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Needs Analysis:
Website-Based Career Readiness Scale Of High School Students

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Abstract

This study aims to analyze the need for developing a website-based career readiness scale for high school students based on the perspectives of students and guidance counselors. The study used a descriptive quantitative approach with a needs analysis design involving 100 11th-grade high school students and 20 guidance counselors. Data were collected using a valid and reliable questionnaire (students' Cronbach's Alpha = 0.911; guidance counselors = 0.938) and analyzed descriptively. The results showed that students still experience limited career knowledge (38%), career confusion (37%), and doubts about career decision-making (37%), while 76% require career assessments and 97% show high interest in using technology. From the guidance counselors' perspective, 80% stated the need for an assessment tool, 100% expected a valid, reliable, and practical instrument, and 95% supported technology integration. These findings indicate that the development of a website-based career readiness scale is necessary to support more objective, effective, and digital-age-appropriate career guidance services.

Keywords: Career Readiness, Career Assessment, Measurement Scale, Website, Guidance and Counseling.

INTRODUCTION

Students at the senior high school level are in a developmental phase characterized by the need to make decisions regarding further education and career choices that will influence the

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transition to adult life, so that readiness in making career decisions is an important aspect of development in this period (Zhang et al., 2019). Various studies show that many high school students still experience difficulties in determining educational and career choices due to limited self-exploration, low confidence in making career decisions, and unclear future goals (Jung & Young, 2019). Changing characteristics of the 21st century working world increasingly demand that students have career readiness from an early age through the development of self-awareness, exploration of career options, decision-making skills, and career planning that is adaptive to changes in the work environment (Berger et al., 2019). In the context of secondary school education, guidance and counseling services have an important role in supporting students' career readiness through career counseling services and further education planning.(Novakovic et al., 2021)However, the implementation of career services in schools often faces challenges in the form of limited measuring tools that are able to map students' career readiness objectively and systematically, so that student career needs assessments cannot yet be fully used as a basis for developing targeted services.(Lombardi et al., 2020).

Guidance and counseling (BK) teachers need accurate data to design effective career readiness services, but various studies show that school counselors still face limitations in their readiness to implement career services and in utilizing data to support decision-making for targeted services.(Parikh-Foxx et al., 2020)Other research shows that college and career readiness services in schools are often hampered by limited resources, administrative complexity, inefficient use of technology, and limited tools that support practical career assessments for secondary school students.(Novakovic et al., 2021)From the student perspective, digital-based career assessments that are easily accessible and allow for independent self-exploration have been reported to increase student engagement in the career readiness development process and help reduce career decision-making difficulties at the high school level.(Chen et al., 2022)The difference in information needs between guidance and counseling teachers who require student mapping data for service development and students who require an easy-to-understand assessment experience demonstrates the importance of exploring the needs of both parties in developing career readiness instruments.(Edwin & Dooley Hussman, 2020)In educational instrument development research, needs analysis is seen as an important initial stage to ensure that the developed measuring instrument has contextual relevance, content validity, and user acceptance before being widely implemented.(Lee, 2019).

The development of digital technology in education and counseling services has opened up opportunities for utilizing website-based platforms to support student career development

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services through assessments, information exploration, and providing feedback that is more easily accessible online.(Kettunen et al., 2015)The use of digital-based assessments has been reported to provide advantages in the form of administrative efficiency, access flexibility, automatic data storage, and ease of processing results compared to conventional paper-based assessments, thus supporting more effective implementation of student evaluations.(Nikou & Economides, 2017)In the context of career services in schools, the use of digital technology enables school counselors to map student needs more systematically and supports more targeted service decision-making based on collected assessment data.(Hooley & Staunton, 2020)However, the development of website-based instruments needs to consider user needs, because aspects of usability, ease of navigation, and suitability to student characteristics are important factors in the successful implementation of digital systems in educational environments.(Teräs et al., 2020)Based on these conditions, this study aims to analyze the need to develop a website-based career readiness measurement scale for high school students based on the perspectives of guidance and counseling teachers and students as the main users of the instrument.

