AG EDITOR

Omah Karier: a web-based individual planning model to enhance career exploration among junior high school students in Surakarta, Indonesia

Omah Karier: un modelo de planificación individual basado en la web para mejorar la exploración profesional entre estudiantes de secundaria en Surakarta, Indonesia

Agus Tri Susilo[1] ✉, Edi Purwanta[2] ✉, Muhammad Nur Wangid[2] ✉, Moh Salimi[3] ✉

[1]Universitas Sebelas Maret, Study Program of Guidance and Counseling, Faculty of Teacher Training and Education. Surakarta, Indonesia.
[2]Universitas Negeri Yogyakarta, Faculty of Education. Yogyakarta, Indonesia.
[3]Universitas Sebelas Maret, Study Program of Elementary School Teacher Education Faculty of Teacher Training and Education. Surakarta, Indonesia.

ABSTRACT

Introduction: the urgency of this research was to determine an effective model of individualized planning services as part of the guidance and counseling program components to encourage students to undertake career exploration. Career exploration was important because it could predict an individual's adjustment in the transition to further education, learning commitment, and academic motivation.
Objectives: this study aimed to produce an individualized planning service model assisted by the "Omah Karier" website to improve the career exploration of junior high school students in Surakarta that met the criteria of feasibility, practicality, and effectiveness.
Method: this study employed the ADDIE model to develop and validate a product, involving experts, teachers, and students at different trial stages. The feasibility and practicality of the product were evaluated using established frameworks and were analyzed with Aiken's V and CVI. Furthermore, its effectiveness was measured through the Career Exploration Survey and was tested using a Paired Sample T-Test.
Results: the study produced an individualized planning service model assisted by the "Omah Karier" website to enhance students' career exploration. The feasibility test showed high validity with Aiken's V scores of 0,89 (material), 0,87 (media), and 0,91 (language), while the practicality test showed I-CVI values between 0,91–1,00. The effectiveness test revealed a significant improvement with t = -19,542 and p < 0,005, proving the model effectively supported students' career exploration.
Conclusions: this service model proved to be effective in increasing students' career exploration and could be leveraged as an alternative guidance service to support students' career goals.

Keywords: Career; Exploration; Individual; Planning; Omah; Karier.

RESUMEN

Introducción: la investigación se centró en la necesidad de un modelo de planificación individual como parte del programa de orientación y asesoramiento, con el fin de estimular la exploración profesional de los estudiantes. La exploración de carrera resulta esencial porque influye en la transición hacia la educación superior, el compromiso de aprendizaje y la motivación académica.
Objetivos: desarrollar un modelo de servicio de planificación individual asistido por la página web "Omah Karier" que cumpla con criterios de viabilidad, practicidad y eficacia para mejorar la exploración profesional

de los estudiantes de secundaria en Surakarta.

Método: se aplicó el modelo de desarrollo ADDIE en cinco etapas: análisis, diseño, desarrollo, implementación y evaluación. Participaron expertos, docentes y estudiantes. La viabilidad y la practicidad se evaluaron mediante la V de Aiken y el CVI, mientras que la eficacia se midió con la Encuesta de Exploración de Carrera y la prueba t de muestras pareadas.

Resultados: el modelo asistido por Omah Karier mostró alta validez con puntajes V de Aiken de 0,89 (material), 0,87 (medios) y 0,91 (lenguaje). La practicidad alcanzó valores de I-CVI entre 0,91 y 1,00. En cuanto a la eficacia, se evidenció una mejora significativa en la exploración profesional, con t = -19,542 y p < 0,005.

Conclusiones: el modelo de planificación individual resultó viable, práctico y eficaz, demostrando su potencial como alternativa de servicio de orientación para fortalecer la exploración profesional y apoyar los proyectos de vida de los estudiantes.

Palabras clave: Carrera; Exploración; Individuo; Planificación; Omah; Karier.

INTRODUCTION

Career exploration, planning, and decision-making should begin while students are still in school, as school serves as a place to develop talents, interests, and personalities. More specifically, Junior High School represents a crucial period for students to develop career awareness, explore career options, make career plans, and begin deciding on career paths.[1] A key component in preparing for a career is reaching a decision regarding one's future career.[2] Individuals, especially those transitioning into adolescence, must make decisions regarding higher education.[3] Therefore, it is essential for individuals to explore various methods for identifying career alternatives and to assess the potential outcomes of each career path, a process known as career exploration.[4] Career exploration behavior, as a form of self-assessment and external search activity, provides the information needed to support choices and personal adjustments. Thus, career exploration is believed to significantly contribute to positive career development among students.[5,6]

Career exploration is defined as the activity of accessing and identifying information about possible career fields of interest.[7] Furthermore, Brown et al.[8] described as an effort to examine and test one's character in relation to strengths and weaknesses. Career exploration is part of the stages in career management theory,[9] where the protean career orientation is related to self-discovery, autonomy, and self-direction. The protean attitude enhances self-awareness and prepares individuals to better manage the changes occurring in the world.[10]

The starting point of the research subjects, junior high school students, refers to the career management theory mentioned above, specifically the age range of 15-25 years, which corresponds to the career exploration stage. Since the 1970s, research on career exploration behavior has continued, given its importance in individual career development. Xu et al.[11] explain that dysfunctional career beliefs can sometimes arise due to the relationship between career exploration and difficulties in decision-making. From this, it can be inferred that the challenges in career decision-making are caused by insufficient career exploration, which may make future career decisions more difficult.

Furthermore, research by Germeijs and Verschueren, cited in [12] found that career exploration can predict an individual's adjustment during the transition to higher education, such as commitment to the learning process in school or academic motivation. Another influence can be seen in the achievement of career identity as described by Gushue, Clarke, Pantzer, and Scanlan, cited in [13]. It is known that career identity plays a significant role in the overall formation of identity, according to Erikson, cited in [14] Additionally, career exploration behavior has been found to affect career decisions and efficacy in making those decisions.[6]

Empirical findings revealed a gap between ideal conditions and actual school practices. Surveys with five counselors in Surakarta showed that most students were uncertain about their future careers, while existing career exploration activities only provided basic knowledge. Counselors agreed that more targeted action plans are needed to effectively support junior high school students' career exploration. To integrate counselor input with student data, the researcher used The Career Exploration Survey (CES), adapted from [15] with 1279 junior high school students in Surakarta. The results showed that 54,65 % had only planned or not yet considered career exploration, while 67,54 % had not engaged in systematic activities to support career choices. In addition, 62,03 % of students expressed uncertainty and had not found a clear focus for higher education or future careers.

The educational experiences that shape career exploration patterns align with the core principles of Social Cognitive Career Theory (SCCT) by Bandura[16] which emphasizes the reciprocal influence between an individual's behavior and their environment. SCCT highlights the interaction between three cognitive variables that enable some individuals to plan and develop their careers: self-efficacy, outcome expectations, and personal goals. Self-efficacy is not a unified or global trait but is understood as a dynamic set of self-beliefs related to specific domains and actions. Outcome expectations refer to beliefs about the consequences or results of engaging in

certain behaviors. Success expectations involve imagining the outcomes of specific actions, for example, "If I do this, what will happen?" Personal goals, on the other hand, can be defined as an individual's intention to engage in particular activities or to achieve specific objectives.

Self-efficacy, success expectations, and personal goals in the SCCT interest model serve as important moderators or predictors in career exploration. This needs to be stimulated through a process that enhances the relevance of learning opportunities both inside and outside the school, providing students with access to career development opportunities that combine self-exploration, career exploration, career planning activities, and the development of management skills, known as an individual plan.[17] To date, no web-assisted individual planning model has been specifically designed for junior high school students in Indonesia, particularly in Surakarta. This approach, however, has proven effective in previous studies.[17,18]

An exploratory survey with five Guidance and Counseling teachers in Surakarta revealed that most had implemented individual planning services through classical guidance or counseling, while one had not. Three teachers created their own paper-based models, but all responded positively when introduced to a web-assisted individual planning model, noting its relevance and applicability since both teachers and students are accustomed to using websites. They emphasized, however, that the model must remain accessible, simple, practical, interactive, and preserve the core purpose of the service. Gysbers et al.[18] states that forms of individual planning include activities related to assessment, educational and occupational planning, as well as placement. Research findings indicate that individual planning interventions can positively impact the development of students' career plans. There is also support for both basic and responsive services such as social skills training, family support programs, and peer counseling.[19] Individual planning activities assist all students in planning, monitoring, and managing their academic achievement, as well as their personal/social and career development.

