

## RESEARCH ARTICLE

# Application of the trait-Factor theory-Based vocational preference inventory on the government school counsellors in Malaysia

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## ABSTRACT

The study aimed to develop a reliable module of career counselling based on the trait-factor theory for government school counsellors in Malaysia. Known as the Modul Kaunseling Kerjaya Tret dan Faktor (MKKKTF), this module was adapted from the Model Pembinaan Modul Sidek (MPMS) and integrated with the trait-factor theorem guidelines. To determine the module's validity, the content and the module's appropriateness and significance were evaluated and reviewed by a group of panel experts who were selected using a specific list of criteria. Using the Fuzzy Delphi Technique, the experts' responses and evaluation of MKKKTF were analysed, and the findings revealed that the MKKKTF was significantly variable to be used as a guideline for government school counsellors, including those who are not registered with the Kaunselor Berdaftar Perakuan Amalan (KBPA) in Malaysia.

**Keywords:** trait-factor theory, career counselling, modul kaunseling kerjaya tret dan faktor (MKKTF), government school counsellors

## 1. Introduction

Making sound career choices is essential as it can affect the trajectory of an individual's life. Hoff et al.<sup>[1]</sup> assert that career-related decisions are significantly influenced by the individual's interest fit, which would be reflected in their performance and career maturity that prepares them to face and adapt to unexpected challenges and societal and professional expectations associated with their career of choice<sup>[2]</sup>. Therefore, career maturity levels must be developed as early as possible imperative to help individuals make informed, realistic decisions when planning their future<sup>[2,3]</sup>.

One of the efficient ways to enhance the level of career maturity is through career counselling<sup>[3]</sup>. According to Akhter et al.<sup>[4]</sup>, career counselling can have a significant influence on developing awareness of

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individual personal traits and career choice strategies. For career counsellors, particularly those in Malaysia, as their goal is to prepare students for meaningful careers and life roles, career development interventions are conducted regularly<sup>[5,6]</sup>.

In general, career counselling in Malaysia has evolved and transformed over the years<sup>[7,8]</sup>. With continuous support and provision from the government<sup>[9]</sup>, several counselling modules were developed to meet the needs and improve the instrument's reliability. Nonetheless, there are still many constraints which hinder the successful implementation of career counselling at the school level. A series of studies by Suradi<sup>[10-12]</sup>, whose findings were corroborated by See<sup>[13]</sup>, Sidek et al.<sup>[14]</sup> and Johari Talib<sup>[15]</sup>, reported that time constraints, a misconception of job responsibilities, lack of counselling skills, and work overload contributed to the counselling program's ineffectiveness. Apart from the said factors, the counsellor's self-efficacy also affects the quality and deliverance of practice<sup>[16-19]</sup>.

Furthermore, the modules' effectiveness and relevance are questionable due to the fact that the implemented career development programs in technical and vocational schools are large-scale programs that did not focus on individual self-exploration, preparation and developing necessary skills<sup>[6]</sup>. In addition to that, Mat Rashid<sup>[6]</sup> also reported that only a small percentage of career counsellors implemented individually tailored career exploration programs and assessments.

Therefore, in this respect, one of the efficient theories used to tackle the issues in career counselling is Parsons' trait-factor theory pioneered by<sup>[20]</sup>. In accordance with this theory, the concept of "trait" could be considered as the quantifiable individual qualities, including competency, behavioural differences and intellectual. Meanwhile, the concept of "factor" is most likely associated with the efficiencies required for a successful career<sup>[21]</sup>. To support the theory's effectiveness, Sharf<sup>[22]</sup> suggests that a three-phase process should be utilised as guidance. The processes are:

- Personal clarification of own abilities, interests, emotions and boundaries.
- Personal clarification of necessities, conditions, opportunities, advantages and disadvantages of different occupations.
- Individual matching of the information about himself and output obtained from outside.

Nevertheless, although the career guidance theorem was widely accepted for its effectiveness, several scholars highlighted that trait-factor-based career counselling is criticised for neglecting the dynamic structure<sup>[20]</sup>, the authority of the counsellor<sup>[21]</sup>, and limited consultation time<sup>[23]</sup>. Despite the criticisms, trait-factor-based career counselling was proven to be effective, particularly in cases where a large number of students were involved<sup>[9]</sup>. Given the issues mentioned above and the findings, it is imperative to develop an integrated career counselling module based on the trait-factor theory, which is comprehensive and practical at the school level.

