



Faculty of Cognitive Sciences and Human Development

**VALIDITY AND RELIABILITY OF THE MALAY VERSION OF MULTICULTURAL
SUPERVISION INVENTORY (MSI) AMONG REGISTERED COUNSELLORS IN MALAYSIA**

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VALIDITY AND RELIABILITY OF THE MALAY VERSION OF MULTICULTURAL
INVENTORY AMONG REGISTERED COUNSELLORS IN MALAYSIA

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ABSTRACT

This study aimed to specifically assess the psychometric properties, validity and reliability of the Malay version of the Multicultural Supervision Inventory (MSI) among registered counsellors in Malaysia. Given the diverse sociocultural landscape of the country, there is an urgent need for a culturally responsive tool to assess multicultural supervision competence. Using a quantitative research design, data were collected from 150 registered counsellors via online and offline platforms. Back-translation and content validation by subject matter experts ensured linguistic and conceptual equivalence, while psychometric analyses including Cronbach's alpha, split-half reliability and exploratory factor analysis (EFA) were used to examine internal consistency and factor structure. The results showed that the Malay version of the MSI had acceptable levels of content validity and internal consistency ($\alpha > 0.78$ for most subscales), indicating its suitability for use in Malaysian counselling settings. This study provides theoretical and practical implications for multicultural supervision, contributing to improved counsellor education, supervisory practice and policy development in Malaysia.

ABSTRAK

Kajian ini bertujuan untuk menilai sifat psikometrik secara khusus, kesahan dan kebolehpercayaan Inventori Penyeliaan Pelbagai Budaya (MSI) terjemahan Bahasa Melayu dalam kalangan kaunselor berdaftar di Malaysia. Memandangkan landskap sosiobudaya negara yang pelbagai, terdapat keperluan mendesak untuk alat responsif budaya untuk menilai kecekapan penyeliaan pelbagai budaya. Menggunakan reka bentuk penyelidikan kuantitatif, data telah dikumpul daripada 150 kaunselor berdaftar melalui platform dalam talian dan luar talian. Terjemahan belakang dan pengesahan kandungan oleh pakar perkara memastikan kesetaraan linguistik dan konseptual, manakala analisis psikometrik termasuk alpha Cronbach, kebolehpercayaan separuh separuh dan analisis faktor penerokaan (EFA) digunakan untuk memeriksa ketekalan dalaman dan struktur faktor. Keputusan menunjukkan bahawa versi Bahasa Melayu MSI mempunyai tahap kesahan kandungan dan ketekalan dalaman yang boleh diterima ($\alpha > 0.78$ untuk kebanyakan subskala), menunjukkan kesesuaiannya untuk digunakan dalam tetapan kaunseling Malaysia. Kajian ini memberikan implikasi teori dan praktikal untuk penyeliaan pelbagai budaya, menyumbang kepada pendidikan kaunselor yang dipertingkatkan, amalan penyeliaan dan pembangunan dasar di Malaysia

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CHAPTER 1

INTRODUCTION

1.0 Introduction

This chapter aims to provide a general overview of the research. It includes the statement of the problem, purpose of study, research objectives, research questions, the significance of the study, definitions of key terms, limitations and a summary.

1.1 Background of Study

Malaysia is a country characterized by a rich multicultural landscape, with a population comprised of Bumiputera (70.4%), Chinese (22.4%), Indian (6.5%), and other ethnic groups. This diversity requires not only counselors but also their supervisors to have strong multicultural competencies to provide effective guidance and supervision in counseling practice. Multicultural supervision is essential to foster ethical and culturally responsive counseling, support supervisor development, and ensure that therapeutic interventions are appropriate for clients from diverse cultural backgrounds (Vekaria et al. 2023)

The Multicultural Supervision Inventory (MSI) by Paul T.P Wong and Lilian C.J Woong 2000 is a recognized tool used to assess supervisors' multicultural competence in counseling settings. Although the MSI has demonstrated validity in Western contexts, its applicability in non-Western multicultural settings such as Malaysia has not been adequately explored. The lack of a validated Malay version of the MSI limits its applicability among Malaysian supervisors, many of whom are responsible for guiding counselors serving linguistically and culturally diverse clients. Without a culturally adapted and linguistically accessible instrument, there is a risk of inaccurate

assessment of supervisors' multicultural competence, which may hinder effective supervision and professional growth (Curtis-Boles et al., 2020)

Given the unique sociocultural environment of Malaysia, there is a clear need to assess the validity and reliability of the Malay version of the MSI. By doing this will ensure that the instrument accurately reflects the multicultural dynamics of the Malaysian supervision context and offers reliable insights into supervisor competence. This study aims to support the improvement of counselor supervision practices and improve the overall quality of mental health services, ultimately benefiting clients across the diverse Malaysian society.

1.2 Problem Statement

In the context of multicultural counseling, effective supervision plays a crucial role in ensuring competent cultural practices among counselors (Vacha-Haase et al., 2019). The Multicultural Supervision Inventory (MSI) is a robust tool developed to assess supervisors' competence in addressing multicultural issues during supervision. However, there is currently no validated Malay language version of the MSI adapted for use among registered counselors in Malaysia.

The lack of a psychometrically sound instrument in the national language hinders accurate evaluation and research of multicultural supervision practices in the Malaysian counseling context. Without ensuring the validity and reliability of the Malay version of the MSI, its use may produce inaccurate or misleading results, potentially compromising both training and supervision outcomes. Therefore, there is a critical need to examine the psychometric properties, particularly the construct validity, internal consistency reliability, and factor structure of the Malay translation of the MSI to ensure that it is a culturally appropriate and statistically reliable tool for assessing multicultural supervision in Malaysia.

1.3 Purpose of Study

The purpose of this study was to assess the validity and reliability of the Malay version of the Multicultural Supervision Inventory (MSI) among registered counselors in Malaysia. Specifically, this study aimed to assess the construct validity, internal consistency reliability, and factor structure of the translated instrument. Establishing the psychometric properties of the Malay version of the MSI is important to ensure that it is culturally appropriate and statistically robust for use in Malaysian counseling supervision settings. A validated instrument will support efforts to enhance multicultural competence in supervision, which is important in the diverse sociocultural

landscape of Malaysia (Anthonysamy et al., 2021). This study contributes to the development of effective and culturally sensitive counseling supervision practices in Malaysia.

1.4 Research Objective

The objectives for this study are:

1. To validate the Malay version of the Multicultural Supervision Inventory (MSI) among registered counsellors in Malaysia.
2. To evaluate the reliability of the Malay version of the Multicultural Supervision Inventory (MSI) among registered counsellors in Malaysia
3. To produce an acceptable Malay version of the Multicultural Supervision Inventory (MSI)

1.5 Research Question

The research questions for this study are:

1. Is the Malay version of Multicultural Supervision Inventory (MSI) valid among registered counsellors in Malaysia?
2. Is the Malay version of Multicultural Supervision Inventory (MSI) reliable among registered counsellors in Malaysia?
3. Is the Malay version of Multicultural Supervision Inventory (MSI) acceptable to be used among registered counsellors in Malaysia?

1.6 Significant

of Study

This study has significant value in advancing both the theoretical understanding and practical application of multicultural supervision in the Malaysian counseling context. Given Malaysia's diverse cultural and linguistic landscape, there is a critical need for culturally competent and responsive supervision practices. By validating the Malay version of the Multicultural Supervision Inventory (MSI), this research provides a linguistically and culturally robust psychometric instrument for use among registered counselors in Malaysia. Such an instrument allows for more accurate assessment of multicultural competence in supervision, thereby supporting efforts to increase cultural sensitivity among counseling professionals (Sahu et al., 2024).

In addition, this study contributes to the localization of psychological instruments, which are often adapted from Western contexts and may not be fully aligned with the Malaysian cultural framework. The findings will also benefit counselor education and training programs, as the validated MSI can be used to monitor and improve supervision practices in multicultural environments. In addition, the results of this study may support policy formulation and contribute to standards set by professional bodies such as the Malaysian Counselor Board (Lembaga Kaunselor Malaysia), particularly in areas related to multicultural supervision and counselor accreditation. Overall, this study addresses a major gap in counseling supervision tools in Malaysia and fosters the development of more inclusive, culturally sensitive, and effective supervision practices.