Supporting this view, Sampson et al.[20] individual planning is part of the Seven-Step Service Delivery Sequence under Individual Case-Managed Services, designed for students with low career decision-making readiness. In this process, teachers guide students in identifying personal resources and activities to support career goals, solve problems, and make informed choices. The planning sequence includes identifying resources, defining their purpose, estimating time commitments, recording intended goals, and prioritizing actions, often using a modified brainstorming approach to maximize creativity and effectiveness.

In alignment with this,[21] Van Horn et al.[22] identified various individual planning models have been created to help students and parents track development, solve problems, and make informed decisions. In this context, Van Horn and Myrick highlight how counselors can use computer technology to enhance efficiency and student support, including sharing information through digital media, delivering distance learning, developing individual plans with electronic systems, exploring college and career options online, using computers as counseling tools, networking, and facilitating counselor training and supervision.

Despite this potential, web-assisted individual planning service models are still rarely found today. A website as a collection of interrelated web pages organized under a domain or subdomain, hosted on the World Wide Web. According to [23] web-assisted individual planning services remain rare, their potential lies in the interactive, accessible, and enriching nature of websites. To address this, the Omah Karier model was developed as a web-based platform to support students' career exploration. The website offers four key features: Self-Assessment (self-concept and career exploration levels), Goals (personal goal identification), Activities (career information, learning habits, vicarious learning strategies, and action prioritization), and Reflection & Follow-Up (progress monitoring and planning next steps).

The Omah Karier platform is designed as a practical, effective, and efficient web-assisted service to guide students through self-assessment, goal setting, career-related activities, and reflection with follow-up actions. It aims to strengthen students' career exploration in line with career management theory, fostering independence in discovering their future paths. The model integrates Social Cognitive Career Theory (SCCT)—highlighting self-efficacy, outcome expectations, and personal goals—with protean career management theory, which emphasizes autonomy and self-directed growth. The main problem identified is the low level of career exploration among junior high school students, caused by limited self-awareness, lack of career information, and the suboptimal use of individual planning services, compounded by the absence of effective digital support. To address this, the study asks: How can a website-assisted individual planning service model, Omah Karier, be developed to enhance students' career exploration while meeting the criteria of feasibility, practicality, and effectiveness? The research aims to produce such a model to improve career exploration in Surakarta junior high schools while contributing to the fields of guidance and counseling, program development, media use, and career services.

METHOD

This research used the ADDIE design model. The type of research was research and development (R&D) utilizing the ADDIE development model, as proposed by Branch[24]. ADDIE stands for Analyze, Design, Develop,

Implement, and Evaluate. Multimedia learning development had been extensively reviewed in Multimedia-Based Instructional Design,[25] which outlined the detailed steps using the ADDIE framework. ADDIE follows a general sequence, where all stages of designing and developing carried out by researchers and practitioners can be fragmented into these five phases.
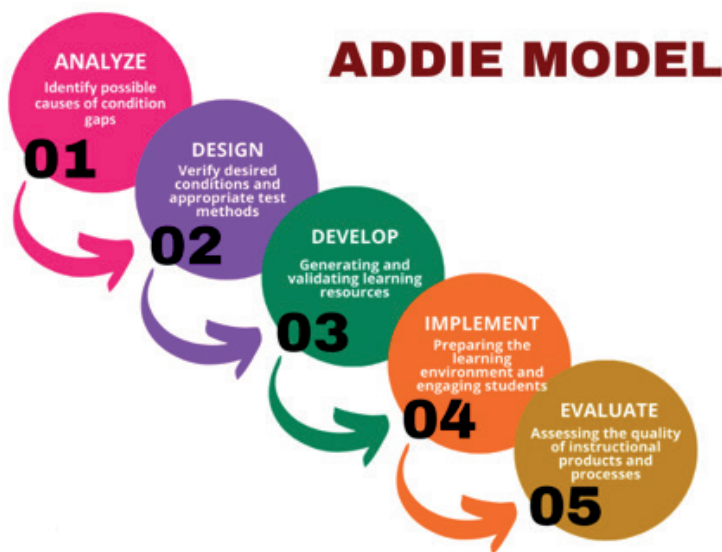

Figure 1. Research and Development Model

The validation subjects for the instruments consisted of two career experts; the product validation subjects included six experts: two content experts, two media experts, and two language experts. The small-scale trial involved ten students, the limited trial involved thirty students, and the user subjects consisted of four guidance and counseling teachers. Finally, the product was implemented with 135 junior high school students in Surakarta. The selection of subjects represents the population because it uses considerations of representatives of state and private junior high schools in Surakarta using the simple random sampling technique. This study involved four junior high schools in Surakarta, conducted from November 2024 to February 2025.

Data collection instruments for product feasibility and practicality used expert evaluation questionnaires developed by Plomp et al.[26]. The data collection instrument for product implementation used the Career Exploration Survey (CES) adapted from Stumpf et al.[27] Data analysis for feasibility and practicality assessments used Aiken's V Index and Content Validity Index (CVI) by Aiken[28]. Data analysis for product implementation used Paired Sample T-Test by Cresswell et al.[29]. All stages were carried out systematically to ensure the validity, reliability, and effectiveness of the developed product. The results of each phase served as the basis for decision-making in the subsequent development phase.

Aiken's V index is used as an index of rater agreement regarding the suitability of the product item (or whether or not the product item is suitable) with the indicator to be measured using the product item. If applied to the validity of product measurement, according to a rater, can be replaced (the number of product items in one instrument). The value of this V index ranges between 0-1. Content validity is developed to determine whether the developed product complies with the rules for making product. To obtain content validity, a rational analysis is required from an expert in the field in which the measuring instrument is developed or professional judgment.[28]

Table 1. Aiken's V Index Criteria		
Range of V values	**Content-validity category**	**Interpretation**
V < 0,40	Very low	Item product needs major revision or should be discarded.
0,40 ≤ V < 0,60	Low-moderate	Item product is weak; revision is recommended before use.
0,60 ≤ V < 0,80	Enough	Item product is acceptable, though minor improvements can enhance clarity.
0,80 ≤ V ≤ 1,00	High	Item product is highly valid; can be used with little or no modification.
Source: Aiken[28]		

Furthermore, the validation analysis of the user test results (practitioners/teachers) conducted in this study using the Content Validity Index (CVI). CVI is a quantitative method used to assess the content validity of a research product, especially in the fields of social sciences and health. CVI is used to determine the extent to which items in an product reflect the construct or domain being measured, based on expert judgment.[30] Below is a concise reference table use to interpret the Content Validity Index (CVI)—both at the item level (I-CVI) and the scale level (S-CVI). Thresholds can vary slightly across sources, but these ranges summarize the criteria most frequently cited in the health-, social-, and educational-measurement literature.[31]

Table 2. Content Validity Index (CVI) Criteria		
CVI range	**Validity category**	**Practical interpretation**
I-CVI < 0,78 (or < 0,80 when ≤ 3 experts)	Needs revision	The item product does not meet the minimum standard for content validity.
I-CVI ≥ 0,78 (or ≥ 0,80 when ≤ 3 experts)	Acceptable	The item product reaches the recommended cut-off; minor edits only if desirable.
S-CVI/Ave < 0,80	Weak overall validity	The instrument's average item CVI (across all items) is below the conventional benchmark; substantial revision is warranted.
0,80 ≤ S-CVI/Ave < 0,90	Adequate	The scale demonstrates moderate content validity; consider targeted improvements.
S-CVI/Ave ≥ 0,90	Excellent	The product instrument exhibits strong overall content validity; suitable for use with minimal changes.

