

An Empirical Profile of Future Work Self-Salience Among Senior High School Students in Makassar: Implications for Digital Career Guidance

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Received: 2/07/2026; Revised: 19/07/2026; Accepted: 24/07/2026

Abstract

Technological advances, automation, and artificial intelligence have made the future of work increasingly dynamic and unpredictable, requiring students to develop career readiness beyond choosing a major, including the ability to envision and direct themselves toward a desired future work self. This urgency is salient in Indonesia given the persistently high unemployment rate among senior secondary and vocational graduates, while research on Future Work Self-Salience (FWSS), a salient representation of oneself in future work, has mostly focused on university students and employees rather than senior high school students, who are at a critical stage of career identity formation. This study aimed to describe the level of FWSS among eleventh-grade students in Makassar City, analyze gender differences, and outline its practical application for adaptive, contextual career guidance and counseling services. A quantitative cross-sectional survey was conducted with 160 students (80 male, 80 female) from 11 senior high schools, measured using the FWSS Scale and analyzed using descriptive statistics and the Mann-Whitney U test. Results showed that students FWSS generally fell into the moderate category (73.75%; $M = 14.09$; range 5-20), with work-identity clarity developing more strongly than job-type clarity, and a significant gender difference was found ($U = 4024$; $p = .005$; $r_{rb} = .258$), with male students scoring higher. The study concludes that senior high school students in Makassar City have begun forming a future work orientation but still require systematic, gender-sensitive support, positioning the FWSS profile as an empirical basis for developing needs-based, digitally oriented career guidance and counseling services.

Keywords: *Career Guidance and Counseling; Future Work Self-Salience; High School Students; Digital Career Guidance.*

INTRODUCTION

Developments in the world of work in the digital age require learners to possess career readiness that is not only based on their choice of degree programme or occupation (Ita, 2025), but also on the ability to envisage, plan and steer themselves towards their desired future in the world of work (Sahin & Sugiharto, 2025), amidst automation and artificial intelligence, which are making the future of work increasingly dynamic and difficult to predict (Dermawan et al., 2025). The World Economic Forum (2023) reports that global technological and economic transformation is projected to create millions of new types of jobs whilst displacing some existing ones, whilst 39% of the core skills required by the labour market are expected to change by 2030. These changes indicate that secondary school pupils need a clear orientation towards the future of work so that they can link their current learning experiences to future educational, training and employment needs. Without a clear vision of the future of work, pupils risk experiencing confusion when deciding on further study, developing their competences and preparing themselves for changes in the world of work.

In the Indonesian context, the urgency of strengthening students career readiness is increasingly important, as secondary education leavers must navigate the transition to higher education, vocational training, or an increasingly complex world of work (Masmur et al., 2025; Saptadi et al., 2025), whilst the open unemployment rates for 2025 secondary school and vocational school graduates still stand at 6.88% and 8.63% respectively (Statistics, 2026). This situation indicates that whilst students may have access to information about study programmes and careers, they are not necessarily able to link this to their own potential, personal values, long-term goals, and strategies for achieving them. Therefore, guidance and counselling services in senior secondary schools need to go beyond simply providing career information and help students construct a more concrete, realistic and meaningful vision of their future selves as a basis for career decision-making.

One psychological construct relevant to understanding learners career readiness is Future Work Self-Salience (FWSS). Strauss et al. (2012) explain that the future work self is an individuals self-representation in the future relating to hopes and aspirations in the world of work, whilst salience indicates the extent to which this representation can be clearly imagined, is easily accessible, and is meaningful to the individual; thus, FWSS essentially describes a persons ability to imagine who they are in their future work and to link this to their current decisions and actions. Theoretically, FWSS is linked to Career Construction Theory, which positions the individual as an active agent in constructing their career through the processes of attributing meaning to experiences, adapting to change, and shaping a personal narrative within a specific socio-cultural context (Savickas, 2019). From this perspective, sixth-form students are viewed not merely as individuals choosing a subject or a job, but as people who are constructing their identity, goals, and narrative regarding their future career.