1.7 Definition of Terms

In the context of this study, several key terms are defined to ensure clarity and consistency. Validity refers to the extent to which an instrument accurately measures what it is intended to measure (Creswell & Creswell, 2018). In this research, validity relates to whether the Malay version of the Multicultural Supervision Inventory (MSI) effectively reflects the construct of multicultural supervision competence among registered counselors. Reliability, on the other hand, refers to the consistency of measurement across items in the instrument. This study specifically focused on internal consistency reliability, which determines the extent to which items in the MSI produce consistent results (Fraenkel, Wallen, & Hyun, 2012).

The Multicultural Supervision Inventory (MSI) is a self-report instrument originally developed to assess supervisors' multicultural competence during clinical supervision. It encompasses dimensions such as cultural awareness, knowledge, and intervention skills (Sue et al., 2019). The Malay version of the MSI is a translated and culturally adapted version of the original instrument, designed to be appropriate for Malay-speaking professionals in Malaysian counseling.

Registered counsellors refer to individuals who are officially recognized by the Malaysian Counsellors Board (Lembaga Kaunselor Malaysia) and are authorized to provide professional counselling services in the country. Finally, psychometric properties encompass the statistical quality of the instrument, including its validity, reliability and factor structure. This study specifically aimed to assess the psychometric robustness of the Malay translation of the MSI to ensure its effectiveness as a culturally appropriate tool for use in multicultural supervision in

Malaysia.

1.8 Limitations

This study has several limitations that may affect the interpretation and generalizability of its findings. First, the sample was limited to registered counselors in Malaysia, which may not be fully representative of the broader population of counselors, including trainees or unregistered practitioners. Therefore, the findings may have limited generalizability beyond this specific group (Degtiar & Rose, 2023). Second, as the study relied on self-reported data using a structured questionnaire, there is the potential for response bias, including social desirability bias, where participants may respond in a way they believe is socially acceptable rather than being honest (Creswell & Creswell, 2018).

Another limitation lies in the process of translation and cultural adaptation of the Multicultural Supervision Inventory (MSI). Although careful steps were taken to ensure linguistic and conceptual equivalence, certain cultural nuances or contextual meanings may still not be fully captured, potentially compromising the construct validity of the instrument (DeHaven et al., 2020). In addition, the study only focused on internal consistency and construct validity. Other forms of validity such as criterion-related validity or test-retest reliability were not assessed due to time and resource constraints. Finally, this study used a purely quantitative approach. While this allowed for statistical analysis of psychometric properties, it did not provide a deeper qualitative picture of the lived experiences and cultural interpretations of multicultural supervision among Malaysian counselors, which could have enriched the findings (Creswell & Creswell, 2018).

1.9 Summary

In conclusion, This study aimed to examine the validity and reliability of the Malay version of the Multicultural Supervision Inventory (MSI) among registered counsellors in Malaysia. The MSI is an instrument designed to assess supervisors' multicultural competence in the context of clinical supervision. Given the multicultural nature of Malaysian society, it is important that the tools used in counselling supervision are culturally relevant and psychometrically sound. Therefore, this research involved translating and adapting the MSI into Malay and assessing its psychometric properties, including construct validity and internal consistency reliability.

This study was motivated by the need for a culturally appropriate assessment tool to support effective multicultural supervision practices in the Malaysian counseling profession. Using quantitative methods, data will be collected from a sample of registered counselors and analyzed to determine whether the Malay version of the MSI is a valid and reliable instrument. These findings are expected to benefit counselor education programs, supervisory practices, and policy development by providing a standardized tool to assess multicultural supervision competence. Ultimately, this study contributes to the enhancement of culturally responsive supervision practices in the counseling field in Malaysia.

CHAPTER 2

LITERATURE REVIEW

2.0 Introduction

This chapter contains the researcher's presentation and comparison of relevant literature, articles or journals from previous studies. The researcher will also provide explanations of the conceptual and theoretical frameworks in this chapter.

2.1 The Multicultural Supervision Inventory (MSI)

This study was motivated by the need for a culturally appropriate assessment tool to support effective multicultural supervision practices in the Malaysian counseling profession. Using quantitative methods, data will be collected from a sample of registered counselors and analyzed to determine whether the Malay version of the MSI is a valid and reliable instrument. These findings are expected to benefit counselor education programs, supervisory practices, and policy development by providing a standardized tool to assess multicultural supervision competence. Ultimately, this study contributes to the enhancement of culturally responsive supervision practices in the counseling field in Malaysia.

The Multicultural Supervision Inventory (MSI), developed by Dr. Lilian C. J. Wong and Dr. Paul T. P. Wong (2000), is a psychometric instrument designed to assess the multicultural competence of clinical supervisors. It measures dimensions such as cultural awareness, knowledge, sensitivity, and relational aspects of the supervision process. Previous studies in Western contexts have shown that the MSI has good internal consistency and construct validity, supporting its usefulness in supervision research and training. However, direct application of the MSI in Malaysia may be problematic without cultural and linguistic adaptation, as instruments developed in Western contexts may not reflect the values, communication styles, and relationship dynamics found in

Asian cultures.

The need for a validated Malay version of the MSI is particularly important given that Malay is the national language and is widely used among professional counselors in Malaysia. Translating and validating the instrument requires not only linguistic translation but also cultural adaptation to ensure that the items are conceptually relevant and retain their original meaning (DeHaven et al., 2020). Research on instrument translation emphasizes the importance of assessing psychometric properties such as validity (the extent to which the instrument measures what it claims to measure) and reliability (the consistency of the instrument in measuring the construct over time or across items).

Previous local studies have investigated multicultural counseling competence among Malaysian counselors (Teoh et al., 2020), but few have focused specifically on supervision, which is a distinct yet important domain. Furthermore, most existing tools used to measure multicultural supervision in Malaysia are informally adapted or lack rigorous validation processes. This highlights a research gap, justifying the need to systematically validate the Malay version of the MSI for registered counselors. In doing so, this study aims to support culturally competent supervision practices in Malaysia, inform training programs, and provide researchers and policymakers with robust tools to assess multicultural supervision competence.

2.2 Past Researcher on The Reliability and Validity of Translated Multicultural Course Racial Experiences Inventory (MCREI) on the Sample of Malaysian Counsellor Trainees.

The article "Reliability and Validity of Translated Multicultural Course Racial Experiences Inventory (MCREI) on the Sample of Malaysian Counsellor Trainees" emphasizes the critical role of multicultural experiences in the training of counsellors, highlighting their necessity for developing cultural competence and sensitivity in counselling practices. Donohue (2020) argues that individuals who lack exposure to diverse cultures may inadvertently adopt a narrow view of their own cultural norms, which can lead to culturally insensitive practices that negatively impact clients. The review references Contact Theory (Allport, 1954), which suggests that interactions among individuals from different cultural backgrounds can foster positive outcomes, such as reduced prejudice and increased empathy. Leung et al. (2008) expand on this by defining multicultural experiences as both direct and indirect encounters with diverse cultures, which enhance cognitive flexibility and empathy (Narvaez & Hill, 2010). Despite the recognized importance of multicultural training, the literature reveals a lack of specific instruments designed to measure multicultural experiences within academic settings, as existing tools often focus on cultural immersion or personal experiences rather than structured academic interactions (Pieterse et al., 2016). The Multicultural Course Racial Experiences Inventory (MCREI), developed to fill this gap, specifically measures the multicultural experiences of trainees during their counselling courses (Pieterse et al., 2016). The review underscores the necessity for reliable and valid instruments like the MCREI to effectively assess multicultural experiences, thereby contributing to the development of multicultural competencies among counsellor trainees (Harun et al., 2021).

The findings of the study confirm the factor structure, reliability, and validity of the Malay version of the MCREI, indicating that it can be effectively utilized by counsellor trainees across various demographics, thus enhancing the understanding of multicultural counselling competence development in diverse cultural contexts.

2.3 Past Researcher on The Multicultural Counseling Inventory: Validity and Applications in Multicultural Training by Gargi Roysircar Sodowsky

The article of The Multicultural Counseling Inventory: Validity and Applications in Multicultural Training by Gargi Roysircar Sodowsky provides a comprehensive overview of the development and significance of multicultural counseling competencies. It emphasizes the increasing recognition of society's multicultural nature, particularly in the United States, and underscores the necessity for counseling professionals to develop competencies that address the diverse cultural, racial, and socioeconomic backgrounds of clients. Professional organizations like the American Psychological Association (APA) and the American Counseling Association (ACA) have established ethical standards mandating multicultural training (MCT) in counselor education. Philosophically, MCT is rooted in the ideology of respecting and understanding cultural differences, highlighting the ethical responsibility of counselors to ensure their competence in multicultural contexts, as outlined in APA and ACA standards. The review references foundational frameworks by Sue et al. (1982) and Sue, Arredondo, and McDavis (1992), which identify essential competencies for culturally skilled counselors, including skills, cultural self-awareness, knowledge of cultural diversity, and the ability to develop appropriate intervention strategies.