Finally, in testing the effectiveness of the individual planning service model assisted by the Omah Karier website to improve career exploration in students, the Paired Sample T Test was used. This test is used to analyze whether there is a difference in the average of two paired samples. The main requirement in the Paired Sample T Test is that the data is normally distributed and homogeneous (not absolute). From the results of the analysis of the normality test and the homogeneity test, the conclusion obtained is that the data is normally distributed and homogeneous.[29]

Table 3. Interpretation Criteria for Paired Sample t-Test		
Criteria	**Value/Description**	**Practical Interpretation**
Sig. (2-tailed) < 0,05	Significant difference exists	There is a statistically significant difference between the two conditions tested.
Sig. (2-tailed) ≥ 0,05	No significant difference	There is no statistically significant difference; the intervention had no strong effect.

This research has been declared to be ethically appropriate in accordance to 7 (seven) WHO 2011 Standards, 1) Social Values, 2) Scientific Values, 3) Equitable Assessment and Benefits, 4) Risks, 5) Persuasion/Exploitation, 6) Confidentiality and Privacy, and 7) Informed Consent, referring to the 2016 CIOMS Guidelines.

RESULTS

The outcomes of this study align with the stages of the ADDIE Model by Branch[24] which includes Analyze, Design, Develop, Implement, and Evaluate.

Analysis Stage
Career Exploration Analysis

The empirical analysis of career exploration yielded the following results:

Table 4. Empirical Analysis of Career Exploration	
No.	**Result**
1.	The baseline data on career exploration profiles of junior high school students in Surakarta, obtained through The Career Exploration Survey (CES), revealed that from 1279 respondents, 54,65 % of students indicated that they had just started planning or had not yet thought about career exploration.
2.	Specifically, in the Intended-Systematic Exploration dimension, one indicator showed that currently, 67,54 % of students had not engaged in activities that support their future career choices.

3. Another dimension, self-exploration & focus, was identified. This was evident from the responses about whether students had found a focus regarding their choice of further schooling and future careers. The majority (62,03 %) responded uncertainly and had not yet determined their direction.

4. School Counselors had conducted career exploration activities, such as classical guidance services. However, they reported that these activities remained at the knowledge level and required follow-up in the form of targeted action plans, as career exploration is crucial and necessary for junior high students.

5. The Student Needs Questionnaire from Grade IX students in Surakarta, assessed with the help of university students during the September-November 2022 internship program, indicated that over 60 % of students responded affirmatively to statement number 40 to 50 (career fields), with item number 48 stating, "I am still confused about thinking about a career after graduating from SMP/MTs."

Table 5. Empirical Analysis on Barrier to Students' Career Exploration

No.	Interview with School Counselors
1	Most students were still confused and had not seriously considered what careers they wanted.
2.	Students had not yet understood themselves well, especially regarding interests and talents that tend to change.
3.	Students lacked understanding of the variety of professions, aspirations, and future job opportunities.
4.	They were not yet aware of the importance of seeking information as part of career exploration.
5.	There were conflicts between parental expectations and students' personal interests.

Table 6. Literature Analysis of Career Exploration

No.	Result
1.	Research by Ghassani et al.[32] found that out of 30 students, only 6 had clear career plans after junior high school; the rest were not yet able to plan further study paths based on their interests, talents, and career aspirations.
2.	A report on "Trend Problem Career in School" for grade IX students noted that learners were unable to choose activities that support career development due to a lack of mastery in self-knowledge, career options, and environmental information.[33]
3.	Career exploration was identified as a crucial stage in career decision-making. Immature career exploration may lead to difficulties in making informed career decisions at later stages.[11]

Needs Analysis of Individual Planning Services

The empirical analysis results related to the needs for individual planning services are as follows:

Table 7. Empirical Analysis of Individual Planning Service Needs

No.	Result
1.	An exploratory study through surveys and interviews with five school counselors in Surakarta revealed that four out of five had already implemented individual planning services for students.
2.	The selected service strategies included classical guidance and individual counseling, while one teacher had not yet implemented any individual planning services.
3.	When researchers introduced the concept of a web-assisted individual planning model, school counselors responded positively and enthusiastically.
4.	This enthusiasm was reinforced by the fact that both teachers and students were already familiar with using websites to access information in the learning process.

5.   In several meetings of the School Counselors Association for Junior High School level in Surakarta, school counselors expressed high expectations for innovations in individual planning services, especially as a product aligned with the current Merdeka Belajar curriculum.

6.   One school counselor emphasized that individual planning is a crucial component of a comprehensive counseling program, particularly in helping students construct self-understanding regarding talents, interests, and career information, which supports continuity in their personal development.

7.   Teachers hoped that the developed web-assisted individual planning model would be accessible, simple, and practical the service model should be easy to use for both students and teachers while still preserving the core meaning and purpose of the service.

Design

Beidoglu et al.[34] identified various ways in which school counselors can use computer technology and the internet to work more efficiently and support student success. However, web-assisted individual planning service models remain scarce—particularly within the Indonesian context. Web-based platforms are characterized by their interactivity, independency, accessibility, and enrichment. In alignment with the state-of-the-art and to fulfill the criteria of novelty, a model of an individual planning service supported by a website was designed under the market branding Omah Karier, aimed at improving students' career exploration. The conceptual model framework was structured as shown in the following schematic:
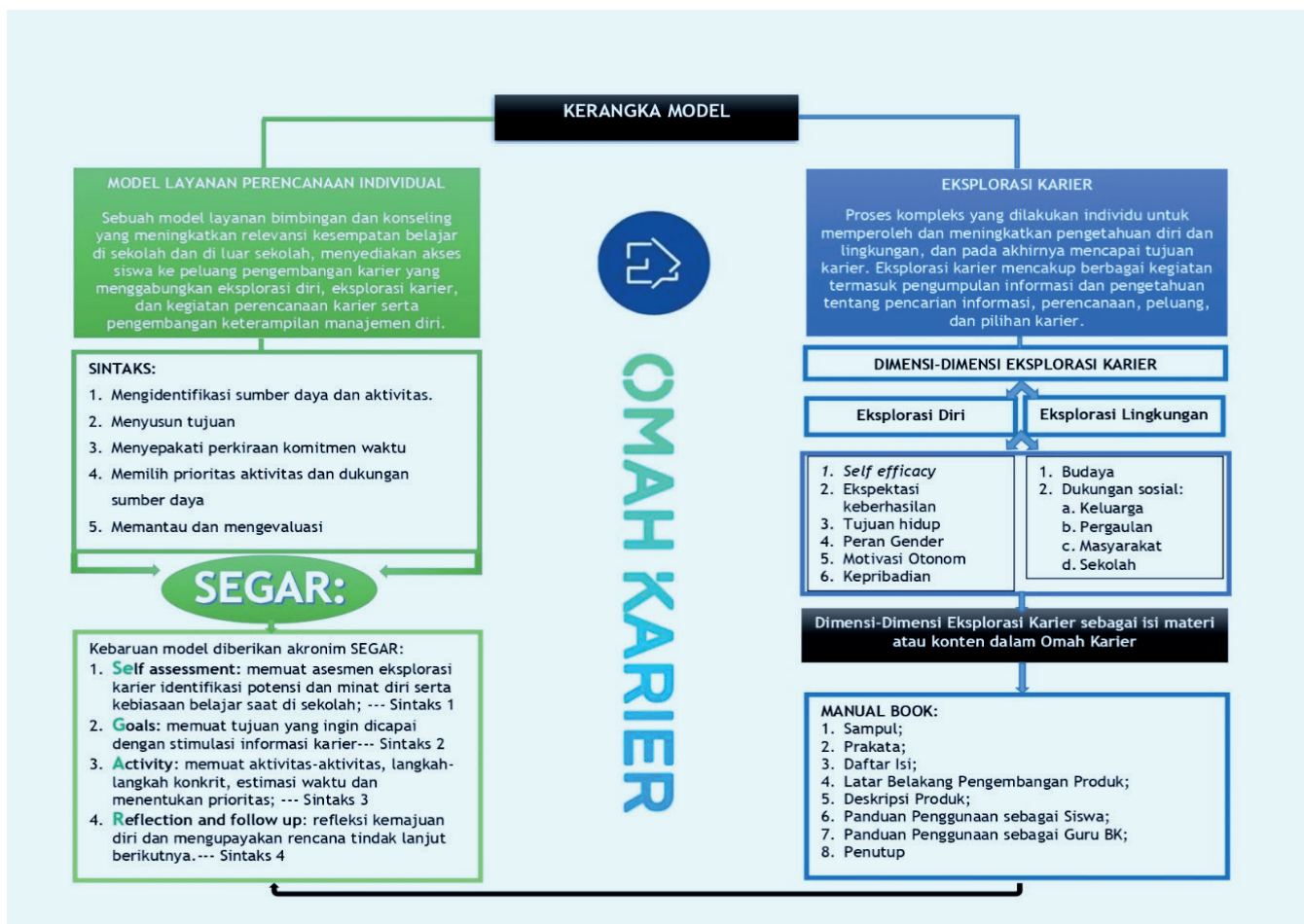
Figure 2. Framework of the Omah Karier Website Model

Omah Karier Website

The Omah Karier website was designed as a platform to support the digitalization of guidance and counseling services—commonly referred to as e-guidance and counseling. Within a comprehensive school counseling structure, this website represents an innovative media development aligned with current educational demands. E-guidance and counseling practice requires school counselors to be creative, innovative, and productive.[35,36]

These services can involve either asynchronous communication, where there is a time lag between interactions, or synchronous communication, which occurs in real-time.[37,38] Omah Karier functions as the branded platform for the individual planning service model aimed at enhancing students' career exploration.