Previous research indicates that FWSS is linked to various aspects of career development: FWSS has been shown to predict proactive career behaviours such as seeking information, developing skills, building networks, and setting career goals (Strauss et al., 2012); it plays a role, alongside career adaptability, in promoting proactive career behaviours (Taber & Blankemeyer, 2015); and is closely linked to future orientation and goal clarity in the formation of career proactivity (Jiang et al., 2023). In the Indonesian context, Nabilah & Indianti (2019) found that the future work self is strongly associated with career adaptability among final-year university students, and that this relationship is partially mediated by career decision-making self-efficacy. Meanwhile, research at secondary education level has focused more on career guidance services, parenting styles, decision-making self-efficacy, and career exploration behaviour (Meitasari et al., 2021; Preston & Salim, 2019) rather than specifically on students self-representation in future work through the FWSS construct.

Based on this review, there are several research questions that need to be addressed. Firstly, previous research has largely examined the relationship between FWSS and career adaptability, self-efficacy, and proactive career behaviour, rather than empirically describing students levels of FWSS. Secondly, the populations of previous studies have been dominated by students and workers, whilst senior secondary school pupils who are still in the stage of identity formation and career exploration have not been extensively studied. Yet, senior secondary school students are beginning to face important decisions regarding their future study paths, preparation for university entry, the development of their interests, and adapting to the competencies required in the digital age (Nabilah & Indianti, 2019; Nurfitriana et al., 2021; Abdillah et al., 2021). Thirdly, there has been little research that utilises the FWSS profile as the basis for developing needs-based career guidance and counselling services. The city of Makassar was selected as it is one of the educational hubs in Eastern Indonesia, with secondary schools spread across various sub-districts, such as Tamalanrea, Panakkukang, Biringkanaya, Manggala, Rappocini, and other areas (DaftarSekolah.net, 2026) This distribution reflects the diversity of educational environments, social backgrounds, access to information, and students experiences in utilising technology for career exploration. Nevertheless, there is currently no empirical data specifically describing FWSS senior high school students in Makassar City as a basis for career service planning.

The novelty of this research lies in its effort to expand the study of FWSS from a population of students and workers to Year XI senior secondary school students who are in the strategic phase of career identity formation, whilst also using the mapping results as a basis for formulating approaches that activate guidance and counselling services in the digital age. This study does not claim to develop or test an intervention model, but rather provides an empirical profile of FWSS students, analyses their tendencies by gender, and translates the results into more operational service recommendations, such as bold career assessments, technology-based job exploration, exercises in reflecting on ones future work, goal mapping, and personal career planning. In light of this, the research problem is the lack of an empirical picture of the level of Future Work Self-Salience among Year XI senior high school students in Makassar City and its application to career guidance services in the digital age. This study aims to describe the level of FWSS among Year XI secondary school students in Makassar, analyse differences based on gender, and outline practical applications for the development of career guidance and counselling services that are adaptive, contextual, and based on students needs.

METHOD

This study employed a quantitative approach using a cross-sectional survey design. This design was chosen because the measurement of future self-salience (FWSS) was conducted on a single occasion to obtain an overview of the students FWSS status without the application of any intervention. The study population comprised Year XI pupils from 11 senior secondary schools in Makassar City who participated in the study. The sample consisted of 160 pupils aged 16-17 years, comprising 80 male pupils and 80 female pupils. The distribution of respondents by school is presented in Table 1.

Table 1. Distribution of Respondents by School

No.	School	Number of Respondents
1.	SMAN 3 Makassar	11
2.	SMAN 5 Makassar	17
3.	SMAN 6 Makassar	10
4.	SMAN 8 Makassar	13
5.	SMAN 9 Makassar	17
6.	SMAN 12 Makassar	7
7.	SMAN 14 Makassar	30
8.	SMAN 18 Makassar	8
9.	SMAN 19 Makassar	14
10.	SMAN 21 Makassar	24
11.	SMAN 23 Makassar	9
	Total	160

Sampling was carried out using a random sampling technique at the student level, with schools serving as the sampling units. The sampling procedure began by identifying 12 schools as research sites. Subsequently, Year XI students who met the criteria were included in the sampling frame and selected at random until the required number of respondents was reached. The number of respondents at each school varied according to the number of pupils who met the criteria and completed the questionnaire in full. The inclusion criteria for the study comprised active Year XI pupils, aged 16-17 years, who were willing to participate in the study and complete all sections of the questionnaire. Incomplete responses, duplicate entries, or those not matching the sample characteristics were excluded from the analysis.