To measure these competencies, the Multicultural Counseling Inventory (MCI) was developed as a self-report tool. The literature details the empirical methods used in its development, including factor analyses that identified four key dimensions: Multicultural Counseling Skills, Multicultural Awareness, Multicultural Counseling Knowledge, and

Multicultural Counseling Relationship. The psychometric properties of the Multicultural Competency Inventory (MCI), including its validity and reliability, are discussed, with initial studies demonstrating its effectiveness in measuring competencies expected from multicultural training and its utility in evaluating counseling programs (Sue et al., 1992; Vera & Speight, 2003). The review highlights the impact of multicultural training, citing studies that show significant improvements in perceived competencies, particularly in skills and awareness, among counseling students who undergo such training (Arredondo et al., 1996; Constantine, 2001). Experiential learning and self-reflexivity are emphasized as crucial in developing these competencies, with research indicating that these factors are key to enhancing counselors' cultural awareness and their ability to apply culturally appropriate interventions (Pedersen, 2002; Sue & Sue, 2016).

Furthermore, the MCI's relationships with other multicultural competency instruments are explored, indicating its broader applicability in evaluating multicultural training processes and outcomes. Studies have shown that the MCI correlates well with other established measures of multicultural competence, such as the *Multicultural Counseling Inventory* (Sue et al., 1992) and the *Cultural Competence Assessment Tool* (Sodowsky et al., 1994), suggesting that it is a reliable tool for assessing the competencies developed through multicultural education. These relationships underscore the MCI's utility in measuring a range of competencies, including cultural awareness, sensitivity, and the ability to engage in culturally relevant counseling practices (Pedersen, 2002; Arredondo et al., 1996).

The review concludes with a call for ongoing research to further validate the MCI and explore its relationships with variables such as racial identity attitudes and social desirability, which may influence the reporting and development of multicultural competencies. Investigating these relationships could enhance the understanding of how multicultural competencies are shaped

by both personal and contextual factors and contribute to more effective training strategies (Constantine, 2001; Sue & Sue, 2016). Understanding the influence of racial identity attitudes, for example, may reveal how counselors' own cultural backgrounds and biases impact their learning and application of multicultural skills. Similarly, exploring the role of social desirability may help identify potential biases in self-reported measures of competence, allowing for more accurate assessments (Vera & Speight, 2003).

Overall, the literature establishes the MCI as a vital tool for assessing and promoting multicultural competencies in counseling, aligning with ethical standards and the evolving needs of a diverse society (Sue et al., 1992; Arredondo et al., 1996). As counseling continues to serve a culturally diverse population, the MCI offers valuable insights into the effectiveness of multicultural training programs and provides a framework for improving the cultural competence of future counsellor.

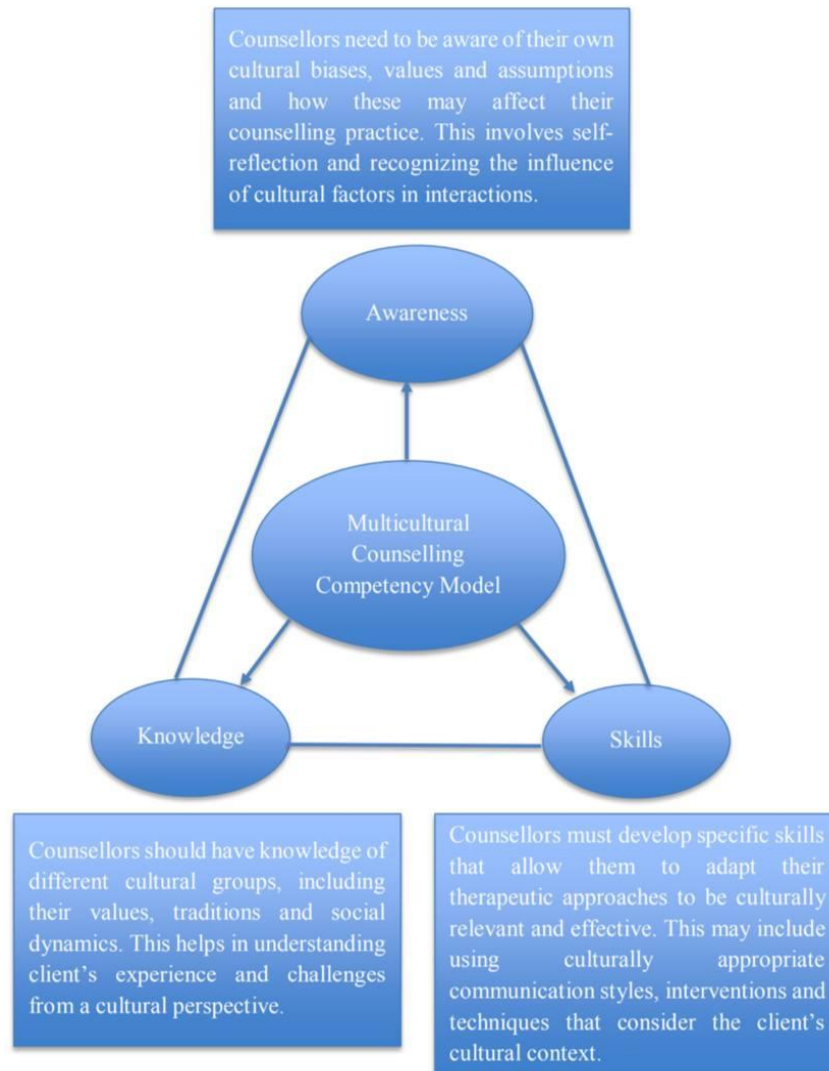
2.4 Past Researcher on The Initial development of the Multicultural Supervision Inventory : Exploring Vaidity and Reliability

The literature reviewed in this article highlights the growing recognition of the importance of multicultural competence in counseling supervision. The development of tools like the Multicultural Supervision Inventory (MSI) stems from prior research emphasizing the need for supervisors to effectively address cultural, racial, and social diversity within supervisory relationships. Several studies (e.g., Fukuyama, 1994; Constantine, 1997; Duan & Roehlke, 2001) underscore that multicultural discussions during supervision enhance supervisee satisfaction, working alliance, and overall supervisory effectiveness.

However, existing literature also points out challenges, such as a lack of initiation and limited frequency of multicultural discussions, often compounded by social desirability biases

that may lead supervisors and supervisees to overestimate their cultural competence or engagement. The complexity of defining and measuring multicultural competence broadly encompassing race, ethnicity, gender, sexual orientation, class, religion, and physical ability is acknowledged, emphasizing the multifaceted nature of cultural considerations in supervision.

The reviewed research also indicates a need for instruments that capture both supervisory and supervisee perspectives, recognizing that perceptions of cultural competence and cultural interactions can differ between parties. The MSI aims to fill this gap by providing a dual-version measure that considers the supervisory relationship and addresses social desirability concerns. Overall, the literature supports the notion that deliberate focus on multicultural issues in supervision can improve training outcomes and foster more culturally responsive counselors. The current study advances this field by developing and validating measures to assess these critical dimensions, aligning with the broader movement towards culturally competent counseling practices and effective supervision.



(SUE ET AL. 1982)

Figure 1: Theoretical Framework on the Validity and Reliability of the Malay Version of Multicultural Inventory among Registered Counsellors in Malaysia

2.5 Theoretical Framework

The theoretical framework for the study, "Validity and Reliability of the Malay Version of the Multicultural Inventory Among Registered Counselors in Malaysia," is based on the main theory of multicultural competence and psychometric assessment. Multicultural competence refers to the counselor's ability to work effectively with clients from various cultural backgrounds, a critical skill in Malaysia's multicultural society. This study is taken from a basic model such as Sue et al.'s Multicultural Counseling Competency Model. (1982), who emphasized the importance of awareness, knowledge, and skills in counseling practice. Given Malaysia's diverse cultural landscape, counselors must demonstrate the ability to effectively navigate cultural differences, making the availability of reliable and valid instruments to measure these competencies essential.