RESEARCH METHODS

This study uses a descriptive quantitative approach with a survey method to analyze the need for developing a website-based career readiness measurement scale for high school students from the perspective of guidance and counseling (BK) teachers and students. The research design used is a needs analysis (needs assessment) conducted by distributing questionnaires to respondents to obtain an overview of the conditions, needs, and expectations for the development of a website-based career readiness instrument. The research procedure includes the preparation of a needs analysis instrument based on theoretical and literature studies, testing the validity and reliability of the instrument, distributing questionnaires to 100 grade XI high school students and 20 high school BK teachers, and descriptive data analysis to identify the need for instrument development.

The research subjects consisted of guidance and counseling teachers and high school students selected using purposive sampling. Data collection was conducted using a needs analysis questionnaire developed based on theoretical and literature studies related to career readiness and digital assessment in guidance and counseling services. The research instrument consisted of a needs analysis questionnaire for guidance and counseling teachers and students with a four-choice Likert scale. In addition to closed-ended items, the student questionnaire also included open-ended questions to explore needs and expectations regarding the development of a

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website-based career readiness scale.

The student needs analysis instrument demonstrated very high reliability with a Cronbach's Alpha value of 0.911. The Corrected Item-Total Correlation (CITC) values ranged from 0.635 to 0.901, indicating that all items had good discrimination power and were suitable for use. Meanwhile, the guidance and counseling teacher needs analysis instrument also had very high reliability with a Cronbach's Alpha value of 0.938. The CITC values for this instrument ranged from 0.726 to 0.920, indicating that all items had good internal consistency. These results indicate that both instruments met the reliability and item validity criteria for use in needs analysis data collection.

RESULTS AND DISCUSSION

The needs analysis was conducted by distributing questionnaires to 100 eleventh-grade high school students. The data obtained were then analyzed using descriptive techniques to identify the level of student needs based on the scale to be developed. The results of this analysis are presented in the following table.

1. Analysis of the Needs of Guidance and Counseling Teachers

Table 1. Mean and Standard Deviation of Guidance and Counseling Teacher Needs

Statement	Mean (M)	Elementary School
I have tools/instruments to measure students' career readiness.	3.30	0.80
I can objectively assess students' career readiness.	3.10	0.64
I have difficulty identifying students' career readiness.	2.35	0.67
The available instruments do not meet the needs	2.60	0.68
I need a valid and reliable career readiness instrument.	3.60	0.50

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I need a website based instrument for easy access	3.65	0.75
Instruments with automatic results will help BK services	3.75	0.44

The results of the descriptive analysis showed that the average score of the needs of guidance and counseling teachers was in the range of 2.35–3.75 with a standard deviation of 0.44–0.80. The highest average was found in the need for instruments with automatic results to assist guidance and counseling services (M = 3.75; SD = 0.44), followed by the need for website-based instruments (M = 3.65; SD = 0.75) and valid and reliable instruments (M = 3.60; SD = 0.50). These findings indicate that guidance and counseling teachers have a high need for the development of website-based career readiness instruments that are practical, accurate, and capable of producing scores automatically.

Table 2. Categorization of Guidance and Counseling Teacher Needs Data

Category	Range	Total Respondents
Tall	21 < X	18
Currently	14 < X < 21	2
Low	X < 14	0

Based on Table 2, the majority of guidance and counseling teachers (18 respondents, 90%) were in the high need category for career readiness instrument development. Meanwhile, 2 respondents (10%) were in the medium need category, and no respondents were in the low need category.

These findings indicate that guidance and counseling teachers have a very high need for valid, reliable, practical, and easily accessible career readiness instruments to support guidance and counseling services in schools. This high level of need indicates that currently available instruments do not fully meet the needs of guidance and counseling teachers in objectively identifying and evaluating students' career readiness. Therefore, the development of a website-based career readiness measurement scale is considered relevant and necessary to support the implementation of more effective and efficient guidance and counseling services.