The research instrument comprised a respondent characteristics form and the Future Work Self-Salience (FWSS) Scale. The respondent characteristics form contained information on age, gender, and school of origin. The FWSS Scale was adapted from an instrument developed by Strauss et al. (2011) to measure the degree of clarity and ease with which individuals can visualise themselves in future work. The scale comprises five items representing a single FWSS construct, namely clarity of work identity, clarity of job type, clarity of the mental image of future work, ease of visualising ones future work, and

ease of imagining oneself working in the future. Each item is answered using a four-point Likert scale: 1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree. The total score ranges from 5 to 20; the higher the score obtained, the clearer, more distinct and more accessible the students mental image of their future work is.

The instrument was adapted by translating the items from English into Indonesian, checking for equivalence of meaning with the original instrument, reviewing the content and language, and conducting a readability test with students sharing similar characteristics to the studys respondents. These steps were taken to ensure that each item could be understood by upper secondary school pupils whilst still representing the FWSS construct. The FWSS scale is positioned as a unidimensional instrument in line with the construct in the original instrument. Empirical evidence of item quality in the research sample was examined via item-rest correlations, whilst the instruments internal consistency was analysed using Cronbachs alpha.

The results of the internal consistency analysis showed a Cronbachs alpha value of 0.800, indicating that the FWSS Scale has adequate reliability. The analysis of item discrimination via item-rest correlations yielded coefficients ranging from 0.525 to 0.654. All coefficients were positive and above the minimum threshold of 0.30; therefore, all items were retained in the analysis. The results of the item discrimination analysis for each item are presented in Table 2.

Table 2. Results of the FWSS scale item analysis

No.	Item	Estimate	Lower 95% CI	Upper 95% CI
1.	P1	0.614	0.541	0.678
2.	P2	0.654	0.586	0.713
3.	P3	0.594	0.518	0.660
4.	P4	0.534	0.450	0.608
5.	P5	0.525	0.441	0.600

The research was carried out after obtaining administrative approval from the school where the study was conducted. Prior to data collection, respondents were provided with information regarding the purpose of the research, the procedure for completing the questionnaire, the benefits of the research, data confidentiality, the voluntary nature of participation, and the right to withdraw from the study without academic consequences. As the respondents were under 18 years of age, student participation was carried out with due regard to the consent of parents or guardians and the students own consent to participate. The respondents personal identities were not included in either the questionnaires or the research report. The data were used solely for academic purposes and reported in aggregate form, meaning they could not be used to identify individual respondents.

Data collection was carried out online using Google Forms, which were distributed with the assistance of guidance and counselling teachers at each school. The opening page of the form contained an explanation of the research and a statement of willingness to participate. Respondents who agreed then completed the demographic characteristics section and the FWSS Scale. The collected data was checked for completeness and compliance with the sampling criteria, then coded and tabulated prior to analysis. Data checks were also carried out to identify blank responses, duplicate responses, and data that did not meet the requirements for analysis.

Data analysis was carried out using the JASP software. Descriptive statistics, including the mean, standard deviation, minimum score, maximum score, frequency and percentage, were used to describe students FWSS scores overall and for each item. FWSS scores were categorised using the empirical mean and one standard deviation, with the category definitions presented in Table 3.