This study also incorporates psychometric theory to assess the validity and reliability of translated instruments. Validity, defined as the degree to which an instrument measures what it purports to measure, is explored through various aspects, including content, construct and criterion validity, guided by frameworks such as Messick's Integrative Validity Theory. Reliability, referring to the consistency and stability of measurement, is analyzed through techniques such as internal consistency (eg, Cronbach's alpha) and test-retest reliability, based on Classical Test Theory (CTT). These theories ensure that the Malay version of the Multicultural Inventory maintains its validity and accuracy in the Malaysian context.

Additionally, the adaptation and translation of the Multicultural Inventory is guided by the International Testing Commission (ITC) Guidelines. This emphasizes maintaining semantic, experiential and conceptual equivalence during translation to ensure cultural appropriateness of the instrument. This is further supported by cultural adaptation theories, such as the Herdman, Fox-Rushby, and Badia models, which highlight the importance of achieving cross-cultural equivalence in psychometric instruments. The original Multicultural Inventory, based on the Multicultural Counseling and Therapy (MCT) framework by Sue & Sue (1990), provides a theoretical basis for assessing cultural awareness, knowledge and skills. The Malay adaptation addresses the need for a culturally relevant tool that aligns with Malaysian professional and ethical standards for registered counsellors.

Finally, this framework considers the regulatory context of counseling in Malaysia, particularly the guidelines set by the Malaysian Council of Counselors (Malaysian Counsellors Board), which emphasize the importance of cultural competence in professional practice. By combining multicultural competence theory, psychometric assessment, and cultural adaptation, this study aims to contribute to the field by ensuring that the Malay version of the Multicultural Inventory is valid and reliable for use among registered counselors in Malaysia.

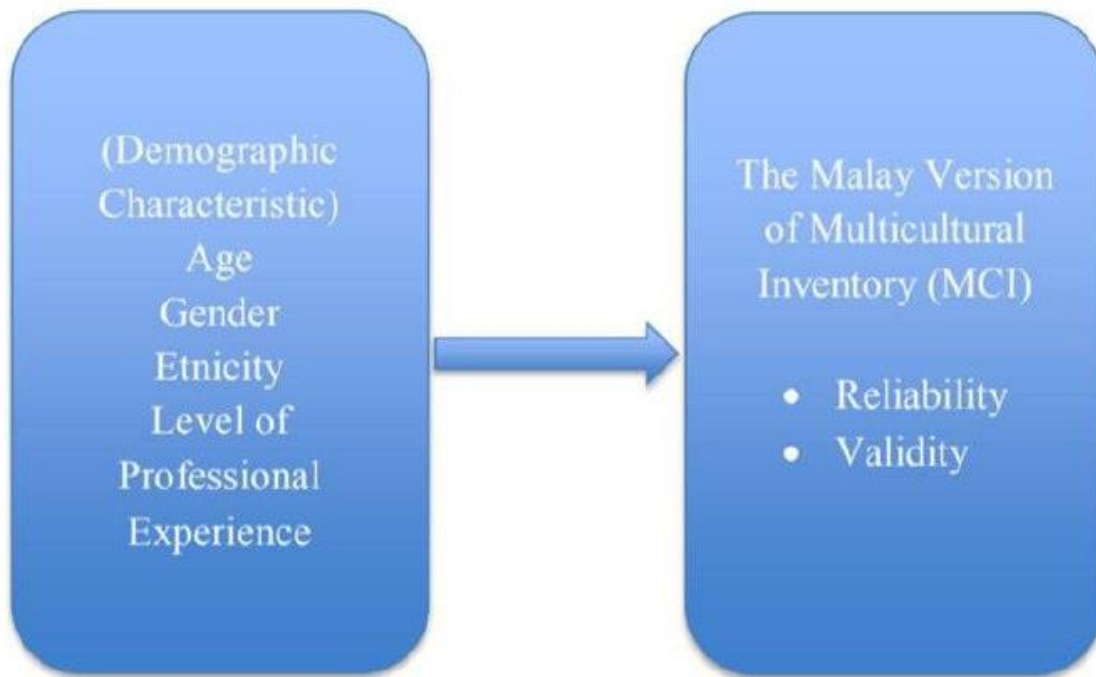


Figure 2: Conceptual Framework on the Validity and Reliability of the Malay Version of Multicultural Inventory among Registered Counsellor in Malaysia

2.6 Conceptual Framework

The conceptual framework of the study on "Validity and Reliability of the Malay Version of the Multicultural Supervision Inventory (MSI) Among Registered Counselors in Malaysia" centers around the relationship between multicultural competence, the instrument (MSI), and the process of validity and reliability testing. Multicultural competence is defined as the attitudes, knowledge, and skills needed to effectively counsel individuals from diverse cultural backgrounds. This dimension is assessed by the MCI, which measures counselors' sensitivity to cultural differences (attitudes), their understanding of cultural influences (knowledge), and their ability to use culturally appropriate interventions (skills).

This study emphasizes validity, which refers to the extent to which the Malay translation MCI accurately measures multicultural competence in the Malaysian context. Validity includes subcomponents such as content validity, which ensures that the item represents the full domain of multicultural competence; construct validity, which verifies alignment with a theoretical framework; and criterion-related validity, which examines correlations with established benchmarks. Additionally, reliability is a key focus, referring to the consistency and stability of MCI results over time and across applications. This involves testing internal consistency, which assesses the consistency of items, and test-retest reliability, which measures the stability of results over repeated applications.

The Malay version of the MCI was developed through a rigorous cultural adaptation process that included translation, back-translation, expert review and pilot testing. This process ensures that the tool is linguistically and culturally relevant to Malaysia's unique multicultural society. The target population for this study is registered counselors in Malaysia, licensed by the Malaysian Counselors Board and working in a diverse cultural landscape including Malay, Chinese, Indian and indigenous communities.

CHAPTER 3

RESEARCH METHODOLOGY

3.0 Introduction

This chapter contains the research methodology such as research design, sample size, sampling techniques, back translation, procedure of data collection and data analysis, validity testing and ethical consideration.

3.1 Research Design

This study will use a quantitative approach using a cross-sectional survey design to assess the psychometric properties of the Malay Multicultural Supervision Inventory (MSI) among registered counselors in Malaysia. This method is well suited for collecting quantitative data on multicultural competence from a diverse group of participants, allowing for the identification of patterns and relationships in the data (Creswell & Creswell, 2018).

3.2 Population

The target population for this study consists of registered counselors in Malaysia who are licensed by the (Counselor Board of Malaysia). These counselors must meet the necessary qualifications and adhere to professional standards to practice legally in this country (Malaysian Counselors Association, 2020). This population is particularly relevant because multicultural competence is important for counselors working with diverse populations in Malaysia, a multi-ethnic country with a rich cultural tapestry (Sue et al., 1992). This study aims to assess the extent to which the Bahasa Melayu version of the inventory can measure the multicultural competence of these professionals, which includes cultural awareness, sensitivity, and the ability to engage with clients from various backgrounds (Sodowsky et al., 1994).

3.3 Sample and Sampling Technique

3.3.1 Sample Size

This study aims to recruit at least 250 respondents, a sample size sufficient for psychometric evaluation such as exploratory factor analysis and validation, as recommended in the methodological literature (Tabachnick & Fidell, 2019). The determination of this sample size is important for the study's ability to generate reliable and generalizable results regarding the psychometric properties of the Malay MSI but the researcher can recruit only 150 respondents due to time constraints and lack of respondents willing to fill out.

3.3.2 Sampling Technique

A simple random sampling technique will be used to select registered counsellors in Malaysia to ensure that each individual has an equal opportunity to be included in the study on the validity and reliability of the Malay version of the Multicultural Supervision Inventory (MSI).

3.4 Back Translation

The translation process to develop the Malay version of the Multicultural Supervision Inventory (MSI) will follow standard translation protocols, such as forward-backward translation. This method ensures linguistic accuracy by having the instrument translated from the original language into Malay and then independently translated back into the original language by a different translator. This iterative process helps identify and resolve discrepancies, reducing the risk of cultural misinterpretation (Brislin, 1970). In addition, a team of bilingual experts with specializations in counseling and multicultural psychology will review the translation to ensure consistency, cultural relevance and conceptual equivalence across the two versions.

Following the translation, a pre-test phase will be conducted involving a small group of registered counselors in Malaysia. This pilot test aims to assess the clarity, comprehensibility, and cultural appropriateness of each item in the Malay Language MSI. Feedback from participants will be systematically collected and used to refine the instrument, ensuring that it is understandable and contextually relevant for the target population (Beaton et al., 2000). This rigorous process increases the validity and reliability of the translation instrument, aligning it closely with the needs and expectations of the intended user.