Therefore, to provide counsellors with a module that would allow them to practice career counselling effectively, a trait-factor theory-based *Modul Kaunseling Kerjaya Tret dan Faktor* (MKKTF) for career guidance in primary and secondary schools was developed. This module's development is in accordance with the *Model Pembinaan Modul Sidek* (MPMS) structure and guidelines<sup>[24]</sup>. The proposed module's objectives are:

1. To give a strong knowledge about skills in applying career counselling based on trait-factor theory among primary and secondary schools' career counsellors.
2. To introduce several techniques that can be implemented during the career counselling programs.

## 2. Literature review

### 2.1. The trait-Factor theory and career guidance in Malaysian primary and secondary schools

The trait-factor theory introduced by Frank Parsons<sup>[25]</sup> has been the foundation for most career counselling and planning work in the 20<sup>th</sup> Century. According to Sidek<sup>[26]</sup>, as a structural approach which focuses on the career selection and study process more effectively, this theory assumes that each individual has a distinctive set of abilities. Using its cognitive patterns, the theory simplifies the career or study selection process using the individual data provided. According to Hassan et al.<sup>[27]</sup>, the theory believes individual occupational profiles should be matched to their traits to determine career suitability. Parsons<sup>[25]</sup> outlined that career guidance and selection should be based on the following:

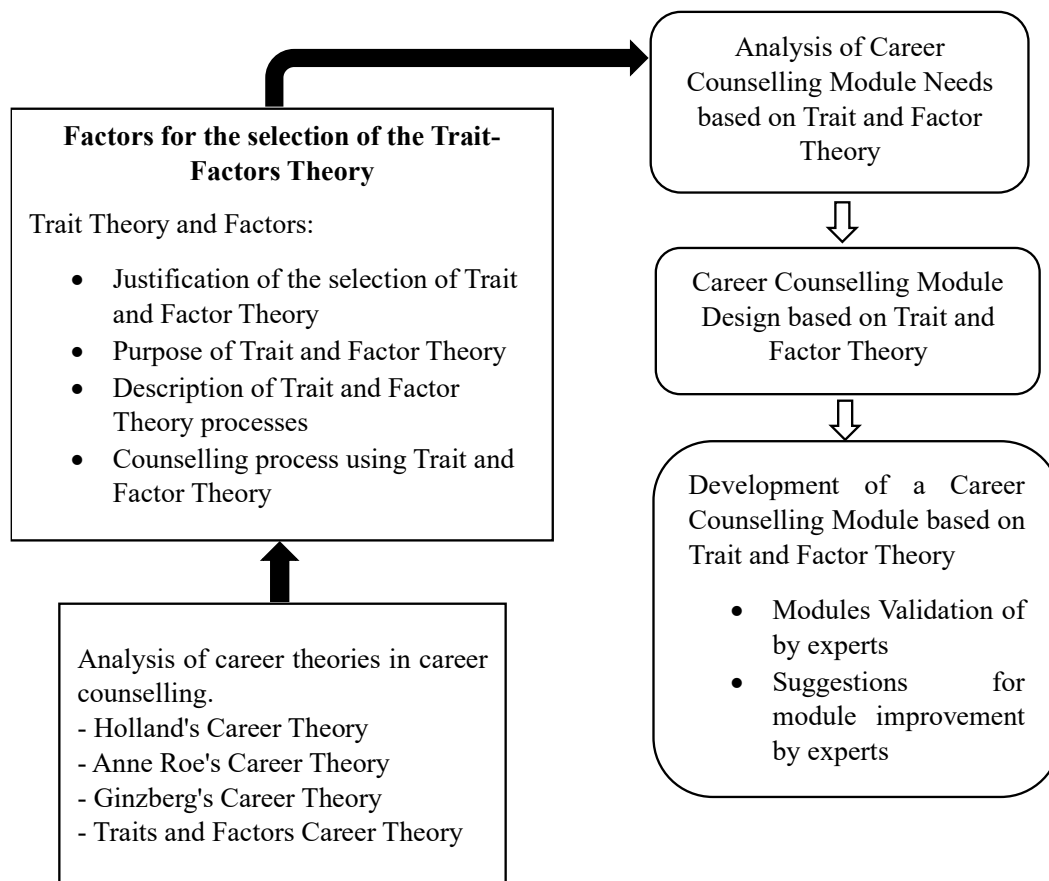
- i. Understanding individual traits (ability, interest and personal capacities)
- ii. Knowledge of employment and the labour market
- iii. Rational and objective consideration of the relationship between their characteristics with the current labour market

For career counsellors, Parsons also suggested that when providing guidance, they should focus on providing information based on their clients' abilities and interests, explain the current challenges and advantages with regard to their abilities and goals, use their industrial experience to give clients a clear understanding of the challenges and demands in the career of choice and assist clients in selecting careers and making final decisions.