Table 3. Guidelines for categorising FWSS scores

No.	Categorisation	Description
1.	$X < M - SD$	Low
2.	$M - SD \leq X < M + SD$	Medium
3.	$X \geq M + SD$	High

Source: Azwar, S. (2021)

Based on an empirical mean of 14.09 and a standard deviation of 2.82, the categorisation thresholds were determined to be 11.27 and 16.91. As FWSS scores are whole numbers, the operational categories were defined as low for scores of 5-11, moderate for scores of 12-16, and high for scores of 17-20. This categorisation was used to describe the distribution of FWSS scores within the study sample and was not intended as a diagnostic or national standard.

The Shapiro-Wilk test was used to examine the normality of the FWSS score distribution. As the test results indicated that the data were not normally distributed, differences in FWSS scores by gender were analysed using the non-parametric Mann-Whitney U test. This test was chosen because it compares scores from two independent groups male and female students without requiring a normal distribution. The significance level was set at $\alpha = 0.05$. In addition to the U and p-values, the analysis results were supplemented with an effect size in the form of the rank-biserial correlation (r_{rb}) to indicate the magnitude of the difference in FWSS scores between the two groups. An absolute value of r_{rb} of around 0.10 is interpreted as a small effect, around 0.30 as a moderate effect, and around 0.50 or higher as a large effect.

FINDINGS AND DISCUSSION

Findings

Data collection was carried out by distributing questionnaires to upper secondary school pupils in Makassar to ascertain their levels of future work self-salience. A total of 160 participants were successfully recruited, comprising 80 male pupils and 80 female pupils. A descriptive overview of the future work self-salience scores of Year XI upper secondary school pupils in Makassar is presented in Table 4.

Table 4. Descriptive statistics for students Future Work Self-Salience

No.	Variabel/indikator	Mean	SD	Minimum	Maksimum
1.	Total FWSS	14,09	2,82	5	20
2.	Clarity regarding job identity	3,01	0,75	1	4
3.	Clarity regarding job type	2,71	0,74	1	4
4.	Clarity regarding the mental image	2,74	0,71	1	4
5.	Ease of visualization	2,88	0,78	1	4
6.	Ease of imagining oneself at work	2,74	0,80	1	4

Table 4 shows that the total FWSS score had a mean of 14.09, with a score range of 5-20. At the indicator level, the highest mean was found for clarity of work identity, whilst the lowest mean was found for clarity of job type. This pattern suggests that students already have a relatively general idea of their identity in their future careers, but are not yet fully able to determine a more specific type of job.

Table 5. Categories of Future Work Self-Salience among secondary school pupils in Makassar

No.	Interval	Categori	Frequency	Percent
1.	$X < 11$	Low	28	17.50%
2.	$11 \leq X < 17$	Medium	118	73.75%
3.	$17 \leq X$	High	14	8.75%
		Total	160	100%

The categorisation results in Table 4 show that the majority of pupils fall into the moderate category, namely 118 pupils (73.75%). Meanwhile, 28 pupils (17.50%) fall into the low category, and

14 pupils (8.75%) into the high category. This distribution confirms that the majority of upper secondary school pupils in Makassar City already have an orientation towards their future careers, but the clarity of this orientation remains at a moderate level. To provide a more concise overview, responses at levels 3 and 4 were grouped as positive responses, whilst responses at levels 1 and 2 indicate that the pupils vision of their future careers is not yet well-defined. The response profiles for each indicator are presented in Table 6.

Table 6. Response profile for each Future work self-salience item

No.	Indicators	Level 3-4 response	Level 1-2 response
1.	Clarity of job identity	134 (83,75%)	26 (16,25%)
2.	Clarity of job type	107 (66,88%)	53 (33,12%)
3.	Clarity of mental image	110 (68,75%)	50 (31,25%)
4.	Ease of visualisation	113 (70,63%)	47 (29,37%)
5.	Ease of imagining oneself at work	103 (64,38%)	57 (35,62%)

Clarity of work identity was the indicator with the highest proportion of positive responses. Conversely, the highest proportion of responses at levels 1-2 was found for the indicators ease of imagining oneself at work and clarity of job type. These findings reveal a gap between students ability to form a general work identity and their ability to describe their future jobs in concrete terms. The distribution of FWSS by gender is presented in Table 7.