The name Omah, meaning "house" in Javanese, symbolizes a dwelling place. Etymologically, it derives from two elements: om (the sky, masculine) and mah (the earth, feminine), representing a union of opposites—father sky and mother earth. According to the Rig Veda, this duality is essential, reflecting complementary forces that form a holistic existence.

Omah Karier : Web-Assisted Individual Planning Service Model

Omah Karier was developed with the primary goal of enhancing students' career exploration—an integral aspect of career management theory—by supporting students in independently identifying their desired futures or career paths. More specifically, the objectives of the model are to ensure that students are able to:

1. Analyze their own abilities through self-assessment.
2. Set clear and achievable goals aligned with their personal aspirations.
3. Select supporting activities based on relevant career information, engage in vicarious learning, and determine appropriate priorities.
4. Review and monitor personal progress, ensuring alignment with planned activities and preparing follow-up actions as necessary.

Omah Karier model consists of the following components:

1. Model Overview: explains the urgency of enhancing career exploration and details the core components of individual planning services, derived from both empirical findings and theoretical analyses. Purpose and Benefits: Clarifies the rationale and anticipated advantages of the model, grounded in contemporary theoretical perspectives. Model Framework: Provides a conceptual foundation for the development of a digital product supporting individual planning services designed to improve career exploration.

2. Implementation Procedures: offers guidance on service delivery procedures for individual planning, referencing established frameworks including Brown et al.[17,18,20] The model integrates insights from previously established approaches, yet introduces a novel structure branded as the SEGAR model, an acronym representing four sequential components: (1) Self-Assessment – Understanding and evaluating one's personal capabilities, including self-concept. (2) Goals – Defining specific personal and career-related objectives. (3) Activity – Engaging in structured career information sessions (including modified O*NET content), identifying learning habits, using vicarious learning strategies, and setting priorities. (4) Reflection and Follow-Up – Reviewing progress, ensuring activities align with the plan, and implementing next steps.

Omah Karier Website Guidebook

The Omah Karier website serves as a key medium within the individual planning service model, designed to support and enhance students' career exploration. Its embedded features operationalize the procedural syntax of individual planning services, aligned with core aspects of career exploration. The Omah Karier guidebook provides structured assistance to students as they progress through self-exploration, environmental exploration, goal setting, activity selection, reflection, and follow-up planning. The output of this structured engagement is a personalized certificate or individual planning report, which includes documentation from each stage: Self-Assessment, Goals, Activity, and Reflection. This report functions as a personal profile database, intended to be sustainable and useful across future career stages. The guidebook includes several interface elements and sections, such as Cover Page, Preface, Table of Contents, Product Background, Product Description, Product Use and Benefits, Student Guide, Teacher Guide.

DEVELOPMENT

In the Develop phase, the research successfully produced a prototype of the individual planning service model supported by the *Omah Karier* website, aimed at enhancing students' career exploration. The product underwent a feasibility validation process involving subject-matter experts, media specialists, and language/linguistic experts. The validation results from the substance/material experts are presented in the table below, following Aiken's V formula:[28]

Substance/Material Validation

The data above indicate that all 17 assessment items received valid scores, with a V coefficient above 0,80. The cumulative validation score from the substance/material experts was 0,89, confirming that the model and the *Omah Karier* website are substantively feasible and appropriate to proceed to the next development stages.

Table 8. Item Validation Results								
Item	**Validator**		**s1**	**s2**	**Σ s**	**n(c-1)**	**V**	**Description**
	1	**2**						
Items 1-17	66	59	49	42	91	102	0,89	highly valid

Media Validation

Table 9. Media Validation Result								
Item	**Validator**		**s1**	**s2**	**sigma s**	**n(c-1)**	**V**	**Description**
	1	**2**						
Items 1-20	70	74	50	54	104	120	0,87	highly valid

The data indicate that all 20 items assessed by media experts achieved a validity score (V) above 0,80. The overall V coefficient of 0,87 confirms that the individual planning service model and the *Omah Karier* website are media-feasible and appropriate to proceed to the next phase of development.

Language Validation

Table 10. Results of Language Validation of all items								
Item	**Validator**		**s1**	**s2**	**Σ s**	**n(c-1)**	**V**	**Description**
	1	**2**						
Items 1-17	66	61	49	44	93	102	0,91	highly valid

The data show that all 17 items assessed met the validity threshold with scores greater than 0,80. The overall Aiken's V score of 0,91 indicates that the language used in the model and the Omah Karier website is valid and appropriate for further development.

The practicality of the product
All feedback from content, media, and language validators was incorporated and revised accordingly by the researcher. Following the validation process, the practicality of the product was tested by 18 prospective users—school counselors at junior high schools in Surakarta.

Relevance
The relevance dimension assessed whether the intervention was necessary and built upon advanced scientific knowledge.

Table 11. Relevance Criteria					
No. Item	**1**	**2**	**3**	**4**	**5**
	18	**18**	**18**	**18**	**18**
I-CVI	1,00	1,00	1,00	1,00	1,00
Category	R	R	R	R	R

Consistency
This dimension evaluated whether the intervention was logically structured and internally coherent.

Table 12. Consistency Criteria			
No Item	**Expert of Agreement of Users 1-18**	**I-CVI**	**Category**
1.	18	1,00	C
2.	18	1,00	C
3.	18	1,00	C
4.	18	1,00	C
5.	18	1,00	C

6.	18	1,00	C
7.	18	1,00	C
8.	18	1,00	C
9.	18	1,00	C
10.	18	1,00	C
11.	18	1,00	C
12.	18	1,00	C
13.	18	1,00	C
14.	18	1,00	C
15.	18	1,00	C
16.	18	1,00	C

Practicality
Ease of use.

Table 13. Practicality Criteria			
No Item	Level of Agreement (Users 1 to 18)	I-CVI	Category
1.	18	1,00	P
2.	18	1,00	P
3.	18	1,00	P
4.	18	1,00	P
5.	18	1,00	P
6.	18	1,00	P
7.	18	1,00	P
8.	18	1,00	P
9.	18	1,00	P
10.	18	1,00	P
11.	18	1,00	P
12.	18	1,00	P

Table 14. Small-scale trial result			
No. Item	Expert of Agreement	I-CVI	Category
1.	10	1,00	R
2.	10	1,00	R
3.	10	1,00	R
4.	10	1,00	R
5.	10	1,00	R
6.	10	1,00	R
7.	10	1,00	R
8.	10	1,00	R
9.	10	1,00	R
10.	10	1,00	R
11.	10	1,00	R
12.	10	1,00	R
13.	10	1,00	R
14.	10	1,00	R
15.	10	1,00	R

The results demonstrate that all items in the practicality assessment received full agreement from the 18 prospective users, resulting in an I-CVI score of 1,00 across the board. This indicates that the product is considered highly practical and easy to use by the target user group—school counselors. The result of the small-scale trial involving ten public and private junior high school students in Surakarta is presented in table 14.