3.5 Pilot Test

A pilot test was conducted to assess the internal consistency reliability of the instrument, focusing on four main constructs: Attitudes & Beliefs, Knowledge & Understanding, Skills & Practices, and Relationships. Reliability was measured using Cronbach's Alpha for each construct.

For the Attitudes & Beliefs construct, which consists of 15 items, the reliability coefficient was 0.499. This value is considered low, indicating that the items in this section may be less consistent and may require revision, such as restating or removing problematic items. In contrast, the Knowledge & Understanding construct, with 9 items, achieved a Cronbach's Alpha of 0.847, suggesting a high level of internal consistency and that the items can measure the intended construct. Similarly, the Skills & Practices construct, which includes 23 items, recorded a high reliability value of 0.839, indicating strong internal consistency between items. The Relationship construct, which consists of 19 items, showed the highest reliability with an alpha coefficient of 0.865, reflecting excellent internal consistency and measurement stability.

Overall, three of the four constructs showed high reliability based on pilot test results. However, the Attitudes & Beliefs construct may require further refinement before being used in a main study to ensure its effectiveness and consistency in measuring the intended dimension.

Item	N of Item	Pilot Test	Real Data
Attitudes & Beliefs	15	0.499	0.695
Knowledge & Understanding	9	0.847	0.822
Skills & Practices	23	0.839	0.786
Relationship	19	0.865	0.813

Table 1 Comparison Reliability of Instrument in Pilot Test and Real Data

3.6 Procedures of Data Collection

The administration of the Malay Multicultural Supervision Inventory (MSI) will be conducted through online and in-person methods to maximize accessibility and response rates. The survey will be distributed through online platforms, such as email and secure survey platforms, to reach a wide population of registered counselors across Malaysia. Additionally, in-person distribution may occur during professional workshops or seminars to capture responses from participants who prefer face-to-face engagement. This dual approach is designed to increase participation and reduce potential barriers, such as geographic or technological limitations (Nguyen et al., 2021).

Prior to participation, all individuals will be provided with a comprehensive informed consent form, clearly outlining the study objectives, procedures, confidentiality measures, and their rights as participants. The consent process will emphasize that participation is voluntary, and respondents can withdraw at any time without penalty. This step ensures ethical compliance and fosters trust between researchers and participants, in line with established ethical guidelines for research involving human subjects (World Medical Association, 2013).

3.7 Procedure of Data Analysis

Demographic characteristics of the sample will be summarized using descriptive statistics to provide a clear picture of the participants. Key variables such as age, gender, ethnicity, race, religion, level of education will be analyzed and reported using measures of central tendency (eg, mean, median) and dispersion (eg, standard deviation, range). Frequency distributions and percentages will be used to describe categorical variables. This summary will ensure a comprehensive understanding of the diversity of the sample and its representativeness of the wider population of registered counselors in Malaysia (Creswell & Creswell, 2018).

The internal consistency reliability of the Malay version of the Multicultural Monitoring Inventory (MSI) will be assessed using two complementary methods: Cronbach's alpha reliability and split-half reliability. Cronbach's alpha is a widely recognized measure of internal consistency, where a value of $\alpha > 0.80$ is considered to indicate satisfactory reliability, indicating that items consistently measure the same underlying construct (Nunnally & Bernstein, 1994). In addition, split-half reliability will be calculated by dividing the instrument into two equivalent parts and correlating the scores of the two parts to assess consistency. The high correlation coefficient between the two parts further supports the internal consistency of the scale. This reliability assessment is in line with standard psychometric practices, ensuring that the instrument produces reliable and reproducible results across different study populations.

3.8 Validity Testing

To assess the construct validity of the Malay Multicultural Supervision Inventory (MSI), a two-step process will be used. First, Exploratory Factor Analysis (EFA) will be conducted to identify the underlying factor structure of the instrument. This involves examining the correlation patterns between items to determine how they cluster into latent dimensions of multicultural competence. Subsequently, content validity will be examined using the formula proposed by Sidek and Jamaludin (2005), which involves calculating the Content Validity Index (CVI) based on expert evaluation. This method ensures that each item is assessed for its relevance and representativeness in measuring the intended construct, thereby strengthening the overall validity of the instrument.

Feedback from experts in the field of counseling and multicultural competence will be sought to assess the relevance, clarity and representativeness of each item in the Bahasa Melayu MSI. Experts will assess whether the items adequately capture the dimensions of multicultural competence as defined by theoretical and practical standards. Their input will be systematically analyzed to refine the instrument, ensuring it aligns with the cultural and professional context of Malaysian counselors (DeHaven et al., 2020)

3.9 Ethical Consideration

Before starting the study, approval will be sought from the institutional ethics review board to ensure compliance with ethical standards in psychological research and counseling. This process will involve a thorough review of the study design, procedures, and potential risks to participants, ensuring adherence to principles such as beneficence, respect for autonomy, and fairness as outlined in ethical research guidelines (American Psychological Association, 2017; World Medical Association, 2013).

Steps will be taken to maintain the confidentiality of all participants. Personal identifiers will be anonymized or stored securely and data will only be accessed by authorized members of the research team. Participants will be informed that their answers will be used solely for research purposes and will remain confidential. Additionally, the study will emphasize the voluntary nature of participation, clearly stating that participants have the right to withdraw at any time without any consequences or having to provide reasons. These steps are designed to foster trust, minimize potential risks, and uphold the highest ethical standards throughout the research process.

CHAPTER 4

RESEARCH FINDINGS

4.0 Introduction

This chapter presents the findings of the study on the validity and reliability of the Malay version of the Multicultural Supervision Inventory (MSI) among registered counsellors in Malaysia. The analysis includes descriptive statistics, validity testing through Formula Sidek and exploratory factor analysis (EFA), and reliability testing using Cronbach's alpha and Split Half Reliability. The results aim to determine whether the translated instrument is both psychometrically sound and culturally appropriate for use in the Malaysian counselling context.

4.1 Descriptive Statistic

4.1.1 Descriptive Analysis on the Demographic Information

A total of 150 registered counsellors participated in this study. In terms of gender, the sample consisted of 98 females (65.3%) and 52 males (34.7%), indicating that female counsellors constituted the majority of the respondents. In terms of age, the majority of participants were between 31 and 40 years old (55.3%), followed by those aged 25 to 30 (26.7%), 41 to 50 (14.7%), and 51 years and above (3.3%). This indicates that most respondents were in the early to mid-stage of their counselling careers. In terms of religion, most participants identified as Muslim (68%), while the others reported being Christian (30%), Hindu (1.3%), and Buddhist (0.7%). The ethnic backgrounds of the respondents were also diverse. The majority are Malay (63.3%), followed by Bidayuh (15.3%), Iban (12%), Chinese (2%), Sabah Bumiputera (2%), Melanau (1.3%), Indian (0.7%), and Bugis (0.7%).

In terms of educational qualifications, 62% of respondents hold a Bachelor's degree, 37.3% have a Master's degree, and only 0.7% have a Ph.D. Employment settings vary, with most respondents working in schools (40%), followed by those in higher learning institutions (27.3%), government agencies (22.7%), private agencies (6%), non-governmental organizations (1.3%), clinics (1.3%), voluntary settings (0.7%),

and statutory bodies (0.7%).

In terms of work experience, the majority of respondents had between 1 and 3 years of service (52%), followed by those with 4 to 6 years (24%), 7 to 10 years (8.7%), more than 10 years (8%), and less than 1 year (7.3%). Overall, demographic data showed a dominance of young to middle-aged female counselors with early career experience, working primarily in educational settings and holding at least a Bachelor's degree.

Descriptive Information	Frequency (f)	Percentage (%)
Gender		
Male	52	34.7
Female	98	65.3
Total	150	100
Age of Registered Counsellors		
25-30	40	26.7
31-40	83	55.3
41-50	22	14.7
51 and above	4	3.3
Total	150	100
Religion		
Islam	102	68
Christian	45	30
Hindu	2	1.3
Buddha	1	0.7
Total	150	100
Race		
Malay	95	63.3
Chinese	3	2
India	1	0.7
Iban	18	12
Bidayuh	23	15.3
Bumiputera Sabah	3	2

Melanau	2	1.3
Bugis	1	0.7
Total	150	100
Level of Study		
Degree	93	62
Master	56	37.3
PHD	1	0.7
Total	150	100
Service Setting		
School	60	40
IPT	41	27.3
Government Agensi	34	22.7
Private Agensi	9	6
NGO	2	1.3
Clinic	2	1.3
Volunteer	1	0.7
Statutory Body	1	0.7
Total	150	100
Length of Service		
Less than 1 year	11	7.3
1-3 year	78	52
4-6 year	36	24
7-10 year	13	8.7
More than 10 year	12	8
Total	150	100

Table 2 Descriptive information on the demography respondents

4.1.2 Description of Means and Standard Deviations of Independent and Dependent Variables.

Means and standard deviations for the demographic and contextual variables collected in the study. A total of 150 participants were involved.