Table 7. Distribution of Future Work Self-Salience categories by gender

No.	Gender	Interval	FWSS Category	Frequency	Percent
1.	Men	$17 < X$	Hight	26	32.5
		$11 \leq X < 17$	Medium	45	56.3
		$X < 11$	Low	9	11.3
2.	Women	$17 < X$	Hight	2	2.5
		$11 \leq X < 17$	Medium	73	91.3
		$X < 11$	Low	5	6.3

The differences in the distribution of FWSS by gender are shown in Table 6. Among the male group, the majority of pupils fell into the moderate category, totalling 45 pupils (56.3%), followed by the high category with 26 pupils (32.5%), and the low category with 9 pupils (11.3%). Meanwhile, in the female group, the vast majority were in the moderate category, namely 73 pupils (91.3%), with only 2 pupils (2.5%) in the high category and 5 pupils (6.3%) in the low category. These findings indicate that the proportion of male pupils in the high category is greater than that of female pupils.

The results of the Shapiro-Wilk test showed that the distribution of FWSS scores deviated from a normal distribution, $W = 0.945$, $p < 0.001$. Furthermore, the results of the test for differences in FWSS by gender are presented in Table 8.

Table 8. Results of the test for differences in Future Work Self-Salience by gender

No.	Gender	n	Mean	SD	Mean rank
1.	Men	80	14,56	3,35	90,80
2.	Women	80	13,61	2,08	70,20

Note. $U = 4024$; $p = 0.005$; $r_{rb} = 0.258$.

The Mann-Whitney test revealed a significant difference in FWSS scores between male and female students, $U = 4024$, $p = 0.005$. Male students achieved a higher mean rank than female students. The biserial rank correlation coefficient of 0.258 indicates that the magnitude of the difference is small to moderate. Thus, male students in the study sample tend to have higher FWSS scores, but this difference does not indicate a large disparity.

Discussion

The research findings indicate that the Future Work Self-Salience (FWSS) of Year XI secondary school students in Makassar falls within the moderate category; that is, students have begun to form a hoped-for identity in the future world of work, but this is not yet fully detailed, stable or specific (Strauss

et al., 2012). This situation is consistent with the career exploration stage at ages 14-24 (Super, 1980), when interests, abilities and personal values begin to take shape but are not yet stable enough to be translated into definitive educational and career choices, as vocational identity at this age is still in the process of seeking coherence and stability (Skorikov & Vondracek, 2007).

At the indicator level, clarity regarding work identity is more developed than clarity regarding job type and the ability to visualise oneself at work, as general identity clarity typically forms before the specifics of occupational choices (Skorikov & Vondracek, 2007). Students find it relatively easier to answer questions about who they will become in the future than to describe the jobs, activities and competencies they need to develop. This situation risks leaving students aspirations at a general level without clear educational steps, as a clear vision of ones future work self is a prerequisite for proactive career behaviour such as information-seeking and goal-setting (Strauss et al., 2012), and is consistent with findings that a clearer FWSS is associated with better career exploration and adaptability (Lu & Jia, 2022).

This moderate category may also be influenced by educational factors at the 11 schools attended by the respondents, which may differ in terms of the quality of career guidance services, availability of information, access to technology, and opportunities for career exploration. Within the Cognitive Information Processing framework, clarity of self-knowledge and occupational understanding develops through structured services ranging from assessment, exploration and synthesis to the implementation of career decisions (Peterson et al., 2002); thus, schools that provide career assessments, campus visits, career introductions, individual counselling and project-based experiences are likely to help students build a more concrete picture of the world of work. Targeted support from teachers has also been shown to act as a secure base that enhances career adaptability whilst clarifying the FWSS (Zhang et al., 2025), whilst services that are merely informative, without a reflective process, may not be sufficient to link pupils interests, values, and life goals into a coherent career narrative (Savickas, 2019). This explanation remains contextual, as this study did not statistically test differences in FWSS between schools.