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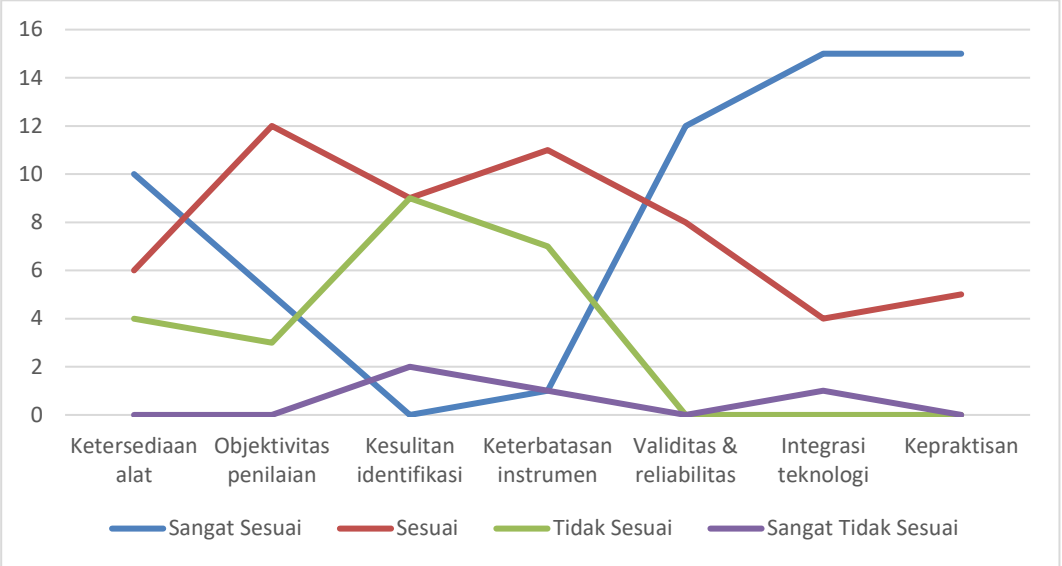


Diagram 1. Data from the Analysis of the Needs of Guidance and Counseling Teachers

Based on the results of a needs analysis involving 20 Guidance and Counseling (BK) teachers, it was found that the majority of BK teachers view the development of technology-based career assessment instruments as an important need in the implementation of BK services in schools. Regarding the availability of tools, 80% of respondents stated that it was appropriate or very appropriate, indicating that BK teachers feel the need to have assessment tools that can help the process of identifying and mapping student needs more systematically. Furthermore, regarding the assessment objectivity indicator, 85% of BK teachers stated that it was appropriate or very appropriate, indicating that objective assessment is an important aspect in supporting the decision-making process for targeted BK services.

The analysis also shows that various obstacles remain in the implementation of the assessment. Regarding the identification difficulty indicator, 55% of respondents stated that it was appropriate or very appropriate, while 45% stated that it was inappropriate or very inappropriate. This finding indicates that some guidance and counseling teachers still face obstacles in accurately identifying students' needs, potential, and problems. A similar finding is seen in the instrument limitations indicator, where 60% of guidance and counseling teachers stated that it was appropriate or very appropriate, but that the available instruments are still limited. This condition indicates the need to develop instruments that are more comprehensive, easy to use, and appropriate to the needs of guidance and counseling services in schools. This finding is in line with

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the results of the study.Herman et al. (2025)which states that assessment is an important component in the preparation of BK programs, but its implementation is often hampered by limited instruments and suboptimal mastery of assessment.

Regarding the validity and reliability indicators, all respondents (100%) stated that they were appropriate or very appropriate. These results indicate that guidance and counseling teachers strongly emphasize the importance of using instruments with good psychometric qualities so that assessment results can be trusted and used as a basis for developing services.Isrofin et al. (2024)explains that valid and reliable instruments are able to produce more accurate data and support the accountability of guidance and counseling services in schools.