No. Item	Level of Agreement from students as users	I-CVI	Category
Table 15. Limited trial			
1.	29	0,97	R
2.	29	0,97	R
3.	30	1,00	R
4.	30	1,00	R
5.	30	1,00	R
6.	29	0,97	R
7.	30	1,00	R
8.	30	1,00	R
9.	29	0,97	R
10.	30	1,00	R
11.	28	0,93	R
12.	29	0,97	R
13.	29	0,97	R
14.	29	0,97	R
15.	30	1,00	R

The following is an overview of the products that have been produced:

Figure 3. Omah Karier Website Overview

The *Omah Karier* website is here as a solution for students who are doing individual planning to improve career exploration. With complete and user-friendly features, researchers prove that this website can help

students find the right career direction and achieve future success. The *Omah Karier* website is one of the media in the individual planning service model designed to help improve career exploration. The features embedded in *Omah Karier* implement the syntax or procedures of individual planning services that are relevant to aspects of career exploration. *Omah Karier* guides and directs students from exploring themselves, exploring the environment, setting goals, choosing activities and conducting reflections and follow-up plans. The output of a series of activities carried out at *Omah Karier* is that each individual will receive a certificate of individual planning results, the content of which contains the results of worksheets starting from Self Assessment, Goals, Activities and Reflection as a self-profile database which is expected to be sustainable for the next career level.

Implementation

In the implementation phase, the researcher conducted a Focus Group Discussion as part of the Training of Trainers for four Guidance and Counseling teachers from Surakarta (two public schools and two private schools). This training aimed to equip them with the necessary skills to implement the individual planning service model supported by the *Omah Karier* website to enhance career exploration among students. The implementation of the individual planning service model began by measuring the initial level of career exploration among students using an adapted instrument developed by the researcher. This instrument was integrated into the *Omah Karier* website.
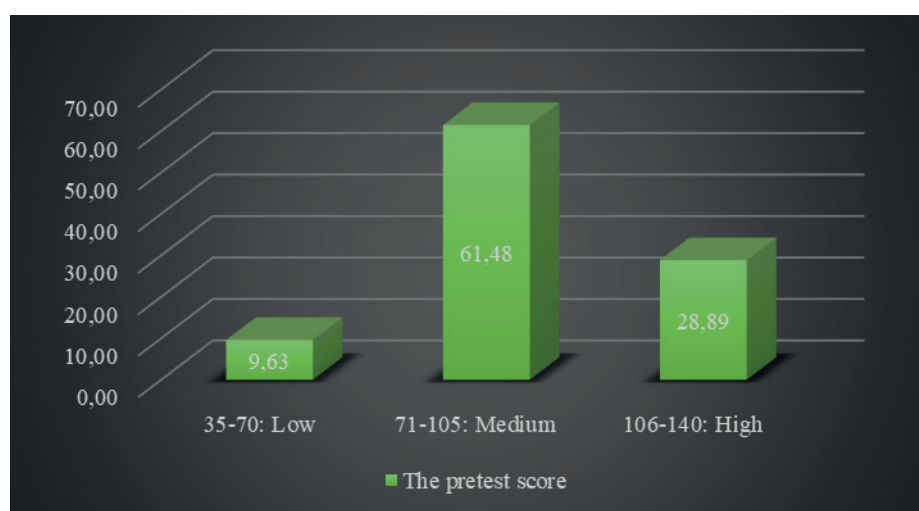

Figure 4. Pretest Scores for Career Exploration Level

The chart above shows the initial measurement of students' career exploration abilities, which reveals: 9,63 % of students in the low category, 61,48 % of students in the medium category, and 28,89 % of students in the high category. This initial data indicates that students' career exploration skills need further stimulation and improvement. The *Omah Karier* website model is designed to address this gap and enhance students' career exploration capabilities.

After collecting the initial data, students proceeded to the self-assessment stage. During this phase, they were provided with informational resources about self-concept, presented in the form of articles and videos. Students then analyzed the material and completed worksheets that included: Identifying their strengths and weaknesses, Reflecting on their study habits, Exploring their future interests or career aspirations, Selecting their top three favorite subjects The school counselors supported and guided students through this process, ensuring that all students completed the self-assessment stage correctly. Once all sections were filled out, students submitted or saved their results.

After that, they moved to the Goal stage. In this stage, the teachers stimulates students by presenting various materials on aspects of career exploration. Students are invited to explore the reading resources one by one. Before moving on to the next reading, students must answer questions to ensure that they have thoroughly absorbed the material. After completing all readings, students are directed to a dialogue box where they are asked to write down their goals, such as: "What is your goal after graduating from junior high school?" ... "What is your goal after graduating from senior high school? What is the reason behind these goals?"

The next stage is Activity. After students read the articles and formulate specific goals in the Goals stage, the platform presents references related to various future job types. Each reference includes: Required qualifications, scope of work, benefits of the job, how to secure that particular job Following their exploration, students are directed to the Activity worksheet, which includes sections on Academic goals, personal-social goals, and career goals Here, students write their specific goals, list the activities needed to achieve those goals, and commit to an estimated timeline for their completion.

The final stage was the reflection and follow-up. In this stage, the teachers reflects on the student's progress, ensures that the activities are being carried out as planned, and encourages the next steps for future actions. The platform provides information about the skills needed in the future, guiding students to broaden their career perspectives and create a post junior high school roadmap. The worksheet at this stage asks students to reflect on which goals have been achieved and which have not, identify concrete steps they will take moving forward, share their hopes for future success.

Through this process, students are guided to plan their career paths, including selecting career directions after junior high school or senior high school and providing reasons for their choices. Reflection and Follow-up are the final stages of the individual planning service model, represented by the acronym "SEGAR" (Self assessment, Goals, Activity, Reflection). After completing the reflection, students click Submit, and the next page displays a Summary of their entries from the self-assessment to the reflection stages.

Before finalizing their submission or continuing their chat with the counselor, students are asked to fill out a final assessment instrument to measure changes in their career exploration levels before and after using the *Omah Karier* website. The posttest data is categorized as follows:
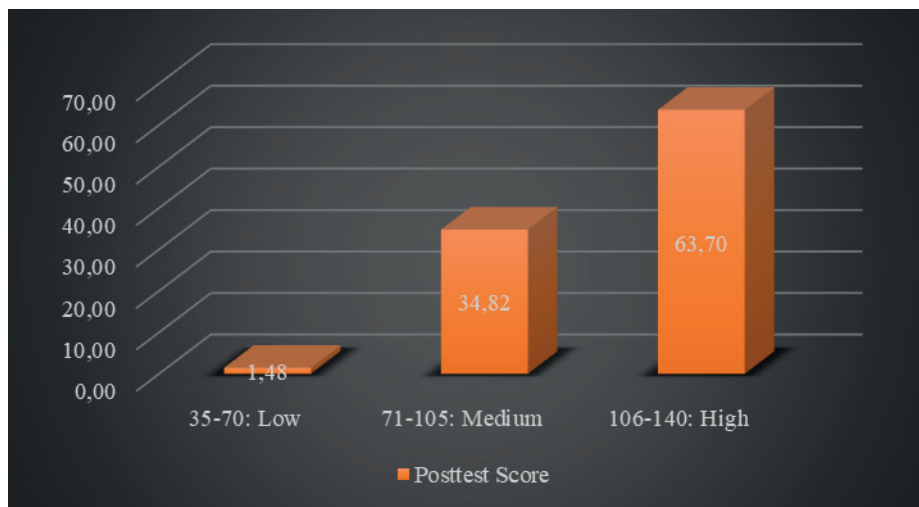

Figure 5. Posttest Scores for Career Exploration Level

The entire SEGAR process within the individual planning service model supported by the *Omah Karier* website is completed when students submit the final assessment of their career exploration level, as illustrated above. Each student receives a certificate summarizing the outcomes of the individual planning service, which can be downloaded in PDF format from the homepage. This certificate may be printed and used as a discussion tool with school counselors and parents. As a form of contribution and involvement from both parents and school counselors in the individual planning process, all parties are required to sign the certificate as a mark of mutual agreement and acknowledgment.

