

Survey of Career Needs for Developing Digital Media in Career Guidance for Senior High School Students in Pekanbaru City

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Abstract. Career planning is an essential aspect of student development, as the decisions made at this stage will influence both their future educational pathways and career choices. However, many students face difficulties in recognizing their own potential and accessing appropriate career information, which makes them vulnerable to making unsuitable decisions. Issues such as the lack of integrated career guidance services, limited student understanding of their own interests and talents, and the scarcity of accessible information media pose significant challenges in the career planning process at schools. This study aims to analyze the career needs of senior high school students as the basis for developing a digital career application to support the identification of their interests and talents. The study employed a quantitative approach using a survey method. The research population consisted of senior high school students in Pekanbaru City, with a sample of 430 respondents. The findings indicate that early identification of students' interests and talents is crucial in helping them plan careers aligned with their potential. Therefore, based on the results of the career needs analysis, there is a need for innovative approaches that can assist students in better understanding themselves and provide relevant information regarding suitable career options.

Keywords: Digital Media; Career Guidance; Senior High School Students



INTRODUCTION

Career planning is an essential part of an individual's personal development toward early adulthood. One of the developmental tasks that adolescents must achieve is selecting and preparing for a career or planning their future career (Hurlock, E. B., 2002). Super stated that human career development can be divided into five stages: growth, exploratory, establishment, maintenance, and decline (Hidayat et al., 2019). Adolescents, particularly those in senior high school (ages 15–18), are in the exploratory stage. At this stage, individuals begin to seek knowledge and skills that align with their interests, talents, values, and preferences to prepare for their future (Hidayat et al., 2019).

Career guidance is a process of assistance provided to individuals to understand themselves, explore various types of occupations, plan, and develop their careers in a directed manner according to their potential and interests (Atma et al., 2024). This service is crucial in helping senior high school students overcome barriers in making career decisions. Career guidance can also reduce students' confusion in determining further educational pathways and future professions (Arjanggi, 2017). The aim of career guidance is to identify and understand oneself while designing a future aligned with students' aspirations (Atma et al., 2024). Career guidance services play a vital role in helping students solve problems related to knowledge, attitudes, and skills relevant to the world of work, and in guiding them to make career choices based on an understanding of their own abilities (Atma et al., 2024). Through career guidance programs, students are equipped with a deeper understanding of career options, the requirements needed, and the steps necessary to achieve their desired career goals (Handayani & Damaianti, 2023; Atma et al., 2024). The importance of career guidance is further emphasized given the complexity of choices faced by senior high school students in shaping their future, as well as the need for a deeper understanding of career orientation and confidence in dealing with global competition (Handayani & Damaianti, 2023).

The development of digital media in career guidance has become increasingly relevant due to the rapid advancement of technology, which provides broader and more interactive access to information. Digital platforms can facilitate various forms of guidance and counseling in career planning and decision-making, such as providing interactive educational materials and virtual job interview simulations, all of which can significantly enhance students' career literacy (Cahyanti & Nuroh, 2023). The adoption of digital media also enables the personalization of guidance experiences, where content and recommendations are tailored to the specific needs of students, making it more effective in shaping mature career orientations (Handayani & Damaianti, 2023). Thus, the integration of digital technology not only broadens the reach of career guidance services but also improves the efficiency and appeal of the process for younger generations who are familiar with technology. This is in line with the conditions of adolescents growing and developing in the digital era. The use of digital media in career guidance is expected to help address various

challenges, such as changes in perspectives within education and gaps in access to information. Education in today's digital era offers a more modern curriculum as well as opportunities to improve learning outcomes through the use of digital data analytics (Ngongo et al., 2019). Nevertheless, the proper integration of digital technology in career guidance can bridge these gaps, especially for Generation Alpha, who tend to be highly skilled in technology and prefer to seek information on the internet rather than from conventional sources (Yasir & Susilawati, 2021). This generation is known for its higher digital literacy and reliance on the internet as the primary source of information. This opens significant opportunities for career guidance services to become more inclusive, interactive, and relevant to current student needs.

Referring to the previous discussion, if career guidance is implemented in accordance with the conditions and needs of students, it can reduce unfavorable outcomes such as unemployment. The high unemployment rate among senior high school graduates, which reached 8.57% in 2022, highlights the importance of more effective and integrated career guidance (Handayani & Damaianti, 2023). The ability to choose a career is a crucial factor for senior high school students in setting goals to be achieved in the future. Inadequate decision-making skills regarding career choices may result in confusion or even unemployment (Handayani & Damaianti, 2023). Therefore, conducting a career needs survey is essential to identify specific areas that require intervention in school guidance and counseling services, particularly in the components of interest-based services and individual planning within career guidance. It is also necessary to ensure that the digital media developed is relevant to the needs of senior high school students.