Nevertheless, in Malaysian primary and secondary schools, the school counsellors are not trained to provide sufficient career guidance to the students in their schools. According to Zakaria<sup>[28]</sup>, most school counsellors are diploma holders and are not certified counsellors and not registered with the *Kaunselor Berdaftar Perakuan Amalan* (KBPA), as their appointment in their respective schools is to meet the schools' needs. Therefore, to help these school counsellors in relation to career selection, this module, *Modul Kaunseling Kerjaya Tret dan Faktor* (MKKTF), is developed to provide better guidance to their students at the school level.

### 2.2. Theoretical framework

In **Figure 1**, the theoretical framework shows that the decision to use Parsons' Trait-Factors Theory was made after considering three other career theories, namely Holland's Career Theory, Anne Roe's Career Theory and Ginzberg's Career Theory. The trait-factors theory was deemed most appropriate for this study's context as it allowed the researcher to consider individual uniqueness and differences when determining their suitability for certain careers and areas of study. When used as part of MKKTF, the module will assist school counsellors in identifying the students' strengths and weaknesses based on their academic achievement and personality traits and use this information to match their abilities to several areas of interest.



**Figure 1.** Theoretical framework.

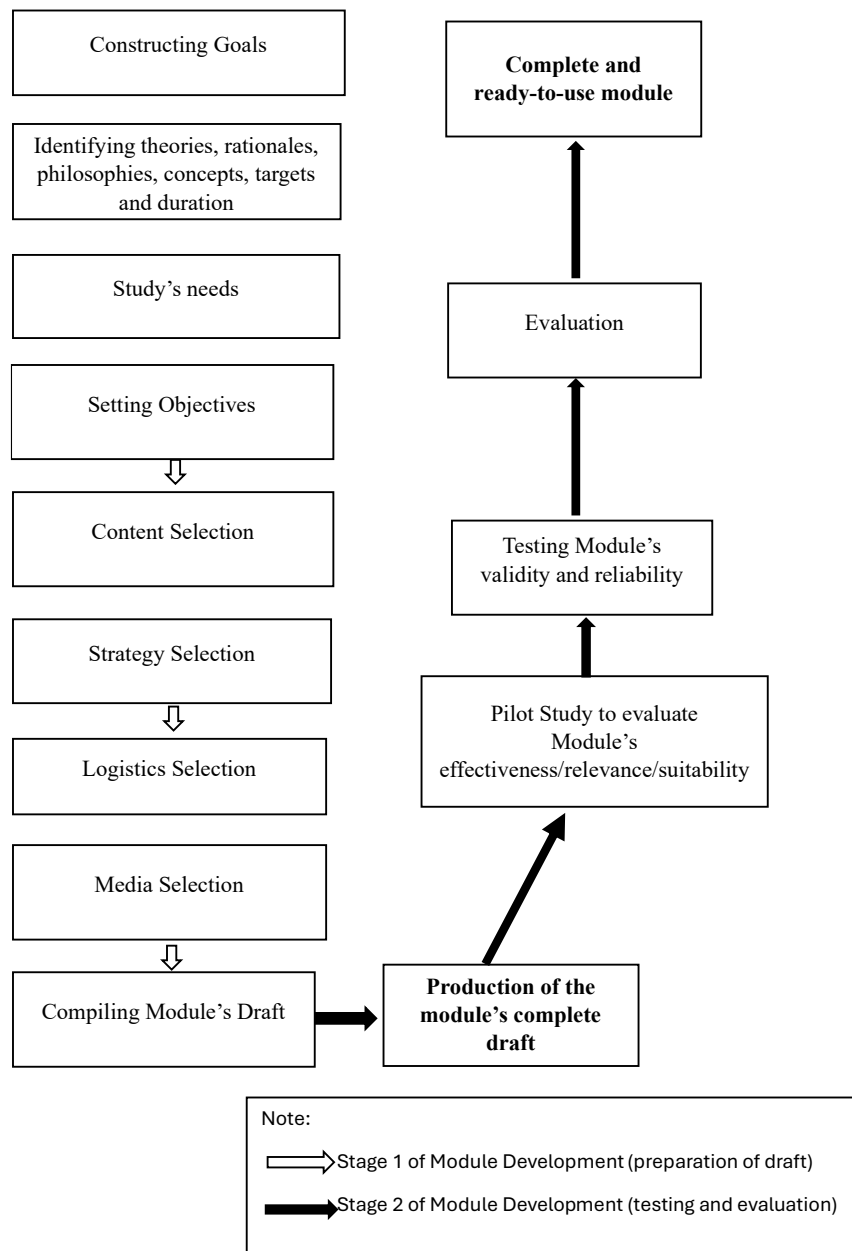
### 2.3. Conceptual framework

The MKKTF module was developed by adapting a previous module of the “*Model Pembinaan Modul Sidek* (MPMS). As shown in **Figure 2**, the MKKTF module used MPMS as the foundation to ensure its trustworthiness.