Evaluation Stage

The final stage of the ADDIE Model is Evaluate. In the context of classical guidance services, evaluation is conducted in two forms: formative evaluation (process evaluation) and summative evaluation (final evaluation). The formative evaluation was carried out by school counselors during the implementation of the individual planning service model supported by the *Omah Karier* website. The evaluation used instruments adapted from the product quality criteria developed by Plomp et al.[26]. A simplified summary of the data is presented below:

No.	Indicator	Score				Average Percentage
		Sc1	Sc2	Sc3	Sc4	
1.	Students find it easy to access the *Omah Karier* website	4	4	5	4	17/20 = 85 %
2.	Students are able to follow the counselor's instructions	4	4	5	4	17/20 = 85 %
3.	Students show active participation during the *Omah Karier* website service	4	4	5	4	17/20 = 85 %
4.	Students demonstrate mastery of the *Omah Karier* website content	4	4	5	3	16/20 = 80 %

Table 16. Formative Evaluation Data

5.	Students are able to complete the worksheets on the *Omah Karier* website	4	4	5	4	17/20 = 85 %
6.	Students interact and collaborate with the counselor during learning and completing the content	4	4	5	3	16/20 = 80 %
7.	Students actively ask questions when experiencing difficulties accessing the website	5	5	5	4	19/20 = 95 %
8.	Students are enthusiastic and motivated in participating in the service	5	5	4	4	18/20 = 90 %
9.	Students have a pleasant experience using the website	5	4	4	4	17/20 = 85 %
10.	Students gain knowledge for making informed decisions on future study options	4	4	5	4	17/20 = 85 %

Note: Sc = School Counselors

The table above demonstrates that all indicators of the formative evaluation achieved scores of 80 % or above. This indicates that the implementation of the individual planning service model using the *Omah Karier* website in the four participating junior high schools in Surakarta was conducted effectively. Next, the summative evaluation of the implementation of the individual planning service model supported by the *Omah Karier* website was conducted by comparing pretest and posttest scores using the Career Exploration Questionnaire. The results are presented in the table below:

Table 17. Paired Samples Statistics				
Paired Samples Statistics				
	Mean	**N**	**Std. Deviation**	**Std. Error Mean**
Pair 1 Pretest	95,73	135	5,090	0,657
Posttest	111,91	135	3,894	0,503

This table provides descriptive information regarding the pretest and posttest scores: pretest: the mean score was 95,73 from a sample size of 135 students. The standard deviation of 5,090 indicates variability in the pretest scores among participants. The standard error of the mean (0,657) reflects the accuracy with which the sample mean estimates the population mean. Posttest: the mean score increased to 111,91, with the same sample size (N = 135).

The lower standard deviation (3,894) suggests less variability in posttest scores. The standard error of the mean was 0,503, indicating a more precise estimate of the population mean. The comparison shows a significant increase in the average score from pretest to posttest, suggesting that the intervention—namely, the implementation of the individual planning service model via the *Omah Karier* website—had a positive effect on students' career exploration capabilities. Then, when viewed from the standard deviation, the variation in posttest scores is smaller than in the pretest (3,894 vs. 5,090), indicating that participants' scores became more homogeneous after the intervention.

Following the descriptive statistical analysis, a paired sample t-test was conducted. The results are presented below.

Based on the table, it can be described as follow:

1. Mean Difference: the average difference between pretest and posttest scores is -10,500, indicating an increase of 10,5 points from pretest to posttest.
2. Standard Deviation: a value of 3,306 reflects the spread of the score differences among participants.
3. Standard Error Mean: the value of 0,427 indicates the precision of the mean difference estimation.
4. 95 % Confidence Interval: ranging from -5,354 to -3,646, this interval does not include zero, suggesting a statistically significant difference.
5. t-Value: the t-value of -19,542 denotes a substantial deviation from the null hypothesis.
6. Degrees of Freedom (df): 134, calculated as N - 1 (135 - 1).
7. Significance (p-value): one-Sided p: <0,001 dan Two-Sided p: <0,001. Both one-sided and two-sided p-values are < 0,001, well below the conventional threshold of 0,05, confirming a highly significant difference.

Based on the data above, the intervention demonstrated a significant effect on improving scores. The negative value of the mean difference indicates that posttest scores were higher than pretest scores. This improvement did not occur by chance but was the result of the treatment provided—namely, the individual

planning service supported by the *Omah Karier* website. The intervention effectively enhanced students' career exploration abilities, as evidenced by the statistically significant difference between pretest and posttest scores.

Table 18. Paired Samples Test									
Paired Samples Test									
Paired Differences						t	df	**Significance**	
	Mean	Std. Deviation	Std. Error Mean	**95 % Confidence Interval of the Difference**				One-Sided p	Two-Sided p
				Lower	Upper				
Pretest -Posttest	-10,500	3,306	0,427	-5,354	-3,646	-19,542	134	<0,001	<0,001

DISCUSSION

The *Omah Karier* Website as an Individual Planning Service Model

Solberg et al.[39] explain that individual planning service function as portfolio documents that not only contain specific plans aligned with career aspirations but also support the development of career management skills and self-exploration. Through such services, students are expected to become more engaged in the learning process and better prepared for the transition to post-secondary education. This study shows that Omah Karier website can enhance students' involvement and relationship with their teachers, as well as between parents and schools. This finding supports Steeb et al.[40] who report that practical implementation of individual planning programs positively influence students' career direction and personal development. These services are designed to offer individualized learning experiences, enabling students to explore various career pathways aligned with their interests and goals. Findings reveal that students participating in such services exhibit significant improvement in their ability to identify the necessary steps to achieve their career objectives.

Furthermore, a study by Condon et al.[41] found that individual planning models implemented with students can improve their transition outcomes to the next educational level. This model includes discovery processes, self-profile writing, and tailored occupational information—all aimed at helping students understand their interests, strengths, and needs. The results indicate that students engaged in this process are more likely to gain insight into future education and career options that match their abilities and preferences, thereby enhancing both career exploration and decision-making.

The model proposed by Condon and Callahan is highly relevant to the individual planning service model supported by the Omah Karier website developed in this study. Each phase in their model is translated into the SEGAR syntax: Self-Assessment, Goals, Activity, and Reflection. These phases are interlinked; each must be completed sequentially and systematically, as the next stage cannot be accessed unless the previous one is completed. Process evaluation of the model's implementation indicates that over 80 % of students were actively engaged and able to navigate the Omah Karier website effectively. Furthermore, outcome-based evaluation revealed a significant increase in students' career exploration levels after receiving the intervention.

This finding supports the notion that individual career planning plays a crucial role in student self-development, enabling them to set goals and formulate strategies to achieve future career aspirations. Zhang et al.[42] emphasized that students often experience career-related stress, which can hinder the individual planning process. Their study demonstrates that a strong understanding of self and environmental exploration can help mitigate this stress and lead to more informed career decision-making.

The Omah Karier-based individual planning model has proven effective by integrating key factors, dimensions, and indicators of career exploration. In the context of student career development, Pratiwi et al.[43] found that factors such as self-efficacy, outcome expectation, and career intention significantly influence career exploration. Supporting this, earlier research by Ochs et al.[44] highlighted the importance of understanding the factors that influence career exploration, particularly for students with disabilities. Using Social Cognitive Career Theory, their study revealed that self-efficacy and outcome expectations are critical predictors of career exploration in both special and general education settings.

Career Exploration as a Crucial Part of Decision-Making

In addition to the previously mentioned factors, Lent et al.[45] found that self-efficacy in career decision-making is positively correlated with outcome expectations, social support, and personality traits such as perseverance. Their study also revealed that individuals with higher self-efficacy tend to have stronger exploratory goals and experience lower decision-making anxiety. This aligns with Social Cognitive Theory, which emphasizes the role of individuals' beliefs in their capacity to manage career-related tasks.[46]

Further supporting this view, Ireland et al.[47] showed that learning experiences gained through career

exploration significantly contribute to the development of self-efficacy and outcome expectations. Their research highlights that positive experiences—such as success in exploration tasks—can strengthen individuals' confidence in making appropriate career decisions. Additionally, social support from peers and mentors was found to reinforce these learning experiences.

Supporting this, Ran et al.[48] found that both career exploration and self-reflection have a significant impact on students' career adaptability. Career exploration is a critical developmental task for students as they navigate pathways that align with their interests and abilities. Kleine, Schmitt, and Wisse argue that career exploration entails collecting information about oneself and the surrounding environment, which supports informed career decision-making.