Furthermore, the technology integration aspect achieved a very high percentage, with 95% of guidance and counseling teachers stating it was appropriate or very appropriate. This result indicates a positive acceptance of the use of technology in guidance and counseling services. This finding is reinforced byDeslonde & Becerra (2018)which found that technology is seen as capable of improving work efficiency, productivity, and the quality of counseling services. Furthermore, regarding the practicality indicator, all respondents (100%) stated that it was appropriate or very appropriate, indicating that guidance and counseling teachers expect assessment instruments that are easy to use, efficient in data processing, and capable of supporting services more effectively. In line with this,Suryawati et al. (2024)emphasized that the use of web-based media and instruments can improve the effectiveness of guidance and counseling services in schools. Therefore, the development of technology-based career assessment instruments is considered relevant to addressing the needs of guidance and counseling teachers in providing more objective, practical, and digitally-adapted services in the educational environment.

2. Student/Counselee Needs Analysis

Table 3. Mean and Standard Deviation of Student Needs

Statement	Mean (M)	Elementary School
I understand my interests and talents	3.12	0.66
I already have a clear career plan	2.99	0.78
I am aware of various career options	3.22	0.64
I feel confused about choosing a career	2.87	0.88
I'm having trouble getting career information	2.47	0.83

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I am hesitant in making career decisions	2.82	0.86
I need a tool to know my career readiness	3.07	0.77
I want to know my level of career readiness objectively.	3.42	0.57
Instruments with automatic results will help BK services	3.19	0.51

The results of the descriptive analysis showed that the average score of students' needs was in the range of 2.47–3.42 with a standard deviation of 0.51–0.88. The highest average was obtained for the need to know the level of career readiness objectively (M = 3.42; SD = 0.57), followed by knowledge of various career options (M = 3.22; SD = 0.64) and the benefits of instruments with automatic results (M = 3.19; SD = 0.51). These findings indicate that students have a fairly high need for career readiness instruments that are objective, practical, and capable of providing automatic results to help their career planning.

Table 4. Categorization of Student Needs Data

Category	Range	Total Respondents
Tall	27 < X	51
Currently	18 < X < 27	49
Low	X < 18	0

Based on Table 4, 51 students (51%) were in the high need category for developing a website-based career readiness measurement scale, while 49 students (49%) were in the medium need category. No students were in the low need category.

These results indicate that all students have a fairly high need for a website-based career readiness instrument. The dominance of the high category indicates that most students need a tool that can help them understand their career readiness level more objectively, obtain information about career readiness, and support their future career planning process. Furthermore, the absence of students in the low category indicates that the need for the development of a website-based career readiness instrument is widely felt by students. This finding reinforces the urgency of developing a website-based career readiness measurement scale as an assessment medium that is appropriate to student needs and technological developments in guidance and counseling services.

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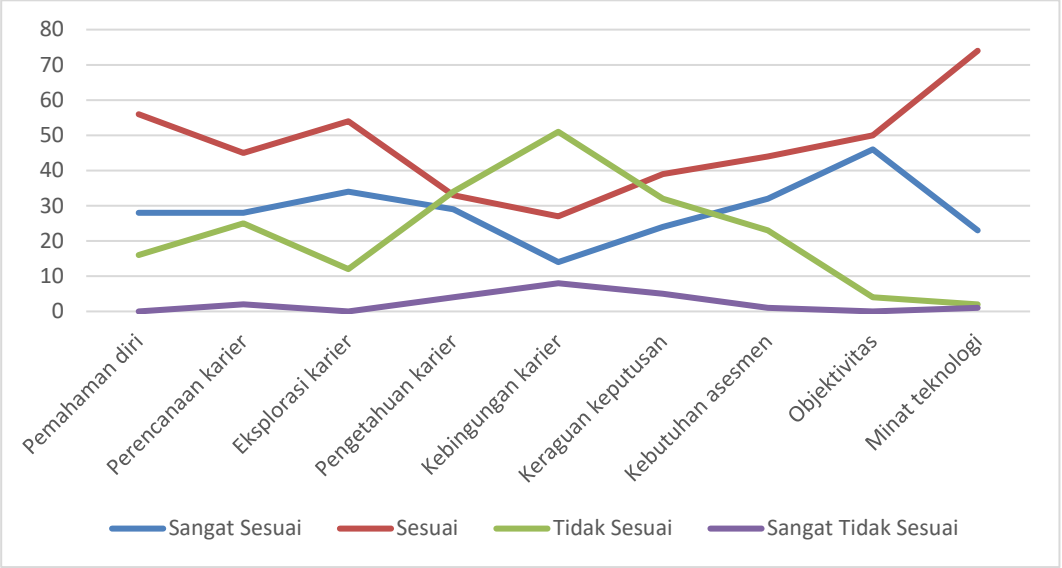


