Counseling Teachers** and **Participatory Families**.

This model illustrates that social media is not the direct cause of career immaturity, but rather a **situational variable** whose effect depends on the adolescent's digital competence. If this competence is strong, social media becomes a productive exploration tool. Conversely, if it is weak, social media causes disorientation and career confusion. Thus, digital citizenship functions as a **gatekeeper** that determines whether digital exposure produces **career readiness** or **career confusion**.

3.7. Study Implications

(i) **Theoretical Implications:** These results expand classic career development theory by incorporating digital variables as a new contextual dimension. Super (1990) emphasized the importance of self-exploration and world-of-work information ; this finding adds that this exploration now occurs in a virtual space demanding digital literacy skills.

(ii) **Practical Implications for Schools and Guidance Teachers:** Guidance and counseling teachers must transform into **Digital Career Coaches** who help students navigate online information. Career mentoring programs must include sessions on "Online Career Information Validation," "Digital Ethics," and "Virtual Career Exploration Simulation".

(iii) **Social and Cultural Implications:** Digital citizenship education must involve parents through **family digital literacy** training. A family–school synergy becomes a prerequisite for forming adaptive adolescents capable of cross-generational dialogue about their career futures.

(iv) **Education Policy Implications:** Government and higher education institutions need to develop career guidance modules based on digital citizenship as part of the national BK curriculum, ensuring that career guidance is not left behind by students' digital reality.

4. CONCLUSION

This study synthesizes findings from a systematic literature review and qualitative mini-research, concluding that social media exerts a significant and paradoxical influence on the career maturity of early adolescents. While platforms like TikTok and Instagram have become new primary arenas for career exploration, this digital exposure, if unfiltered, results in "information overload" and "career disorientation," as evidenced by 80% of college students in our field study reporting significant confusion.

Our findings confirm that this disorientation is exacerbated by two key contextual factors: (1) a heavy reliance on informal, often unverified digital sources (e.g., influencers, alumni) rather than formal guidance, and (2) a persistent cultural conflict between adolescents' need for personal autonomy and pressure for family compliance in decision-making.

A central thesis derived from our synthesis is the crucial and moderating role of digital citizenship. Competencies in digital literacy, ethics, security, and participation

serve as essential cognitive “gatekeepers.” When present, digital citizenship transforms social media from a source of confusion into a productive tool for meaningful career exploration.

Based on this, we propose a "Digital Citizenship-Based Adaptive Career Maturity" model, which posits that the impact of social media depends on users' digital competencies. This model yields critical implications, requiring the expansion of classical career theory for the digital age and the practical transformation of Guidance and Counseling (BK) teachers from simple information providers to "Digital Career Coaches." Furthermore, we recommend the integration of digital citizenship into the national curriculum and the promotion of intergenerational digital literacy to foster supportive and informed career dialogue within families. Ultimately, the development of digital citizenship is crucial for developing adaptive global citizens capable of independently navigating their future careers.

5. AUTHORS’ NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. Authors confirmed that the paper was free of plagiarism.

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