Family and socio-economic factors also play a role in shaping FWSS. Family structures and processes, such as warmth, support and attachment, are consistently linked to career development across the lifespan (Whiston & Keller, 2004); thus, parental support, discussions about further education, access to training, exposure to different professions, and the familys social network can broaden the career options that pupils envisage. Conversely, socio-economic limitations are associated with low aspirations for ideal employment and limited career exploration, meaning students tend to opt for safe choices or those offering rapid economic security (Sawitri & Suryadi, 2020). Parental expectations can act as both a source of support and a constraint on exploration if they overly direct a childs choices without considering their interests, in line with the emphasis in Career Construction Theory that careers are constructed within specific socio-cultural contexts (Savickas, 2019).

Within the context of local culture, students career orientation in Makassar may be influenced by values such as family responsibility, the value placed on education, economic independence, and social perceptions of certain occupations, as is common in collectivist societies that prioritise social aspects and family harmony in career decisions, in contrast to individualistic societies that are more focused on personal goals (Hidayat et al., 2025). Cultural values can serve as a source of motivation for future planning, but they also have the potential to limit choices if certain professions are perceived as more suitable for one gender, as explained through the process of gender-based occupational circumscription (Gottfredson, 1981). As this study does not measure cultural variables directly, the influence of the local Bugis-Makassar culture cannot yet be concluded to be causal; however, the socio-cultural context remains important to consider, given that careers are always constructed within a specific socio-cultural context (Savickas, 2019).

Differences in FWSS by gender must be interpreted with caution. Male students have higher scores and mean ranks; however, the effect sizes are small to moderate and therefore cannot be

interpreted as an innate advantage. Instead, they are best understood through the processes of circumscription and compromise that is, the developmental processes whereby children and adolescents gradually eliminate occupational choices perceived as incompatible with their gender and social prestige, and tend to prioritise gender-appropriate occupations over aspects of prestige or interest (Gottfredson, 1981). This tendency may be linked to differences in socialisation, family support, freedom to explore professions, role models and social expectations; consequently, these findings are best understood as a reflection of differences in career exploration experiences and opportunities between male and female students (Whiston & Keller, 2004), rather than as an indication of differences in psychological capacity between the genders.

From the perspective of Career Construction Theory, a career is viewed as an active process of constructing meaning, a personal narrative and a life direction through interaction with the socio-cultural environment (Savickas, 2019). FWSS can be positioned as a cognitive-affective bridge between students present selves and their future working selves, translating aspirations into proactive career behaviour (Strauss et al., 2012). The intermediate category indicates that students career narratives have begun to take shape but are not yet fully coherent, in line with the understanding that vocational identity coherence develops gradually and is not necessarily achieved by mid-adolescence (Skorikov & Vondracek, 2007), therefore, strengthening FWSS must involve a process of reflection and the construction of meaningful career narratives, rather than merely providing information about jobs, as emphasised in the life-design counselling approach (Savickas, 2019).

These findings reinforce the link between FWSS and career adaptability. Ling et al. (2022) confirm that FWSS and future-time orientation serially contribute to career adaptability, and that low FWSS is associated with low readiness to face career transitions. Within the framework of Career Construction Theory, a vision of one's future work self can reinforce the four dimensions of career adaptability, namely concern, control, curiosity, and confidence in implementing career plans (Savickas & Porfeli, 2012); thus, when the vision of the future is unclear, students tend to struggle to set goals and identify the competencies that need to be developed.

These findings can also be explained through Social Cognitive Career Theory (Lent et al., 1994), which states that career choices are influenced by the interplay of self-efficacy, outcome expectations, goals, support, and contextual barriers; students will find it easier to form a vision of their future work when they feel capable, believe in the benefits of their choices, and receive support from their family and school. In the Indonesian context, self-efficacy in career decision-making has been shown to mediate the relationship between the future work self and career adaptability among final-year university students (Nabilah & Indianti, 2019); thus, the moderate level of FWSS among senior secondary school students in Makassar may reflect a lack of self-confidence or a lack of clarity regarding the expected outcomes of a career choice.

