



Career Maturity In The Digital Age: Challenges And Solutions For Guidance Services In High Schools

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Abstract

Career maturity is an important aspect of student development in high school, as they begin to make decisions that affect their future. However, in this digital era, students are faced with various new challenges that affect their career maturity. This study aims to explore the challenges and solutions faced by guidance services in helping students develop career maturity in the digital era. The systematic literature review in this study followed the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines, investigating the impact of career maturity and guidance services on high school students in the digital era. Key areas explored include the role of digital skills, social cognitive career theory (SCCT), and the Technology Acceptance Model (TAM) in career guidance. The findings indicate that digital technology enhances career maturity. While the main challenges include low student awareness of digital skills and lack of technology support. Then there are barriers to technology acceptance, such as perceived difficulty of use and limited technical support. To overcome this, the results of the review suggest integrating digital skills training and tailored support for students and counselors. This approach aims to foster career maturity in students, which is in line with the demands of an increasingly digital workforce.

Keywords: *Career Maturity; High School Students; Digital Skills; Career Guidance.*

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INTRODUCTION

Career maturity is one of the important aspects of student development, especially in high school, where they begin to make decisions that impact their future (Davis, 2021). Based on the research results of Srianhuri and Supriatna (2020), the career maturity of high school students obtained low results, especially in the aspect of managing planning. In fact, one aspect of forming career maturity is career planning (Lestari & Tentama, 2020). Therefore, guidance and counseling services in schools need to comprehensively help develop students' career maturity.

Utilizing technology in this digital era can help students improve their career maturity (Lee, Nam, and Jeong, 2024). Moreover, in the ever-evolving digital era, students are faced with various new challenges that affect their career maturity, including abundant access to information, the influence of social media, and rapid changes in the job market (Smith, 2022). It is therefore important for guidance services in schools to adapt their approach to helping students develop the career maturity needed to navigate the complex and dynamic world of work.

One of the main challenges faced by students is information overload. Information is obtained from many open platforms and can be easy access for people to convey views and information but it becomes difficult to understand because what is presented is often contradictory (Ahmad, etc., 2023). Additionally, with so much information available online, students often have difficulty distinguishing between relevant and irrelevant information regarding their career choices (Brown, 2021). This can lead to confusion and uncertainty in career decision-making. Guidance services need to develop strategies to help students manage this information effectively, so they can make more informed decisions (Johnson, 2023).

Social media also has a significant influence on students' career maturity. While social media can be a useful source of information, they can also create social pressure and unrealistic expectations regarding career paths (Miller, 2022). Students may be influenced by idealized images displayed by peers or public figures, which may affect their views on career success. Therefore, comprehensive guidance is needed to help students understand and manage these social media influences (Garcia, 2021).

In addition, rapid changes in the job market due to technological advances also affect students' career maturity. Many jobs that exist today may cease to exist in the next few years, and conversely, many new types of jobs are emerging (Anderson, 2021). Guidance services should provide up-to-date information on labor market trends and the skills required to enter specific fields, as well as help students identify and develop appropriate skills (Clark, 2022).

Amidst these challenges, there are also opportunities for guidance services to utilize technology in the process of developing career maturity. Digital tools such as online learning platforms and career guidance apps can provide greater access for students to explore career options and develop the necessary skills (Taylor, 2023). Therefore, it is important for guidance and counseling teachers to adapt to these changes and utilize technology effectively in their practice.

In this context, this study aims to explore the challenges and solutions that guidance services face in helping students develop career maturity in the digital age. By identifying the challenges and examining solutions that have been implemented in various schools, it is

hoped that effective strategies can be found to support students in achieving optimal career maturity (Wilson, 2022).

Through this literature review, it is expected to provide new insights for educators and guidance professionals in formulating relevant and innovative programs, as well as increasing understanding of the role of guidance services in facilitating students' career maturity development (Roberts, 2021). Thus, this research will contribute to the development of strategies that can help students to be better prepared for future career challenges.