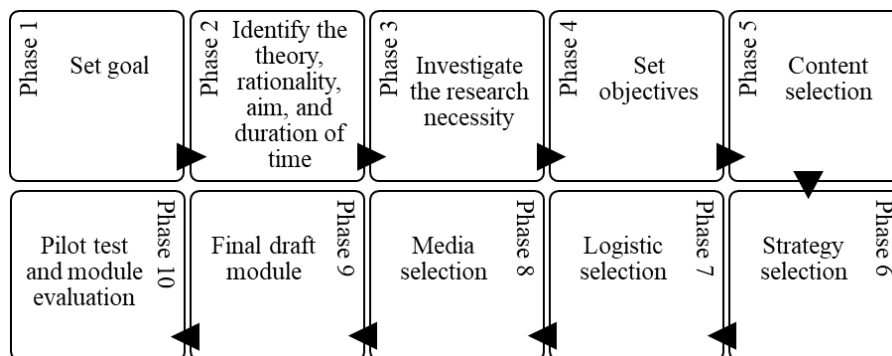
The preparation of the MKKTF module consisted of nine phases before producing the final draft module, as indicated in **Figure 3**.

The MKKTF module includes five sub-modules:

- Submodule A: General Career Counselling
- Submodule B: Personalities and Career Exploration
- Submodule C: Gathering Career Information
- Submodule D: Matching Session
- Submodule E: Termination Phase



**Figure 2.** An adapted model based on *model pembinaan modul sidek* (MPMS) (Sidek & Jamaludin, 2005) used to develop the MKKTF module.



**Figure 3.** The MKKTF module (modified from the MPMS concept).

**Submodule A:** In this initial phase, exposure to trait-factor-based career counselling is demonstrated to enhance the understanding of participants. Comprehensive guides which cover profound concepts, best practices and techniques in the domain of trait-factor based career counselling are introduced here.

**Submodule B:** This submodule includes individual recognition of self-interest, personality orientation, self-representation, interpersonal, emotional stability, cognitive self and competency. In this phase, participants are prepared for an in-depth understanding of individual self-recognition, individual interests and abilities, including values and boundaries. This submodule consists of three activities, comprised of: i) Personality Recognition, ii) Sidek Personality Inventory iii) Vocational Preference Inventory (VPI). In the first activity of Personality Recognition, participants are able to learn the personality orientation of a person and integrate the personality aspect with their level of confidence. The second activity involves the determination of personality domain and gaining awareness of his reflection on the appropriate career environment. Information on the structured responses, measurement tools score, interpretation of score, and general implementation method are provided in detail. Meanwhile, in the third activity, a profiling study adapted from the Holland Person-Environment Fit instrument is conducted. Data gathered from the instrument include their traits, self-knowledge, interpersonal skills, abilities and motivation values.

**Submodule C:** Submodule C is implemented in the second phase of the MKKTF. Here, career-related data are gathered to demonstrate clear guidance and significant assistance in matching an individual's target. Two activities are i) evaluation of career information and ii) healthy matching of the information and personality traits. During the evaluation of career information, participants are guided to gather, classify and organise the information, and how to access useful related data. The most significant target in this phase is the source of information, which is very helpful for career development. The second activity aimed to provide clarification and information on matching an individual's trait and career choice in relation to the implementation of the associated process.

**Submodule D:** The third phase of the MKKTF module is adopted in Submodule D, which comprises two activities. The first activity is the Evaluation of Iachaan Index score, and the second one is The Career Choice.

**Submodule E:** In this last phase, the general understanding of participants is evaluated. Here, participants are encouraged to associate the module activities with the achievement and ascertained expectations obtained during the session. At the end of the session, participants are evaluated in relation to the pre-and post-counselling process.

### **3. Research method and process**

#### **3.1. Research design**

This study adopted the Fuzzy Delphi Technique (FDT) to obtain views, experience, knowledge, and expert consensus on certain issues<sup>[29]</sup>. Regarding the use of FDT in research, Ciptono et al.<sup>[30]</sup> and Hasim et al.<sup>[31]</sup> asserted that the technique is not only cost-effective (use of questionnaires) but also allows the respondents (panel experts) to voice their views openly. In the context of this study, panel's feedback on MKKTF was crucial to ensure the module's relevance and applicability when used as part of the schools' career guidance program.

The five experts were selected based on the following criteria.