The present study selects career exploration as a key variable, recognizing its foundational role in the career decision-making process. As Hermawan et al.[49] assert, career exploration helps individuals understand their own potential and interests, which is vital in choosing an appropriate career path. This research underscores that a strong understanding of both self and the career landscape can significantly enhance students' readiness to make informed decisions.

Research Gap and Novelty

A notable research gap, and simultaneously the novelty of this study, lies in its advancement of the individual career planning model previously developed by Abu et al.[50] which was still paper-based. The current study extends this model into a digital format through the Omah Karier website, enhancing its accessibility and functionality. The individual planning service model has proven effective in improving students' self-exploration, self-efficacy, and environmental exploration. The findings demonstrate a significant difference between the experimental group—who received the digital model intervention—and the control group—who did not. It indicates that well-designed interventions can help students overcome uncertainty and enhance their readiness for post-junior secondary career decisions. One key recommendation emerging from this research is for future studies to consider adopting digital-based individual planning service models. Such approaches are likely to be more effective in helping students develop the necessary skills for career planning and exploration.

The study conducted by Tri Susilo et al.[51] offers in-depth insights into the factors influencing career exploration in schools. However, a notable research gap exists in the application of the Omah Karier web-based individual career planning service model, which is specifically tailored for junior secondary school students. Previous research has predominantly focused on career exploration at the senior secondary and tertiary education levels, while the specific needs and challenges faced by students in lower secondary education remain underexplored. This study thus presents a significant novelty by developing and evaluating the effectiveness of a service model aimed at enhancing students' understanding and engagement in the career exploration process, while also addressing the current shortcomings in career guidance services.

Ultimately, career exploration has been shown to impact long-term career outcomes, including job satisfaction and identity formation. Jiang et al.[52] found that individuals who engage more deeply in career exploration tend to have a clearer understanding of themselves and their career options, which in turn fosters greater satisfaction and commitment to their career paths. The Omah Karier web-assisted individual planning service model thus emerges as a promising alternative guidance intervention. It holds strong potential for scalability and implementation among guidance and counseling teachers—particularly at the junior secondary level in the Surakarta region—to support students in establishing career pathways that align with their self-beliefs, self-concept, interests, abilities, informational resources, outcome expectations, and career goals extending beyond junior high school, through higher education, and into future employment.

CONCLUSIONS

Based on the results of the conducted research, it can be concluded that the individual planning service model supported by the *Omah Karier* website has proven effective in enhancing the career exploration of junior high school students in Surakarta. The model has undergone several testing phases, including content feasibility, which found that the materials were valid and relevant to students' career exploration needs. Media feasibility results indicated that the design of the *Omah Karier* website is attractive, accessible, and appropriate for the target users, namely junior high school students. The model also met the language feasibility standards, with language that is simple, communicative, and easily understood by students. Furthermore, the model fulfilled the practicality criteria; according to guidance and counseling teachers, it is considered practical to implement in individual planning services in terms of time, technical execution, and service process effectiveness.

Effectiveness testing showed a significant increase in students' career exploration abilities after using the web-based service model. This indicates that the model effectively supports students in gaining a deeper understanding of their career options. Therefore, the model may serve as an innovative alternative to support career guidance programs at the junior high school level, particularly in facilitating students' career exploration.

BIBLIOGRAPHIC REFERENCES

1. Lau PL, Chung YB, Wang L. Effects of a Career Exploration Intervention on Students' Career Maturity and Self-Concept. J Career Dev. 2021;48(4):311–24. https://doi.org/10.1177/0894845319853385

2. Hirschi A, Läge D. Using accuracy of self-estimated interest type as a sign of career choice readiness in career assessment of secondary students. J Career Assess. 2008;16(3):310-25. https://doi.org/10.1177/1069072708317372

3. Germeijs V, Verschueren K. High school students' career decision-making process: Development and validation of the study choice task inventory. J Career Assess. 2006;14(4):449–71. https://doi.org/10.1177/1069072706286510

4. Çarkıt E, Assist R, Hacı N, Veli B. The Relations between Career Adaptability, Career Engagement, and Life Satisfaction. Psycho-Educational Res Rev. 2022;11(3):412-25. https://doi.org/10.52963/PERR_Biruni_V11.N3.02

5. Esters LT. Career Exploratory Behaviors of. 2008;49(1). https://doi.org/10.5032/jae.2008.03023

6. Cheung R, Arnold J. The impact of career exploration on career development among hong kong chinese university students. J Coll Stud Dev. 2014;55(7):732–48. https://doi.org/10.1353/CSD.2014.0067

7. Massof RW. Understanding rasch and item response theory models: Applications to the estimation and validation of interval latent trait measures from responses to rating scale questionnaires. Ophthalmic Epidemiol. 2011;18(1):1–19. https://doi.org/10.3109/09286586.2010.545501

8. Brown SD, Lent RW. Career Development and Counseling: Putting Theory and Research to Work. Vol. 53, John Wiley & Sons. 2013. 722 p.

9. Briscoe JP, Hall DT, Frautschy DeMuth RL. Protean and boundaryless careers: An empirical exploration. J Vocat Behav. 2006;69(1):30-47. https://doi.org/10.1016/j.jvb.2005.09.003

10. Briscoe JP, Hall DT. The interplay of boundaryless and protean careers: Combinations and implications. J Vocat Behav. 2006;69(1):4-18. https://doi.org/10.1016/j.jvb.2005.09.002

11. Xu H, Hou ZJ, Tracey TJG. Relation of Environmental and Self-Career Exploration With Career Decision-Making Difficulties in Chinese Students. J Career Assess. 2014;22(4):654–65. https://doi.org/10.1177/1069072713515628

12. Dietrich J, Kracke B, Nurmi JE. Parents' role in adolescents' decision on a college major: A weekly diary study. J Vocat Behav. 2011;79(1):134-44. http://dx.doi.org/10.1016/j.jvb.2010.12.003

13. Wang J, Fan W, Cheung FM, Wang Q, Li M. Personality and Chinese adolescents' career exploration: The mediation effects of self-efficacy and perceived parental support. J Pacific Rim Psychol. 2019;13(e28):1–9. https://doi.org/10.1017/prp.2019.16

14. Porfeli EJ, Lee B, Vondracek FW, Weigold IK. A multi-dimensional measure of vocational identity status. J Adolesc. 2011;34(5):853–71. http://dx.doi.org/10.1016/j.adolescence.2011.02.001

15. Stumpf SA, Colarelli SM, Hartman K. Development of the Career Exploration Survey (CES). J Vocat Behav. 1983;22(2):191–226.

16. Bandura A. The Explanatory and Predictive Scope of Self-Efficacy Theory. J Soc Clin Psychol. 1986;4(3):359-73. https://doi.org/10.1521/jscp.1986.4.3.359

17. Solberg VS, Wills J, Redmond K, Skaff L. Use of Individualized Learning Plans: A promising practice for driving college and career readiness efforts. 2014. 1-67 p. https://files.eric.ed.gov/fulltext/ED588651.pdf

18. Gysbers NC, Henderson P. Developing & managing your school guidance & counseling program, 5th ed. Developing & managing your school guidance & counseling program, 5th ed. 2012. xvi, 529.

19.   Dimmitt C, Carey JC, Mcgannon W, Henningson I. Agenda : A Delphi Study. 2005;44(March):214–28. https://doi.org/10.1002/j.1556-6978.2005.tb01748.x

20.   Brown SD, Ryan Krane NE, Brecheisen J, Castelino P, Budisin I, Miller M, et al. Critical ingredients of career choice interventions: More analyses and new hypotheses. J Vocat Behav. 2003;62(3):411–28. https://doi.org/10.1016/S0001-8791(02)00052-0

21.   Evans M, Sommerville S. A Design For Life: Futures Thinking. Futur Res Q. 2007;Fall. https://d1wqtxts1xzle7.cloudfront.net/598142/Evans__M___Sommerville__S__2007__A_Design_For_Life_-_Futures_Thinking_in_the_Design_Curriculum.pdf?response-content-disposition=inline%3B+filename%3DEvans_M_and_Sommerville_S_2007_A_Design.pdf&Expires=162642477

22.   Van Horn, S. M., and Myrick RD. Computer technology and the 21st century school counselor. Professional School Counseling. Pros Semin Nas "Bimbingan dan Konseling Islam. 2001;5(2):124-130. https://journals.sagepub.com/doi/10.1177/2156759X0500900306

23.   McKimm J, Jollie C, Cantillon P. Web based learning. Bmj. 2003;326(7394):870. https://doi.org/10.1136/bmj.326.7394.870

24.   Branch RM. Instructional Design: The ADDIE Approach. Springer New York Dordrecht Heidelberg London. 2009. 4159–4163 p. https://doi.org/10.1007/978-0-387-09506-6

25.   Lee, Owens DL. Multimedia based Instructional Design. Pfeiffer; 2004. 479 p. https://journals.sagepub.com/doi/10.1177/152342202237519

26.   Plomp, Nieveen N, Folmer E. Educational Design Research Educational Design Research. Netherlands Inst Curric Dev SLO. 2013;1–206.