Participants had a mean age category of 1.95 (SD = 0.740), indicating a relatively young demographic. Gender was coded with a mean of 1.65 (SD = 0.478), suggesting a nearly balanced representation. The sample was predominantly from one religious group (M = 1.35, SD = 0.543), and the racial composition showed more variability (M = 2.56, SD = 2.454), reflecting diversity within the sample.

Regarding academic and professional context, most participants were at the same level of study M = 1.39, SD = 0.502). As for their professional backgrounds, participants indicated moderate diversity in service setting (M = 2.11, SD = 1.267) and period of service (M = 2.58, SD = 1.025), which may reflect a mix of early-career and more experienced individuals.

Information	N	Mean (M)	Standard Deviation (SD)
Gender	150	1.65	0.478
Age	150	1.95	0.740
Religion	150	1.35	0.543
Race	150	2.56	2.454
Level of Study	150	1.39	0.502
Setting Service	150	2.11	1.267
Period of Service	150	2.58	1.025

Table 3 Descriptive information on Means and Standard Deviations for Independent Variables

4.2 Inferential Analysis Based on Research Objective

4.2.1 To validate the Malay Version of the Multicultural Supervision Inventory (MSI) among registered counsellors in Malaysia.

4.2.2 Back Translation

The researcher conducted a back-translation process with four language teachers from Sekolah Kebangsaan Meranek, Kota Samarahan. The group comprised two Malay language teachers and two English language teachers. The back-translation process was carried out simultaneously in a collaborative session, where both Malay and English translations were discussed and refined in real time. The Malay language teachers involved were Madam Dayang Hagijah binti Abang Sernan and Madam Sorpiani binti Dewa, while the English language teachers were Madam Norhazlifah binti Abdul Hamid and Madam Jacinta Sherolyn Thomas. All four teachers contributed to ensuring the linguistic accuracy and conceptual equivalence of the translated instrument.

Total Item	Subscale	Item
66 item	Attitudes & Beliefs	15
	Knowledge & Understanding	9
	Skills & Practices	23
	Relationship	19

Table 4 Subscale Item

Bil	Item	BM 1	BM 2	BI 1	BI 2
1.	Menunjukkan keterbukaan dan rasa hormat terhadap penyeliaan individu yang berbeza budaya	8	10	8	8
2.	Menyedari batasan model kaunseling dan pendekatan berdasarkan andaian Barat dalam bekerja dengan individu daripada budaya lain.	8	10	9	8
3.	Menyedari bahawa sesuatu yang dianggap tidak sesuai oleh budaya majority mungkin diterima dalam budaya minority	8	9	8	8
4.	Menolak kepentingan aspek budaya dalam proses kaunseling dan penyeliaan	8	10	8	8
5.	Tidak mengambil kira latar belakang demografi penyelia yang diselia	9	9	9	9
6.	Pernah membuat kenyataan yang mencerminkan sikap perkauman	5	10	10	5
7.	Tidak menyedari kewujudan rasisme yang tidak disengajakan	6	9	9	6
8.	Tidak menyedari kecenderungan budaya sendiri yang tersirat dalam penyeliaan dan kaunseling	5	9	9	5
9.	Tidak menyedari batasan diri dalam	5	10	9	5

	bekerja dengan penyelia atau klien daripada budaya berbeza				
10.	Menghormati pandangan hidup, kepercayaan agama dan nilai-nilai budaya penyelia yang diselia	8	9	9	8
11.	Tidak pernah menyatakan bahawa kaum merupakan factor penting dalam kaunseling dan penyeliaan	5	10	10	5
12.	Percaya bahawa model dan pendekatan kaunseling sesuai digunakan tanpa mengira latar etnik	8	10	8	8
13.	Menunjukkan rasa hormat terhadap budaya lain tanpa mengidentifikasi diri dengan budaya minority atau bersikap memandang rendah	8	10	8	8
14.	Menunjukkan minat mendalam untuk mempelajari budaya lain	8	9	9	8
15.	Mengakui bahawa pengalaman hidup, nilai peribadi dan prasangka sendiri boleh mempengaruhi proses penyeliaan	6	9	9	8

I. Attitudes & Beliefs

Bil.	Item	BM 1	BM 2	BI 3	BI 4
1.	Memahami bagaimana budaya, etnik dan kaum mempengaruhi proses penyeliaan dan kaunseling	8	10	10	10
2.	Menyedari isu stereotaip perkauman dalam penyeliaan dan kaunseling	8	9	9	10
3.	Mempunyai pengetahuan tentang system nilai pelbagai kumpulan budaya	8	10	8	9
4.	Menyedari bahawa prasangka dan andaian dalam model barat boleh memberi kesan negative kepada penyelia dan klien yang berbeza budaya	8	10	8	9
5.	Menunjukkan pengetahuan tentang tradisi budaya pelbagai kumpulan etnik	8	9	9	9
6.	Memahami budaya dan system nilai saya	8	10	10	9
7.	Mengetahui kaitan antara jantina, status sosioekonomi dan isu keagamaan dengan status minority	8	10	9	8
8.	Memahami sebab mengapa pelajar	8	9	8	9

	atau klien minority kadangkala tidak mempercayai wakil budaya dominan				
9.	Memahami pandangan dunia penyelia dan klien dari budaya lain	8	10	8	10

II. Knowledge & Understanding

Bil.	Item	BM 1	BM 2	BI 1	BI 2
1.	Berupaya mengelakkan stereotaip kaum dengan mempertimbangkan keunikan individu dan ciri budaya mereka	8	10	9	9
2.	Mengambil kira latar belakang budaya dan Bahasa penyelia yang diselia dalam memberi maklum balas dan penilaian	8	10	9	9
3.	Pernah menggunakan ungkapan yang menyingung kaum minority	6	10	8	9
4.	Menunjukkan kepekaan ketika menyelia pelatih daripada latar budaya berbeza	8	10	10	10
5.	Menggalakkan perbincangan tentang pengaruh budaya dan kaum dalam kaunseling serta penyeliaan	8	10	10	10

6.	Komited untuk meningkatkan kecekapan pelbagai budaya dalam penyeliaan dan kaunseling	8	9	9	9
7.	Mampu menyesuaikan pengetahuan tentang perbezaan budaya dalam amalan penyeliaan dan kaunseling	8	9	9	10
8.	Menghargai kaedah bantuan yang berbeza daripada amalan barat	8	9	9	9
9.	Menyedari perbezaan individu dalam identity etnik dan kaum	8	10	9	10
10.	Terlalu tegar dalam menentukan apa yang dianggap sebagai pendekatan kaunseling yang betul	6	10	8	9
11.	Menilai secara negative penyelia yang diselia yang tidak mengikuti pendekatan teori yang difahaminya	6	9	8	9
12.	Berkomunikasi secara berkesan (verbal dan non-verbal) dengan penyelia daripada budaya yang berbeza	6	9	8	9
13.	Fleksibel dalam menyesuaikan gaya penyeliaan mengikut latar budaya penyelia yang diselia	8	9	8	10
14.	Mengkritik penyelia yang diselia	6	10	8	9

	daripada budaya lain apabila mereka menggunakan pendekatan langsung dan berstruktur				
15.	Peka terhadap konflik antara ciri umum kaunseling dengan nilai budaya tertentu	8	10	8	9
16.	Mengambil kira bias budaya dalam penilaian dan keputusan klinikal	8	10	9	9
17.	Sentiasa mencari peluang untuk meningkatkan kecekapan pelbagai budaya dalam kalangan penyelia yang diselia	8	10	8	9
18.	Membantu dalam membangunkan pelan penilaian dan rawatan yang sesuai dengan budaya	8	9	9	10
19.	Menyedari pengaruh bias kaum dan implikasi sosiopolitik dalam penyeliaan dan kaunseling	8	10	8	10
20.	Bersedia mendapatkan khidmat pakar atau sumber dalam komuniti etnokultural	8	10	9	9
21.	Mahir dalam pelbagai kaedah penilaian dan intervensi, termasuk pendekatan tidak konvensional	8	10	9	9