- i. Expertise (Senior Academics majoring/ teaching Counselling/ Curriculum Design)

- ii. Qualification (Professors and Senior Lecturers)
- iii. Individual Characteristics
- iv. Comparative Abilities
- v. Consistent and Trustworthy
- vi. Experience

### **3.2. Research tools**

#### **3.2.1. Module content validity questionnaire**

The MKKTF module content validity questionnaire was adapted from a questionnaire constructed by Jamaludin<sup>[37]</sup>, who referred to Russell's<sup>[38]</sup> views on module validation. The items were constructed based on the module validity rules suggested by Russell.

With reference to Russell<sup>[38]</sup>, five rules of module validity were translated into Malay and made into questions or items in the form of a Likert scale ranging from 0 to 5 (Strongly disagree to Strongly Agree). Apart from the 0 to 5 scales, one of the questionnaires was designed with a 0-10 scale (Strongly disagree to Strongly Agree) to obtain the respondents' views on the statements related to the module's validity. The questionnaire was divided into five sections, namely:

- i. The module's content meets the target population
- ii. The module's content can be implemented perfectly.
- iii. The module's content corresponds to the time allocated
- iv. The module's content can effectively improve the counselling practitioners' (career counselling guidance teachers) skills
- v. The module's content can help clients become outstanding individuals

To further ensure the items' accuracy and clarity, the questionnaire was vetted and validated by Malay Language teachers before it was emailed to the respondents. The questionnaire also included an open-ended section where the respondents could write their responses regarding the module.

#### **3.2.2. Module validation**

The module was validated by testing its content, criteria and ideas to ensure its validity and reliability when used in career counselling programs. A module is considered valid when it meets the following criteria:

- i. meets the target population
- ii. The module's implementation method is satisfactory
- iii. Sufficient time allocated to complete the module
- iv. Successful in improving the participants' performance
- v. Successful in changing the participants' attitudes

### **3.3. Data collection**

The MKKTF was conducted for 12 hours, which was one sub-module for 12 days, meaning that each survey session was conducted for 1 hour until 1 hour and 30 minutes.

### 3.4. Validation analysis

The validity of the module was determined by the experts. Following the studies of [32-35], the level of proficiency or achievement that reaches 70% to 80% is considered valid when there is proof of reliability coefficient as a measurement tool. The panel of expertise involved was selected from Universiti Sains Islam Malaysia (USIM), Universiti Putra Malaysia (UPM), Universiti Malaysia Terengganu (UMT), Universiti Malaysia Sabah (UMS), and Universiti Kebangsaan Malaysia (UKM). The selection of the panel was based on their field of expertise and experience in developing counselling modules. The module was evaluated in terms of content appropriateness, systematical structure, the significance of the audience, and time consumption of each session.

To determine the module's validity, Sidek<sup>[26]</sup> suggested that the scores must be 70 per cent and above to be considered high validity. On the other hand, any scores lower than 70 per cent will be deemed low in terms of content. This study used a formula proposed by Sidek and Jamaluddin [38] to calculate the level of validity indicated in the questionnaire forms filled out by the experts. The results of the assessment were analysed using the validity coefficient as follows<sup>[36]</sup>:

$$\frac{\text{Total score expert (x)}}{\text{Maximim score}} \times 100\% = \text{validity of achievement}$$

## 4. Findings

**Table 1.** MKKTF Overall content validity.

No	Statement	Percentage	Experts' Opinions
1	The Trait and Factors Theory-based Career Counselling Module content for Career Counselling Practitioners (career counselling guidance teachers) in Malaysia meets the target population.	93.33	accepted and appropriate
2	The Trait and Factors Theory-based Career Counselling Module content for Career Counselling Practitioners (career counselling guidance teachers) in Malaysia can be implemented perfectly.	86.67	accepted and appropriate
3	The Trait and Factors Theory-based Career Counselling Module content for Career Counselling Practitioners (career counselling guidance teachers) in Malaysia is in accordance with the allotted time	86.67	accepted and appropriate
4	The Trait and Factors Theory-based Career Counselling Module content for Career Counselling Practitioners (career counselling guidance teachers) can effectively improve the teachers' skills in Malaysia	93.33	accepted and appropriate
5	The Trait and Factors Theory-based Career Counselling Module content for Career Counselling Practitioners (career counselling guidance teachers) can help individuals become more outstanding.	93.33	accepted and appropriate
<b>Overall Percentage</b>		<b>90.67</b>	

The results of the expert validity findings show that the minimum percentage obtained is 86.67 per cent of the MKKTF module can be fully implemented. Meanwhile, the maximum percentage obtained is 93.33 per cent of the MKKTF module has the potential to improve the skills and knowledge of career counselling guidance teachers in schools. Thus, the overall score obtained for all items was 95.5 per cent, equivalent to a content validity coefficient of  $.70 > .95$ , indicating high and good content validity. Meanwhile, the findings of the evaluation of the validity of module content based on submodules and activities showed that the maximum percentage obtained was 83.33 per cent for the MKKTF module can be fully implemented. The



comparative analysis by submodule category showed that the whole submodule was accepted and received positive feedback from the experts, where the maximum percentage obtained was 90.00 per cent.