METHODOLOGY

This study employed a quantitative approach with a descriptive survey design to collect data on the career needs of senior high school students (Atma et al., 2024). This method was chosen to obtain a comprehensive overview of students' perceptions regarding career choices, career maturity levels, as well as their preferences for the format and content of digital media that could potentially be used in career guidance (Waldopo, 2018; Safitri et al., 2020). Specifically, this study was directed at identifying students' needs for the development of a career information application based on their interests and talents. The research population consisted of senior high school students in Pekanbaru, with a sample of 430 respondents determined using a simple random sampling technique. The research instrument was a Likert-scale questionnaire developed based on indicators of the need for media availability in providing career information tailored to students' interests and talents. The instrument had undergone validity and reliability testing prior to its use. Data were collected through online questionnaires distributed via Google Forms to students, and then analyzed using descriptive statistics with the assistance of SPSS software to illustrate students' needs for digital media in career guidance.

RESULT AND DISCUSSION

Based on the results of the questionnaire distributed to respondents regarding students' needs for the availability of an application as a medium for career guidance to assist them in planning their further education, the findings are presented in Table 1.

Table 1. Results of Career Media Needs Analysis

Number of Respondents	Total Score Obtained	Maximum Total Score	Percentage of Career Media Needs Questionnaire Analysis Results
430	31083	36120	86.05 %

Source: Questionnaire Calculation Results, 2025

Based on Table 1 above, it can be seen that the total number of respondents involved in this study was 430 students. The total score obtained from the results of the career media needs questionnaire was 31,083 out of a maximum score of 36,120. When converted into a percentage, the result reached 86.05%. This figure indicates that students' need for career guidance media falls into the *very high* category. These findings reinforce that the majority of respondents consider career guidance media to be an important and necessary tool in helping them plan and make career decisions more effectively.

This study is in line with other research which also highlights the high demand for career guidance supported by digital media, especially in addressing the dynamics of the modern labor market (Adetia et al., 2025). This suggests that the development of digital media for career guidance is a strategic step to facilitate students' career decision-making, considering the complexity of career options in today's era of globalization (Safitri et al., 2020). Furthermore, previous research has indicated that online learning methods, which became common during the COVID-19 pandemic, proved effective in distributing learning motivation questionnaires and can be adapted for career needs surveys, given the ease of access and participation from home (Mahaardhika & Tari, 2022).

Nevertheless, the integration of technology into career guidance media must also take into account the challenges of unequal internet access in certain areas, as has been found in the context of blended learning in senior high schools (Azari & Syafrini, 2021). These limitations emphasize the importance of developing flexible digital career guidance media, which not only leverage the potential of modern technology but also accommodate diverse infrastructure conditions (Kusumasari et al., 2024; Hidayat & Mesra, 2024). Furthermore, the analysis of career media needs for each indicator is presented in the following diagram:

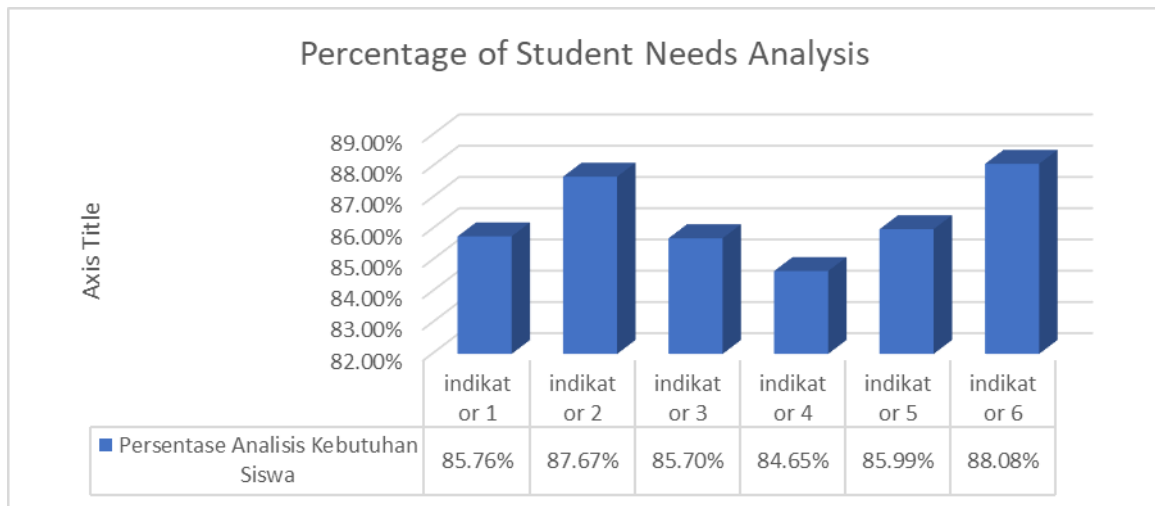


Figure 1. Percentage of Student Needs Analysis

Based on the results of the analysis of career guidance media needs illustrated in the diagram above, it can be seen that all indicators show a *very high* level of necessity. Interest and talent guidance (85.76%), career and education information (87.67%), as well as interest and talent tests and recommendations (85.70%) indicate that students require comprehensive support to recognize their potential while also obtaining relevant information regarding further educational pathways. The importance of personalization in career guidance through digital media is also emphasized, given students' preferences for tailored recommendations aligned with their profiles, along with the ability of AI to match skills and interests with appropriate career options (Capinding & Dumayas, 2024).

In addition, counseling services and social support (84.65%) remain considered important, although this indicator obtained the lowest percentage among others. This indicates that while students value digital aspects, human interaction and emotional support remain crucial components of effective career guidance. Therefore, the development of digital career guidance media must integrate interactive elements that facilitate connections with counselors, while simultaneously leveraging technology for personalized information and career simulations (Gedrimiene et al., 2023).

This highlights the essential role of school counselors in accompanying students in determining career directions that align with their interests and talents. Although students tend to prioritize the availability of digital media that is practical, informative, and easily accessible, the role of counselors cannot be entirely replaced by technology. Counselors provide added value not only in terms of information but also through personal guidance, meaningful interactions, and emotional support needed by students in dealing with confusion, pressure, or doubts when making career choices. This condition affirms that digital platforms are indeed effective as an initial means of career information exploration; however, the final decision-making process still requires the

humanistic touch provided by school counselors. Through face-to-face dialogue, individual counseling, and group mentoring, counselors can help students reflect on their choices, consider available alternatives, and connect their interests and talents with the realities of education and the labor market.

Furthermore, the design and accessibility of the application (85.99%) were identified as important indicators, emphasizing that the developed media should be user-friendly and easy to access. Interestingly, the indicator of application usefulness obtained the highest score, at 88.08%, which reflects students' high expectations of career guidance media as a truly beneficial tool in helping them plan their future. Overall, the total analysis results reached 86.05%, categorized as *very high*. This finding affirms that the development of career guidance media is not only important but also urgent to address the actual needs of students in career planning. This aspect highlights the urgency of providing a digital platform that is not only rich in information but also visually engaging, flexible, easy to use, and integrated with comprehensive career information, including educational requirements and relevant job opportunities (Gedrimiene et al., 2023).

Such media development is expected to provide students with the means to explore various career options, identify suitable educational pathways, and prepare themselves to face future challenges in the world of work (Bimrose et al., 2018). In conclusion, this study confirms the very high need for digital career guidance media among senior high school students in Pekanbaru, with a needs percentage of 86.05%, categorized as *very high*. These findings underscore that innovations in career information delivery through digital platforms are highly relevant in the context of rapid technological development (Ngongo et al., 2019). The development of such media is further reinforced by previous research showing that digital story-based media can enhance students' language skills, which suggests similar potential in the context of career guidance to facilitate understanding and exploration (Cahyanti & Nuroh, 2023).

CONCLUSIONS

The use of digital media in career guidance is not only relevant to the characteristics of a technology-savvy generation (Arvianto et al., 2023) but also crucial in fostering students' interest and learning motivation as well as encouraging exploratory activities within them (Rohani, 2015). In addition, digital media facilitates access to career information that has not previously been provided through face-to-face learning, thereby enriching students' insights into various future career options (Adisel et al., 2022). Career guidance services are essential to be implemented in schools so that students can make informed career choices based on an understanding of their abilities, particularly given the problems students often face related to the lack of information and maturity in career decision-making (Atma et al., 2024). Therefore, the development of

comprehensive and interactive digital career guidance media is essential to equip students with a better understanding of their career options (Alga et al., 2024; Noviarni et al., 2023).

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