22.	Mampu menjelaskan masalah dan membentuk konsep kes yang relevan secara budaya bersama klien	8	10	8	9
23.	Berkeupayaan membentuk pelan rawatan yang sesuai dengan budaya klien	8	9	8	8

III. Skills & Practices

Bil.	Item	BM 1	BM 2	BI 1	BI 2
1.	Mampu menjelaskan peranan dan jangkaan dalam hubungan penyeliaan silang budaya	8	9	9	8
2.	Berupaya mengurangkan rasa defensive, curiga dan kebimbangan saya terhadap penyelia daripada budaya lain	8	10	8	9
3.	Cenderung menyalahgunakan kuasa dengan memaksa pandangannya keatas penyelia yang diselia	6	10	9	9
4.	Berinteraksi secara aktif dengan pelajar minority di luar sesi kaunseling dan kelas	8	10	9	9
5.	Memberi bimbingan kepada pelajar antarabangsa dan pendatang baru untuk membantu proses	8	10	9	9

	penyesuaian budaya				
6.	Mewujudkan suasana selamat bagi penyelia yang diselia untuk berkongsi cabaran dan kebimbangan	8	10	9	9
7.	Memberi sokongan emosi dan galakan kepada pelajar minority	8	9	10	10
8.	Berusaha membina hubungan kepercayaan dan penerimaan tanpa syarat dengan penyelia daripada budaya lain	8	10	9	9
9.	Aktif dalam menangani bias budaya dan amalan diskriminasi	8	10	9	8
10.	Tidak menunjukkan minat untuk memahami latar belakang budaya dan warisan etnik saya	6	10	9	9
11.	Menerima pandangan saya walaupun berbeza daripada nilai peribadinya	8	10	8	9
12.	Menerima semua penyelia yang diselia tanpa syarat, tanpa mengira kaum, etnik atau budaya	8	9	9	9
13.	Prihatin terhadap kebajikan penyelia yang diselia dan klien	8	10	9	10
14.	Sanggup memperjuangkan keadilan	8	10	9	9

	untuk golongan minority yang				
	menghadapi diskriminasi institusi				
15.	Mampu berhubung secara professional dengan penyelia yang diselia daripada budaya lain sambil mengekalkan nilai budaya sendiri	8	10	9	9
16.	Mengintegrasikan kepercayaan, pengetahuan dan kemahiran dalam membina hubungan silang budaya	8	9	8	9
17.	Menunjukkan minat untuk membantu pelajar minority mengatasi halangan sistemik dan institusi	8	9	8	9
18.	Berusaha memahami dan menyesuaikan diri dengan penyelia daripada latar budaya berbeza	8	9	9	9
19.	Mampu menangani cabaran budaya dan Bahasa semasa bekerja dengan pelajar atau klien daripada kumpulan minority	8	10	9	10

IV. Relationship

4.2.3 Content Validity

Following the back-translation process with the language teacher, the researcher proceeded with the content validity assessment with three expert panel members. These experts were lecturers in the field of counselling, appointed to evaluate and provide feedback on the translated instrument. The purpose of this process was to ensure that the instrument accurately measured all important aspects of the intended construct. Details of the appointed expert panel are presented in Table 5.

Bil	Expert Panel	Position	Field of Expertise
1	Dr Edris bin Aden	Counseling Lecturer	Social Science
2	Dr Azzaharah binti Annuar	Counseling Lecturer	Counselling and Psychotherapy
3	Dr Salmah binti Mohamad Yusoff	Counseling Lecturer	Social Science

Table 5 Expert Panel

The appointed expert panel provided their evaluation and feedback via the Content Validity Form. Each item was rated using a scale ranging from 1 (Strongly Disagree) to 10 (Strongly Agree), allowing the experts to rate the level of agreement for each item. At the end of the form, the experts were also asked to rate the overall level of agreement for the total number of items developed under each subconstruct.

The calculation of content validity was based on the formula proposed by Sidek and Jamaluddin (2005), as shown below:

$\text{Validity Value} = \frac{\text{Total score by expert}}{\text{Maximum Score}} \times 100\%$
--

Content Validity Score Formula

Bil	Item	P1	P2	P3	Validity Value (%)
1.	Menunjukkan keterbukaan dan rasa hormat terhadap penyeliaan individu yang berbeza budaya	8	10	7	83.33
2.	Menyedari batasan model kaunseling dan pendekatan berdasarkan andaian Barat dalam bekerja dengan individu daripada budaya lain.	7	7	8	91.67
3.	Menyedari bahawa sesuatu yang dianggap tidak sesuai oleh budaya majority mungkin diterima dalam budaya minority	7	10	8	83.33
4.	Menolak kepentingan aspek budaya dalam proses kaunseling dan penyeliaan	8	9	8	92.60
5.	Tidak mengambil kira latar belakang demografi penyelia yang diselia	6	9	0	55.55
6.	Pernah membuat kenyataan yang mencerminkan sikap perkauman	8	10	8	86.67
7.	Tidak menyedari kewujudan rasisme yang tidak disengajakan	8	10	8	86.67
8.	Tidak menyedari kecenderungan	8	10	3	70

	budaya sendiri yang tersirat dalam penyeliaan dan kaunseling				
9.	Tidak menyadari batasan diri dalam bekerja dengan penyelia atau klien daripada budaya berbeza	7	10	3	66.67
10.	Menghormati pandangan hidup, kepercayaan agama dan nilai-nilai budaya penyelia yang diselia	8	10	0	60
11.	Tidak pernah menyatakan bahawa kaum merupakan factor penting dalam kaunseling dan penyeliaan	8	10	8	86.67
12.	Percaya bahawa model dan pendekatan kaunseling sesuai digunakan tanpa mengira latar etnik	7	10	7	80
13.	Menunjukkan rasa hormat terhadap budaya lain tanpa mengidentifikasi diri dengan budaya minority atau bersikap memandang rendah	8	10	7	83.33
14.	Menunjukkan minat mendalam untuk mempelajari budaya lain	8	10	8	86.67
15.	Mengakui bahawa pengalaman hidup, nilai peribadi dan prasangka sendiri boleh mempengaruhi proses penyeliaan	8	10	8	86.67

i. Attitudes & Beliefs

Bil.	Item	P1	P2	P3	Validity Value (%)
1.	Memahami bagaimana budaya, etnik dan kaum mempengaruhi proses penyeliaan dan kaunseling	7	10	8	83.33
2.	Menyedari isu stereotaip perkauman dalam penyeliaan dan kaunseling	6	10	8	80
3.	Mempunyai pengetahuan tentang system nilai pelbagai kumpulan budaya	7	7	8	91.67
4.	Menyedari bahawa prasangka dan andaian dalam model barat boleh memberi kesan negative kepada penyelia dan klien yang berbeza budaya	8	8	0	66.67
5.	Menunjukkan pengetahuan tentang tradisi budaya pelbagai kumpulan etnik	8	10	8	86.67
6.	Memahami budaya dan system nilai saya	9	10	8	90
7.	Mengetahui kaitan antara jantina, status sosioekonomi dan isu	8	10	8	86.67

	keagamaan dengan status minority				
8.	Memahami sebab mengapa pelajar atau klien minority kadangkala tidak mempercayai wakil budaya dominan	8	7	7	91.67
9.	Memahami pandangan dunia penyelia dan klien dari budaya lain	8	10	0	60

ii. Knowledge & Understanding

Bil.	Item	P1	P2	P3	Validity Value (%)
1.	Berupaya mengelakkan stereotaip kaum dengan mempertimbangkan keunikan individu dan ciri budaya mereka	8	8	8	100
2.	Mengambil kira latar belakang budaya dan Bahasa penyelia yang diselia dalam memberi maklum balas dan penilaian	8	7	0	62.5
3.	Pernah menggunakan ungkapan yang menyingung kaum minority	8	10	8	86.67
4.	Menunjukkan kepekaan ketika menyelia pelatih daripada latar budaya berbeza	8	8	8	100