The MKKTF module was further improved based on the feedback from the panel of experts. The improvement involved attaching detailed notes to the activities to help participants understand what is required of them. In addition, the experts also pointed out that the time allotted should be balanced with the participants' needs. The experts also suggested that the notes included in the activity of this module should include the latest reference to facilitate the participants after the MKKTF module session ended.

One of the most significant outcomes of the validation process is that the experts believed that the MKKTF module was not only good but it met the target group, which was career counselling teachers who are not KBPA-registered. As a result, the expert group also agreed that the teacher counselling practitioners of career counselling guidance in schools have minimal knowledge of career theory and the skills to conduct sessions with students. Furthermore, in the last activity, the experts highlighted that the activity helped give the respondents room to strengthen their knowledge and skills during the session using the MKKTF module with the facilitator. Therefore, the materials used, such as notes for each activity need to be neater, efficient and easy to understand or self-explanatory.

Overall, the experts were satisfied with the activities planned in the module as they fit the theoretical phase and the target group.

## **5. Discussion**

The MKKTF module's validity and reliability show that it can make a significant impact on the existing career counselling practices in government schools. MKKTF was developed to provide career counselling guidance for teachers, especially those who are not registered with KBPA, with a module that would help them gain skills and techniques to help students make correct career decisions based on their personalities and interests. The module also aims to help most counselling guidance teachers in Malaysian government schools were appointed without following the standards of the Malaysian Counsellors Board (LKM) and are not trained to provide support and guide the students in several aspects without involving sensitive issues (sexual abuse, trauma etc.).

Although the counselling teachers in the government schools lack the accreditation required, the MKKTF module should be able to bridge the knowledge and theoretical gaps between trained and untrained counsellors, enabling them to perform their tasks efficiently, preventing them from being overwhelmed, burned out or confused when fulfilling their responsibilities.

Apart from the module's benefitting school career counsellors, the findings also reinstated the importance of the trait-factors theory in the current academic landscape as it allows the counsellors to align with their students' traits with interest hence leading to higher job satisfaction and career success. In a volatile and demanding work environment, students must be mentally prepared to face unexpected challenges and set realistic and achievable career objectives with their counsellors' guidance.

## **6. Limitations and implications of the study**

This study is not without its limitations. The study solely focused on validating the MKKKTF module and content and submodules, phases, and activities suitability from the select panel of experts' perspective instead of testing the usability.

The study has significant theoretical and practical implications. Theoretically, the study shows that the trait-factors theory is still relevant in the 21<sup>st</sup> Century, where teachers, especially career counsellors need to

understand their students' interests and needs to match them to suitable career choices and academic pathways. Moreover, this study is the first of its kind to apply the trait-factors theory to career counsellors in Malaysia. Therefore, this study has provided a theoretical and practical framework as the basis of intervention using a module on career counselling guidance teachers to improve skills and knowledge specifically before their career counselling session with their respective clients.

From a practical perspective, MKKTF can develop the teachers' awareness, confidence and effort to improve further existing education systems and practices to develop the nation's future human capital. It is also time for schools to consider the special needs of career counselling for their career counselling teachers. MKKTF has an impact on the needs of counselling practitioners, namely career counselling guidance teachers, in applying it in career counseling sessions for school students. Career counselling guidance teachers are not only expected to understand the issues brought by students but also to design and implement student career development programs in schools systematically and effectively.

## **7. Recommendations for future career counselling modules**

The school is advised to introduce a career development course or club that focuses on aspects of self-understanding, understanding the working world, career selection, the behaviour of obtaining career information, making career decisions and career adjustment. Through these types of clubs, students will be guided by teachers as facilitators or mentors regularly. Through these courses or clubs, the MKKTF module can be used or adapted as part of the activities that students must complete before they move on to the next sub-module. When registering for this course, students are required to complete the instrument to identify their level of career interest and take the same instrument after finishing school to see the results' consistency before continuing their studies.

Next, counselling and career guidance services in each school have a big role in providing students with suitable counselling and career services, and an environment that supports their personality and soft skills development. Counselling practitioners, i.e. career counselling guidance teachers, can use MKKTF in career programs, whether implemented individually or in groups. It is recommended that career counselling guidance teachers use MKKTF for students to match them with their preferred field of specialisation.