Diagram 2. Data from the Results of the Student/Counselee Needs Analysis

Based on the results of a needs analysis involving 100 eleventh grade high school students, it was found that most students have a fairly good level of career readiness in several aspects. The self-understanding aspect showed that 84% of students stated that it was appropriate or very appropriate, which indicates that the majority of students have recognized their interests, talents, and potential. In the career planning aspect, 73% of students stated that it was appropriate or very appropriate, while the other 27% still felt that they did not have a mature career plan. These results indicate that although most students have begun to think about their future, there are still a number of students who need help in developing a clearer and more focused career plan.

For the career exploration indicator, 88% of students stated that it was appropriate or very appropriate, indicating that students were quite active in seeking information about further education and the world of work. However, the career knowledge indicator showed more mixed results, with only 62% of students feeling they had adequate career knowledge, while 38% admitted they still lacked a clear understanding of available career options. These findings indicate that students still need information sources and guidance services that can broaden their horizons regarding various career alternatives.

Furthermore, regarding the career obstacle indicator, 59% of students stated that the career confusion indicator was not suitable or very unsuitable, while 37% of students still felt that the situation was suitable or very suitable. Meanwhile, regarding the career decision-making

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uncertainty indicator, 37% of students still experienced doubts. These results indicate that although some students have a fairly clear career direction, others still need guidance in the career decision-making process. According toSuper (1980)Adolescence is a stage of career exploration characterized by the process of searching for and confirming career choices, so confusion and doubt are common. Furthermore,Savickas (2013)explains that career readiness develops through an individual's ability to understand themselves, explore opportunities, and make adaptive career decisions.

The analysis also showed that 76% of students stated they needed a career assessment, indicating a high need for instruments that could help them identify their potential and career direction more objectively. This finding is supported by the high percentage of the objectivity indicator, where 96% of students stated that objective assessment results were important to them. Furthermore, the interest in technology indicator achieved the highest percentage, with 97% of students stating that it was appropriate or very appropriate. These findings indicate that students have a very good acceptance of the use of technology in career guidance services. Therefore, the development of technology-based career assessment media is considered relevant to help students improve self-understanding, expand career knowledge, and support more informed career decision-making. These findings are in line with the opinion ofGysbers & Henderson (2014)which emphasizes the importance of using assessment and technology in career guidance services to help students make more effective career decisions.

CONCLUSION

The needs analysis results indicate that the development of a website-based career readiness scale for high school students is a relevant need from both the perspectives of students and guidance counselors. From the student perspective, although most students have a good level of self-understanding, career planning, and career exploration, there are still limitations in career knowledge and confusion and doubt in career decision-making among some students. Furthermore, the high demand for career assessments, the importance of objectivity in assessment results, and the high student interest in utilizing technology indicate that website-based instruments have the potential to be an effective tool in supporting the development of student career readiness. From the perspective of guidance counselors, the analysis reveals a need for an objective, valid, reliable, practical, and technology-integrated assessment instrument to overcome the limitations of assessment tools currently used. The high level of acceptance by guidance counselors of the use of technology in guidance and counseling services further

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reinforces the urgency of developing a website-based career readiness scale. Therefore, the development of this scale is expected to be a solution that can help students recognize their potential, improve career readiness, and support guidance counselors in implementing career services that are more effective, efficient, and in line with the demands of the digital era.