Technological developments present both opportunities and challenges for the formation of the future work self, in line with projections that automation and artificial intelligence will continue to reshape the landscape of workplace competencies (Dermawan et al., 2025; World Economic Forum, 2023). Access to university information, career videos, online classes, work simulations, career assessments and professional networks enriches self-knowledge and occupational understanding (Peterson et al., 2002); however, the sheer volume of information also has the potential to cause confusion and unrealistic expectations without the metacognitive skills to filter it. Individuals with a clearer sense of future work self-schema (FWSS) tend to view technology and artificial intelligence as tools to strengthen their control over their future careers, rather than as threats (Voigt & Strauss, 2024); therefore, the development of FWSS needs to be accompanied by career digital literacy so that students are able to evaluate information and relate it to their personal goals.

In operational terms, these findings can be translated into digital career guidance services through four stages that align with the CASVE cycle within the Cognitive Information Processing approach

(Peterson et al., 2002): first, needs assessment using the FWSS Scale alongside assessments of interests, values, strengths and self-efficacy in career decision-making; second, digital exploration via career videos, university databases, online interviews with practitioners, and research into work-related competencies; third, the development of a narrative of one's future working self through reflective journals, career vision boards, career journey maps, or letters to one's future self, as a form of career narrative construction within the life-design counselling approach (Savickas, 2019); and fourth, translating this vision into measurable goals, choices for further study, skills development, and a digital career portfolio.

Services can be differentiated according to students' FWSS levels. Students in the low category require self-awareness, broader exposure to professions, and reinforcement of their belief in future opportunities to build basic self-efficacy (Lent et al., 1994); students in the medium category who constitute the majority in this study require assistance in clarifying job types, assessing the realism of their choices, and linking their aspirations to concrete educational steps; whilst students in the high category can be guided towards strengthening achievement strategies, project experience, networking, and portfolios as forms of proactive career behaviour (Strauss et al., 2012). Guidance counsellors also need to ensure that examples of professions, guest speakers, and opportunities for exploration do not reinforce gender stereotypes in the workplace, given that the process of circumscription can unconsciously narrow the scope of pupils' aspirations if not addressed at an early stage (Gottfredson, 1981).

Theoretically, this study extends the application of the FWSS construct which has previously been extensively researched amongst working populations and university students to a population of upper secondary school pupils who are still in the stage of career identity formation, serving as an early indicator of pupils' readiness to construct their future within the framework of Career Construction Theory (Savickas, 2019). In practical terms, the research findings provide an empirical basis for schools to design needs-based career services, whether through the Cognitive Information Processing approach or by strengthening teachers' support as a secure base for pupils' career exploration. However, the cross-sectional design of this study is not yet able to explain changes in the FWSS over time or the causal relationships with family, socio-economic, cultural, educational, gender and technological factors; therefore, future research needs to examine these factors through longitudinal or experimental designs, including the mediating roles of career adaptability and self-efficacy in career decision-making.

CONCLUSION

The research findings indicate that the Future Work Self-Salience (FWSS) of Year XI secondary school pupils in Makassar generally falls within the moderate category. This finding suggests that pupils already have an initial sense of their identity within the future world of work, but this sense is not yet fully concrete, specific, or easily translated into educational choices and career development steps. Clarity regarding their work identity appears to be more developed than their ability to determine the type of job and to visualise themselves performing a specific job. Gender-based differences indicate that male students tend to have higher FWSS than female students; however, this trend should not be interpreted as a difference in innate ability. It is more accurately understood as a possible reflection of variations in experience, support, opportunities for exploration, role models, and social expectations in career development.

The research also confirms that students' career development cannot be achieved simply by providing information about study programmes and occupations; rather, it must be directed towards helping them form a clear, realistic and meaningful vision of their future working lives. The research findings can be utilised as a basis for developing needs-based digital career guidance services through self-assessment, technology-assisted career exploration, reflection on one's future, career narrative development, and the translation of aspirations into educational goals and competence development.

plans. These services need to be delivered in a phased, contextual and gender-sensitive manner so that all pupils have equal opportunities to build and realise their future careers.

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