## **8. Conclusion**

In conclusion, the career counselling-based trait and factor module (MKKTF) is expected to have a great influence in improving the development of career counsellors in government schools in Malaysia. Due to the lack of knowledge among career counsellors and the lack of tools and materials during the counselling session, this module is a suitable guide for a career counsellor. This module can give a clear understanding to motivate career counsellors to improve their skills and techniques when implementing career counselling programs in schools.

## **Author Contributions**

The module developed has been utilized by practitioners.

## **Conflict of Interest**

The authors declare no conflict of interest.

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## References

1. Hoff KA, Song QC, Wee CJM, Phan WMJ, Rounds J. Interest fit and job satisfaction: A systematic review and meta-analysis. *Journal of Vocational Behavior*. 2020;123(August):103503. Available from: <https://doi.org/10.1016/j.jvb.2020.103503>
2. Nurani GA. Factors Influencing Students' Career Maturity in Vocational and General High School. *International Journal of Recent Educational Research*. 2022;3(6):750–61. <https://doi.org/10.46245/ijorer.v3i6.265>
3. Ni J, Zhang J, Wang Y, Li D, Chen C. Relationship between career maturity, psychological separation, and occupational self-efficacy of postgraduates: the moderating effect of registered residence type. *BMC Psychology*. 2023;11(1):1–13. Available from: <https://doi.org/10.1186/s40359-023-01261-9>
4. Mat Rashid, A. & Bakar, A. R. Career development interventions implemented by secondary school counsellors in Malaysia. *The Journal of Global Business Management*, (2010); 6(2), 138 – 147
5. Mat Rashid, A., Bakar, A. R., Asimiran, S., & Loh, P.T.. Career development interventions in secondary schools in the state of Terengganu, Malaysia. *The European Journal of Social Sciences*, (2009); 8(1), pp. 62-67.
6. Mat Rashid A. Career Development interventions in technical and vocational schools in Malaysia. *The Journal of Human Resource and Adult Learning*. 2011 Dec 1;7(2):23.
7. Wilde, M. O., Park, D., & Lee, C. C. Training transformed school counsellors. In C. S. Clauss
8. Ehlers, Z. N. Serpell, & M. D. Weist (Eds.), (2013). *Handbook Of Culturally Responsive School Mental Health: Advancing Research, Training, Practice, and Policy*. 2011; (pp. 189–196). New York: Springer.
9. Azizah O, Siti Salina A. Counselling in Malaysia: Trends and Practice with the Malays. *International Journal of Business and Applied Social Science [Internet]*. 2015;1(1):1–10. Available from: [www.ijbassnet.com](http://www.ijbassnet.com)
10. Atan, NJMIA. A guidance and counselling model practised within Malaysian schools. *International Journal of Education and Research*, (2013);1(4), pp.1-12.
11. Suradi S. Masalah Perkhidmatan Bimbingan dan Kaunseling di Sekolah-Sekolah Menengah di Malaysia. *Jurnal PERKAMA*, 1992; 3&4, 100-119.
12. Suradi S. Tahap Pelaksanaan Perkhidmatan Bimbingan dan Kaunseling Di Sekolah Sekolah Menengah di Malaysia. *Jurnal PERKAMA*, 1994a ; 5, 1-40.
13. Suradi S. Prospek masa depan perkhidmatan bimbingan dan kaunseling di Malaysia, dalam Suradi Salim. *Perkhidmatan bimbingan dan kaunseling: Kajian keperluan, pelaksanaan dan prospek*. Selangor: Pustaka Akademik. 1994.
14. See, CM. School counselling and guidance in the Asia-Pacific region: Current issues and prospects. In *The 5th International Conference on Education Research*, Korea pada 21-22 Oktober 2004.
15. Sidek MN, Nordin K, Mohd YA, Shamsudin H & Halimatun HM. Status dan keberkesanan perkhidmatan bimbingan dan kaunseling di sekolah menengah di Semenanjung Malaysia. *Jurnal Penyelidikan Penyelidikan*, 2005; 7,143-166.
16. Johari T. Profesionalisme kaunselor sekolah rendah. *Malim*, 10, 159-181.2009
17. Wan Jaafar, W. M., Mohamed, O., Bakar, A. B., & Ahmad Tarmizi, R.. The influence of counselling self-efficacy towards trainee counsellor performance. *International Journal of Learning*, 2009;16(8), 247–260.
18. Bakar, A. R., Zakaria, N. S., & Mohamed, S. Malaysian counsellors' self-efficacy: Implication for career counselling. *International Journal of Business and Management*, 2011; 6(9), pp. 141.
19. Yusof R, Ishak NM, Salleh AM, Zahidi AM, Bakar AYA. Counselling self-efficacy (CSE) Among Malaysian School Counsellors. *Malaysian online J Couns*. 2017;3(2):73–86.
20. Ooi PB, Wan Jaafar WM Bin, Baba MB. Relationship Between Sources Of Counseling Self-Efficacy And Counseling Self-Efficacy Among Malaysian School Counselors. *Social Science Journal [Internet]*. 2018;55(3):369–76. Available from: <https://www.sciencedirect.com/science/article/pii/S0362331917300599>
21. Nilcs, S. G., & Harris-Bowlsbey, J. *Career development interventions in the 21st Century (4th Edition)*. Pearson.2013
22. Bacanlı, F.. Özelliik-faktör uyumlu kuramlar. In B.Yeşilyaprak (Ed.), *Mesleki rehberlik ve kariyer danışmanlığı kuramdan uygulamaya [Vocational guidance and career counseling from theory to practice ]* 2011; (pp. 89-126). Ankara: Pegem Akademi.
23. Sharf, R. S.. *Applying Career Development Theory to Counselling*. 2006 USA: Thomson Brooks/Cole.
24. Atli, A. The effects of trait-factor Theory-based career counselling sessions on the levels of career maturity and indecision of high school students. *Universal Journal of Educational Research*, 2016;4(8), pp. 1837-1847.