27.   Stumpf, S. A., Colarelli, S. M., and Hartman K. Development of the Career Exploration Survey (CES). Journal of Vocational Behavior; 1983. p. 191–226. https://doi.org/10.1016/0001-8791(83)90028-3

28.   Aiken LR. Content validity and reliability of single items or questionnaires. Educ Psychol Meas. 1980;40(4):955–9. https://doi.org/10.1177/001316448004000419

29.   Creswell, J. W., and Creswell JD. Research design: Qualitative, quantitative, and mixed methods approaches (5th ed.). SAGE Publ. 2018.

30.   Zamanzadeh V, Ghahramanian A, Rassouli M, Abbaszadeh A, Alavi-Majd H, Nikanfar AR. Design and Implementation Content Validity Study: Development of an instrument for measuring Patient-Centered Communication. J Caring Sci. 2015;4(2):165–78. https://doi.org/10.15171/jcs.2015.017

31.   Polit, D. F., and Beck CT. Essentials of nursing research: Methods, appraisal, and utilization (6th ed.). Vol. 16, Lippincott Williams & Wilkins. 2006. 39–55 p.

32.   Ghassani M, Ni'matuzahroh N, Anwar Z. Meningkatkan Kematangan Karir Siswa SMP Melalui Pelatihan Perencanaan Karir. J Interv Psikol. 2020;12(2):123–38. https://doi.org/10.20885/intervensipsikologi.vol12.iss2.art5

33.   Lee SD, Aquino A, Kuncel NR, Hansen JIC. Personality predictors of career exploration: A meta-analysis. Career Dev Q. 2023;71(1):41–55. https://doi.org/10.1002/cdq.12315

34.   Beidołlu M, Dinçyürek S, Akintuł Y. The opinions of school counselors on the use of information and communication technologies in school counseling practices: North Cyprus schools. Comput Human Behav. 2015;52:466–71. https://doi.org/10.1016/j.chb.2015.06.022

35.   Perdana, R., and Shofaria A. Keterampilan E-Counseling bagi Konselor Pendidikan dalam Meningkatkan Layanan Bimbingan Konseling di Sekolah pada Era Digital 5.0. QUANTA J Kaji Bimbing dan Konseling dalam Pendidik. 2020;5(2):1–10. https://doi.org/10.22460/q.v5i2p67-78.2636

36.   Petrus J, Sudibyo H. Kajian Konseptual Layanan Cyberconseling. Konselor. 2017;6(1):6–12. https://doi.

org/10.24036/02017616724-0-00

37.   Barak A, Klein B, Proudfoot JG. Defining internet-supported therapeutic interventions. Ann Behav Med. 2009;38(1):4–17. https://doi.org/10.1007/s12160-009-9130-7

38.   Dowling M, Rickwood D. Online counseling and therapy for mental health problems: A systematic review of individual synchronous interventions using chat. J Technol Hum Serv. 2013;31(1):1–21. http://dx.doi.org/10.1080/15228835.2012.728508

39.   Solberg VS, Phelps LA, Haakenson KA, Durham JF, Timmons J. The Nature and Use of Individualized Learning Plans as a Promising Career Intervention Strategy. J Career Dev. 2012;39(6):500–14. https://doi.org/10.1177/0894845311414571

40.   Steeb DR, Zeeman JM, Bush AA, Dascanio SA, Persky AM. Exploring career development through a student-directed practicum to provide individualized learning experiences. Curr Pharm Teach Learn. 2021;13(5):500–5. https://doi.org/10.1016/j.cptl.2021.01.020

41.   Condon E, Callahan M. Individualized Career Planning for students with significant support needs utilizing the Discovery and Vocational Profile process, cross-agency collaborative funding and Social Security Work Incentives. J Vocat Rehabil. 2008;28(2):85–96. https://doi.org/10.3233/JVR-2008-28202

42.   Zhang Z, Yu X, Liu X. Do I decide my career? Linking career stress, career exploration, and future work self to career planning or indecision. Front Psychol. 2022;13. https://doi.org/10.3389/fpsyg.2022.988719

43.   Pratiwi F, Syakurah RA, Yuliana I, Siburian R. Relationships of Self-Efficacy, Outcome Expectation, Career Intention and Career Exploration in Nutrition Science Student's Career Choice. 2020;25(Sicph 2019):302–9. https://doi.org/10.2991/ahsr.k.200204.063

44.   Ochs LA, Roessler RT. Predictors of Career Exploration Intentions: A Social Cognitive Career Theory Perspective. Rehabil Couns Bull. 2004;47(4):224–33. https://doi.org/10.1177/00343552040470040401

45.   Lent RW, Ezeofor I, Morrison MA, Penn LT, Ireland GW. Applying the social cognitive model of career self-management to career exploration and decision-making. J Vocat Behav. 2016;93:47–57. http://dx.doi.org/10.1016/j.jvb.2015.12.007

46.   Storme M, Celik P. Career Exploration and Career Decision-Making Difficulties: The Moderating Role of Creative Self-Efficacy. J Career Assess. 2018;26(3):445–56. https://doi.org/10.1177/1069072717714540

47.   Lent RW, Ireland GW, Penn LT, Morris TR, Sappington R. Sources of self-efficacy and outcome expectations for career exploration and decision-making: A test of the social cognitive model of career self-management. J Vocat Behav. 2017;99:107–17. http://dx.doi.org/10.1016/j.jvb.2017.01.002

48.   Ran J, Liu H, Yuan Y, Yu X, Dong T. Linking Career Exploration, Self-Reflection, Career Calling, Career Adaptability and Subjective Well-Being: A Self-Regulation Theory Perspective. Psychol Res Behav Manag. 2023;16:2805–17. https://doi.org/10.2147/PRBM.S416839

49.   Hermawan R, Farozin M. The role of career exploration in career decision participants. COUNS-EDU Int J Couns Educ. 2018;3(4):126–32. https://doi.org/10.23916/0020180311840

50.   Bin Abu Talib J, Mohamad Z, Abdul Wahab N. Effects of Career Exploration Module on Career Planning, Career Self-Efficacy and Career Maturity among Community College Students. Mediterr J Soc Sci. 2015;6(6):464–9. https://doi.org/10.5901/mjss.2015.v6n6s6p464

51.   Susilo AT, Nur Wangid M, Purwanta E, Salimi M. What Influences the Success of Career Exploration in School? Data Metadata. 2024;3. https://doi.org/10.56294/dm2024.421

52.   Jiang Z, Newman A, Le H, Presbitero A, Zheng C. Career exploration: A review and future research agenda. J Vocat Behav. 2019;110:338–56. https://doi.org/10.1016/j.jvb.2018.08.008

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

AUTHORSHIP CONTRIBUTION

Conceptualization: Agus Tri Susilo.
Data curation: Agus Tri Susilo.
Formal analysis: Agus Tri Susilo.
Research: Agus Tri Susilo.
Methodology: Agus Tri Susilo.
Project management: Agus Tri Susilo, Moh Salimi.
Resources: Agus Tri Susilo, Moh Salimi.
Validation: Edi Purwanta, Muhammad Nur Wangid, Moh Salimi.
Drafting - original draft: Agus Tri Susilo.
Writing - proofreading and editing: Agus Tri Susilo, Edi Purwanta, Muhammad Nur Wangid.