METHOD

This systematic literature review followed the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines to ensure a transparent and comprehensive approach in identifying, evaluating, and synthesizing relevant studies on challenges and solutions in guidance services for high school students' career maturity in the digital era. The methodology included several stages: literature search, selection criteria, data extraction, and analysis (Moher et al., 2009). The literature search was conducted in various academic databases, including PubMed, PsycINFO, ERIC, and Google Scholar. Keywords and phrases used in the search included “career maturity,” “high school students,” “guidance services,” “digital age,” “career decision-making,” “technology in guidance,” and “intervention strategies.” The search was limited to peer-reviewed journal articles published between 2018 and 2024 to ensure the inclusion of recent and relevant studies. In addition, the reference lists of the selected articles were manually reviewed to identify other relevant studies.

The inclusion criteria for this review required that studies focus specifically on high school students and explore the impact of guidance services on career maturity. Both qualitative and quantitative studies were considered, as long as they included measurable outcomes related to career maturity. Studies were excluded if they focused on populations outside the specified age range, did not involve school-based interventions, or lacked empirical data. An initial screening of titles and abstracts was conducted followed by a full text review to ensure all selected studies met the inclusion criteria. Data Extraction and Analysis Data extraction involved systematically recording key information from each study, including intervention type, sample characteristics, study design, outcome measures, and findings. The extracted data were then analyzed using a narrative synthesis approach to identify common themes, trends, and patterns among the studies. The effectiveness of various interventions was evaluated based on their reported impact on students' career maturity, with particular attention to methodological rigor and reliability of results. By synthesizing these findings, this review aims to provide a comprehensive overview of the challenges and solutions in guidance services that can support high school students' career maturity in the digital age.

FINDINGS AND DISCUSSIONS

The results of this study were thoroughly analyzed using a systematic review approach to identify and evaluate relevant research related to high school students' career maturity and guidance services in senior high schools. This process followed systematic steps, starting with a data search through various databases, which resulted in a total of 98 initial records.

Table 1. Systematic Review Stages

No	Stage	Result
1	Identify records through database search	98
2	Notes after duplicates are removed	54
3	Filtered records	54
4	Excluded records	33
5	Full-text articles assessed for eligibility	21
6	Exempt full-text articles	17
7	Studies that fall under qualitative synthesis	2
8	Studies that fall under quantitative synthesis	2

The process of this study began with a search for records through various databases, which resulted in a total of 98 initial records. After the identification stage, the next step was to remove duplicates, which brought the number of relevant records to 54. Then, the remaining records were screened based on pre-defined inclusion and exclusion criteria, resulting in 54 filtered records. Of these, 33 records were excluded for not meeting the criteria, while 21 full-text articles were evaluated for eligibility. This process ensured that only the most relevant and quality studies were included in this review.

After evaluating the full-text articles, 17 articles were excluded from further analysis because the systematic review results determined that they did not meet criteria such as focusing on a population outside the specified age range, not involving school-based interventions, or not having empirical data, resulting in 2 studies being included in the qualitative synthesis and 2 studies in the quantitative synthesis. This study aims to identify and understand the challenges and solutions in guidance services that can help improve students' career maturity in high schools in the digital era. By using a systematic approach, it is expected to provide in-depth and evidence-based insights to support the development of guidance services that are more effective and responsive to students' needs.

The following section presents a synthesis of the literature review, which was carefully screened and analyzed to provide a comprehensive foundation for this study.

Table 2. The Filtered Results Of The Literature Review

Title	Author Year	Challenge	Description	Solution
Factors Influencing Career Maturity among Indonesian High School Students in the Digital Era	Nurani, G. A. (2022).	Students' low career awareness of digital-age skill needs and lack of technological support.	Examine the factors that influence Indonesian high school students' career maturity in the digital age, such as the influence of social media and lack of career training.	Improve digital skills education in schools and conduct career training focused on the development of the digital world.