25. Mahmud, M.I., Noah, S.M. Ahmad, J. & Ahmad, W.M.W. Modul Kesiediaan Kerjaya Berdasarkan Teori Cognitive Information Processing (CIP). *Jurnal Kurikulum & Pengajaran Asia Pasifik* 2016; 4(3).
26. Parsons, F. *Choosing a Vocation*; Houghton Mifflin Co.: Boston, MA, USA, 1909
27. Sidek MN. *Perkembangan kerjaya: teori dan praktis*. Serdang: Penerbit Universiti Putra Malaysia. 2002
28. Hassan, H Hussain, M.; Niazi, A.; Hoshino, Y.; Azam, A.; Kazmi, A.S. Career Path Decisions and Sustainable Options. *Sustainability* 2022, 14, 10501. <https://doi.org/10.3390/su141710501>
29. Zakaria M, 2011. *Peranan teori dalam proses kaunseling*. Kuala Terengganu: Penerbit Universiti Malaysia Terengganu
30. Jamil MRM, Hashim ATM, Othman MS, Ahmad AM, Noh NM, Kamal MFM. Digital Pedagogy Policy in Technical and Vocational Education and Training (TVET) in Malaysia: Fuzzy Delphi Approach. *Journal of Technical Education and Training*. 2023;15(2):1–10.
31. Ciptono A, Setiyono S, Nurhidayati F, Vikaliana R. Fuzzy Delphi method in education: A mapping. *Journal of Physics: Conference Series* 2019;1360(1).
32. Hasim MA, Jabar J, Sufian A, Ibrahim NF, Khalid FA. Employing Fuzzy Delphi Techniques to Validate the Components and Contents of E-Learning Antecedents and Usage Behavior Towards E-Learning Performance. *European Journal of Educational Research*. 2023;12(1):467–80. <https://doi.org/10.12973/eu-jer.12.1.467>
33. Mohd, MK, Kaedah penyelidikan pendidikan. Edisi ke 4. Kuala Lumpur: Dewan Bahasa dan Pustaka. 2004.
34. Julie, C., *The Theory of Assessment: An Introduction*. London: Kogen Page Limited. 1995.
35. Abu BN. *Penilaian Afektif*. Kajang: Masa Enterprise. 1995.
36. Edward G. Carmines, Richard A. Zeller, *Reliability And Validity Assessment*. United States Of America: Sage Publication, Inc. 1979.
37. Jamaludin A. Sidek N. Pendekatan alternative dalam menentukan kesahan dan kebolehppercayaan modul program maju diri (PMD), Jabatan Pendidikan Selangor. *Jurnal PERKAMA*, 9, 2002.pp. 97-118.
38. Jamaludin A, Kesahan, kebolehppercayaan dan keberkesanan Modul Program Maju Diri ke atas motivasi pencapaian di kalangan pelajar sekolah menengah negeri Selangor," Ph.D. thesis, Universiti Putra Malaysia, Serdang, Selangor, 2002.
39. Russell, J. D. *Modular Instruction: A Guide to the Design, Selection, Utilization and Evaluation of Modular Materials*. New York, NY: Publishing Company. 1974
40. Sidek, MN, Jamaluddin, A *Pembinaan modul: Bagaimana membina modul latihan dan modul akademik*. Serdang: Penerbit Universiti Putra Malaysia. 2005