REFERENCES

Berger, N., Hanham, J., Stevens, C. J., & Holmes, K. (2019). Immediate feedback improves career decision self-efficacy and aspirational alignment. Frontiers in Psychology, 10, 255.

Chen, S., Chen, H., Ling, H., & Gu, X. (2022). An online career intervention for promoting Chinese high school students' career readiness. Frontiers in Psychology, 12, 815076.

Deslonde, V., & Becerra, M. (2018). The Technology Acceptance Model (TAM): Exploring School Counselors' Acceptance and Use of Naviance. Professional Counselor, 8(4), 369–382.

Edwin, M., & Dooley Hussman, M. (2020). Factors influencing school counselors' time spent on career planning with high school students. Professional School Counseling, 23(1), 2156759X20947724.

Gysbers, N. C., & Henderson, P. (2014). Developing and managing your school guidance and counseling program. John Wiley & Sons.

Herman, PY, Nurfarhanah, N., & Ardi, Z. (2025). Literature Review: Validity and Reliability of Student Career Planning Instruments in Guidance and Counseling Services. Socius: Journal of Social Sciences Research, 2(12).

Hooley, T., & Staunton, T. (2020). The Role of Digital Technology in Career Development.

Isrofin, B., Taufiq, A., Septiana, NZ, & Nurmalasari, Y. (2024). Initial Validation of a School Counselor Accountability Scale (ID-SCAS) Using The Rasch Model. Indonesian Journal of Guidance and Counseling: Theory and Application, 13(1), 70–84.

Jung, J. Y., & Young, M. (2019). The occupational/career decision-making processes of intellectually gifted adolescents from economically disadvantaged backgrounds: A mixed methods perspective. Gifted Child Quarterly, 63(1), 36–57.

Kettunen, J., Sampson Jr, J.P., & Vuorinen, R. (2015). Career practitioners' conceptions of competency for social media in career services. British Journal of Guidance & Counselling, 43(1), 43–56.

Lee, J. (2019). Rapid needs assessment: an evidence-based model. European Journal of Training and Development, 43(1–2), 61–75.

Lombardi, A., Rifenbark, G., Tarconish, E., Volk, D., Monahan, J., Buck, A., Izzo, M., & Murray, A. (2020). Main and moderating effects of an online transition curriculum on career readiness. Career Development and Transition for Exceptional Individuals, 43(3), 146–156.

Nikou, S. A., & Economides, A. A. (2017). Mobile-based assessment: Investigating the factors that influence behavioral intention to use. Computers & Education, 109, 56–73.

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Novakovic, A., Patrikakou, E.N., & Ockerman, M.S. (2021). School counselor perceptions of preparation and importance of college and career readiness counseling. Professional School Counseling, 25(1), 2156759X21998391.

Parikh-Foxx, S., Martinez, R., Baker, S. B., & Olsen, J. (2020). Self-efficacy for enhancing students' career and college readiness: A survey of professional school counselors. Journal of Counseling & Development, 98(2), 183–192.

Savickas, M. L. (2013). Career Construction Theory and Practice. Career Development and Counseling: Putting Theory and Research to Work, 2(1), 144–180.

Super, D. E. (1980). A life-span, life-space approach to career development. Journal of Vocational Behavior, 16(3), 282–298.

Suryawati, CT, Kholili, MI, Susilo, AT, & Surur, N. (2024). Enhancing Effectiveness of Guidance and Counseling Services Through Web-Based Interactive Media. Ingénierie Des Systèmes d'Information, 29(1), 37.

Teräs, M., Suoranta, J., Teräs, H., & Curcher, M. (2020). Post-Covid-19 education and education technology 'solutionism': A seller's market. Postdigital Science and Education, 2(3), 863–878.

Zhang, Y.C., Zhou, N., Cao, H., Liang, Y., Yu, S., Li, J., Deng, L., Sun, R., Wu, Q., & Li, P. (2019). Career-specific parenting practices and career decision-making self-efficacy among Chinese adolescents: The interactive effects of parenting practices and the mediating role of autonomy. Frontiers in Psychology, 10, 363.

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