21 The Role of Digital Technology in Career Development	Hooley, T., & Staunton, T. (2021)	Adapting to the changing role of technology in careers, dependency and the social impact of technology.	It examines how digital technologies are changing career development and creating new opportunities and challenges in career services.	Using technology-based pedagogical approaches to help guidance professionals address individual career challenges.
School Counselors' Intention to The Technology Acceptance Model	Anni, C. T. et al (2018)	Perceived Ease of Use: Counselors find technology difficult to use. Lack of Understanding: Not all counselors understand the benefits of technology in counseling. Limited Technical Support: Limited technical support hinders technology adoption.	This study evaluated school counselors' intention to use computer technology to support counseling services. A total of 125 counselors (74.8% female) completed an online questionnaire measuring the key constructs of the Technology Acceptance Model (TAM).	Training Program: Develop a training program to Increase counselors' understanding and expertise in using technology. Awareness Campaign: Raise awareness about the benefits of technology in counseling. Ongoing Support: Provide ongoing technical support to facilitate the use of technology.
Social Cognitive Career Theory at 25: Progress in Studying the Domain Satisfaction And Career	Brown, S. D., & Lent, R. W. (2019)	Studying the integration of career satisfaction and self-management models in the context of continuous career development	This study reviews the development of SCCT in exploring education and job satisfaction models, as well as career management models across the life span, highlighting how	It develops applications of the theory to assist individuals in dealing with future career uncertainty and encourages the development of

Self-Management Models	these models help understand career choice and satisfaction.	combination of models to deepen insights into persistence in career choice.
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The table highlights recent studies that explore various aspects of career maturity and the impact of digital technology on students and counselors. One notable study by Nurani (2022) investigates the factors influencing career maturity among Indonesian high school students in the digital era. It identifies the low awareness of career skills relevant to today's job market and the lack of technological support as significant challenges. To address these issues, the study recommends enhancing digital skills education in schools and conducting career training that emphasizes the evolving digital landscape.

Hooley and Staunton (2021) further explore the role of digital technology in career development, analyzing how technological advancements create both opportunities and challenges in career services. Their work underscores the need for professionals to adapt to the changing technological environment, highlighting the importance of pedagogical approaches that incorporate technology to better support individuals facing career challenges.

By leveraging technology, career development can become more accessible and relevant for students navigating their futures.

Anni et al. (2018) focused on school counselors' intention to adopt technology in their practice. The study identified major barriers such as perceived difficulty in using technology, lack of understanding of its benefits, and limited technical support. Based on the results of the study, counselors showed positive attitudes towards technology and intended to use it because they considered technology easy to use and beneficial. To address these challenges, the authors propose the development of a training program aimed at improving counselors' technology proficiency, increasing awareness of its benefits, and providing ongoing technical support to facilitate smoother technology integration.

Lastly, The article Social Cognitive Career Theory at 25: Progress in Studying the Domain Satisfaction and Career Self-Management Models by Lent and Brown (2021) reflects on the advancements and applications of Social Cognitive Career Theory (SCCT) over the past 25 years, focusing particularly on the two newer models: domain satisfaction and career self-management. These models enhance SCCT's framework by providing insights into how career satisfaction and self-regulation skills can influence lifelong career development and adaptability. The authors suggest that further research on model combinations could improve our understanding of persistence in career choices. They also emphasize the importance of theory-guided applications, which can help individuals manage career uncertainties by preparing for change and developing resilience in an evolving job market.

CONCLUSION

The conclusion of this study shows the importance of digital readiness in career services to support students' career maturity in secondary schools in the digital era. Key challenges include students' low awareness of digital skills and lack of technological support. In addition, the need for professionals to adapt technology-based approaches to career

development is becoming increasingly important, given the rapid development of technology in the work environment. Barriers to technology acceptance, such as perceived difficulty of use and limited technical support, are also factors that need to be addressed to increase the adoption of technology in career services. Furthermore, strategic planning and ongoing training for counselors and career professionals can support wider adoption of technology, assisting them in facilitating more effective career services. Thus, digital skills education in schools as well as the application of theory-based strategies in supporting students' career adaptability can increase their resilience to uncertainty in the future world of work. This approach is expected to result in more responsive and relevant guidance services, aligned with students' needs in the digital age.

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