5.	Menggalakkan perbincangan tentang pengaruh budaya dan kaum dalam kaunseling serta penyeliaan	8	10	8	86.67
6.	Komited untuk meningkatkan kecekapan pelbagai budaya dalam penyeliaan dan kaunseling	8	7	7	91.67
7.	Mampu menyesuaikan pengetahuan tentang perbezaan budaya dalam amalan penyeliaan dan kaunseling	7	10	8	83.33
8.	Menghargai kaedah bantuan yang berbeza daripada amalan barat	8	6	8	91.67
9.	Menyedari perbezaan individu dalam identity etnik dan kaum	8	10	8	86.67
10.	Terlalu tegar dalam menentukan apa yang dianggap sebagai pendekatan kaunseling yang betul	8	6	7	87.5
11.	Menilai secara negative penyelia yang diselia yang tidak mengikuti pendekatan teori yang difahaminya	8	7	0	62.5
12.	Berkomunikasi secara berkesan (verbal dan non-verbal) dengan penyelia daripada budaya yang berbeza	8	7	0	62.5
13.	Fleksibel dalam menyesuaikan gaya	8	7	0	62.5

	penyeliaan mengikut latar budaya				
	penyelia yang diselia				
14.	Mengkritik penyelia yang diselia daripada budaya lain apabila mereka menggunakan pendekatan langsung dan berstruktur	8	6	0	58.33
15.	Peka terhadap konflik antara ciri umum kaunseling dengan nilai budaya tertentu	7	7	8	91.67
16.	Mengambil kira bias budaya dalam penilaian dan keputusan klinikal	8	9	8	92.60
17.	Sentiasa mencari peluang untuk meningkatkan kecekapan pelbagai buduaya dalam kalangan penyelia yang diselia	8	9	0	63
18.	Membantu dalam membangunkan pelan penilaian dan rawatan yang sesuai dengan budaya	8	7	7	91.66
19.	Menyedari pengaruh bias kaum dan implikasi sosiopolitik dalam penyeliaan dan kaunseling	9	8	8	92.60
20.	Bersedia mendapatkan khidmat pakar atau sumber dalam komuniti etnokultural	8	7	8	95.83

21.	Mahir dalam pelbagai kaedah penilaian dan intervensi, termasuk pendekatan tidak konvensional	8	7	8	95.83
22.	Mampu menjelaskan masalah dan membentuk konsep kes yang relevan secara budaya bersama klien	8	7	8	95.83
23.	Berkeupayaan membentuk pelan rawatan yang sesuai dengan budaya klien	8	8	8	100

iii. Skills & Practices

Bil.	Item	P1	P2	P3	Validity Value
1.	Mampu menjelaskan peranan dan jangkaan dalam hubungan penyeliaan silang budaya	8	6	7	87.5
2.	Berupaya mengurangkan rasa defensive, curiga dan kebimbangan saya terhadap penyelia daripada budaya lain	8	9	8	92.60
3.	Cenderung menyalahgunakan kuasa dengan memaksa pandangannya keatas penyelia yang diselia	8	7	0	62.5
4.	Berinteraksi secara aktif dengan	8	9	8	92.60

	pelajar minority di luar sesi kaunseling dan kelas				
5.	Memberi bimbingan kepada pelajar antarabangsa dan pendatang baru untuk membantu proses penyesuaian budaya	8	9	7	88.88
6.	Mewujudkan suasana selamat bagi penyelia yang diselia untuk berkongsi cabaran dan kebimbangan	8	9	0	62.96
7.	Memberi sokongan emosi dan galakan kepada pelajar minority	8	10	8	86.67
8.	Berusaha membina hubungan kepercayaan dan penerimaan tanpa syarat dengan penyelia daripada budaya lain	8	9	0	62.96
9.	Aktif dalam menangani bias budaya dan amalan diskriminasi	8	10	8	86.67
10.	Tidak menunjukkan minat untuk memahami latar belakang budaya dan warisan etnik saya	8	10	8	86.67
11.	Menerima pandangan saya walaupun berbeza daripada nilai peribadinya	8	10	7	83.33
12.	Menerima semua penyelia yang	8	9	0	62.96

	diselia tanpa syarat, tanpa mengira kaum, etnik atau budaya				
13.	Prihatin terhadap kebajikan penyelia yang diselia dan klien	8	9	0	62.96
14.	Sanggup memperjuangkan keadilan untuk golongan minority yang menghadapi diskriminasi institusi	8	10	8	86.67
15.	Mampu berhubung secara professional dengan penyelia yang diselia daripada budaya lain sambil mengekalkan nilai budaya sendiri	8	10	0	60
16.	Mengintegrasikan kepercayaan, pengetahuan dan kemahiran dalam membina hubungan silang budaya	8	8	6	91.67
17.	Menunjukkan minat untuk membantu pelajar minority mengatasi halangan sistemik dan institusi	8	10	8	86.67
18.	Berusaha memahami dan menyesuaikan diri dengan penyelia daripada latar budaya berbeza	8	9	0	62.96
19.	Mampu menangani cabaran budaya dan Bahasa semasa bekerja dengan pelajar atau klien daripada	8	10	8	86.67

iv. Relationship

4.2.3 Content Validity by using Formula Sidek

Content validity indices for the four constructs measured based on expert ratings using the Sidek formula. The constructs assessed included Attitudes & Beliefs, Knowledge & Understanding, Skills and Practices, and Relationships. Each construct was rated on a scale of 1 to 10 by a panel of experts.

Attitudes & Beliefs received a total score of 355 out of a possible 450, yielding a content validity index (CVI) of 78.88%. Knowledge & Understanding scored slightly higher, reaching 214 out of 270 with a CVI of 79.26%. Skills and Practices showed a relatively low CVI of 70.43%, with a total score of 486 out of 690. Similarly, Relationships scored 405 out of a potential 570, yielding a CVI of 71.05%.

Overall, these results indicate that although all constructs pass the common benchmark of 70% often considered an acceptable threshold for content validity, Skills and Practices and Relationships could benefit from further refinement to ensure stronger alignment with the intended assessment criteria.

Item		Expert Score (1-10)	Total Score	Maximum Score	Content Validity Index (%)
Attitudes & Beliefs		118.32	355	30	78.88
Knowledge & Understanding		118.89	214	30	79.26
Skills and Practices		105.65	486	30	70.43
Relationship		106.58	405	30	71.05

Table 6 Content Validity Table by using Formula Sidek

4.2.4 Exploratory Factor Analysis (EFA)

Exploratory Factor Analysis (EFA) was conducted to examine the underlying factor structure of the instrument. Prior to analysis, the Kaiser-Meyer-Olkin (KMO) sampling adequacy measure and Bartlett's Test of Sphericity were used to determine the suitability of the data for factor analysis. The KMO value obtained was 0.780, which was considered acceptable and indicated that the sample was sufficient for EFA (Kaiser, 1974). Furthermore, Bartlett's Test of Sphericity was significant ($\chi^2 = 8521.813$, $df = 2145$, $p < .001$), indicating that the correlations between items were large enough for factor analysis (Bartlett, 1954). These results support the factorability of the correlation matrix and justify proceeding with EFA.

Test	Statistic	Value
Kaiser-Meyer-Olkin (KMO)	-	.780
Bartlett's Test of Sphericity	Approx. Chi Square	8521.813
	df	2145
	Sig.(p value)	0.00

Table 7 Exploratory Factor Analysis (EFA)

Factor Matrix

Factor loadings for items analyzed using exploratory factor analysis (EFA). Loadings with an absolute value of 0.4 or higher are generally considered significant for interpretive purposes. The matrix shows that the items are distributed across ten factors, suggesting a multidimensional construct.

Item A12 loaded significantly on Factor 2 (0.455) and negatively on Factor 1 (-0.429), suggesting possible cross-loading. Similarly, item A11 showed positive loadings on Factor 1 (0.421) and negative loadings on Factor 2 (-0.425), indicating ambiguity in item alignment. Such cross-loadings may imply that this item taps into multiple underlying constructs or requires refinement to improve specificity. Item D9 displayed negative loadings on Factor 1 (-0.420) and stronger positive loadings on Factor 3 (0.584), suggesting a clearer alignment with Factor 3. This suggests that Factor 3 may represent a different construct that is better captured by item D9.

Items such as A5 (-0.472 on Factor 4), C13 (-0.435 on Factor 5), B4 (-0.511 on Factor 6), and B6 (-0.414 on Factor 6) show strong negative loadings on their respective factors, supporting their role as indicators for this dimension. This item appears to be conceptually aligned with its factors, as evidenced by its single factor dominance. Item C14 loaded positively on Factor 7 (0.461), suggesting that it is a suitable indicator for this factor. Item C3 showed a significant negative loading on Factor 8 (-0.480), while item D11 had a weaker but acceptable positive loading on Factor 10 (0.409), indicating that this item also contributed to the multidimensional structure.

Overall, the factor matrix supports a structure consisting of ten distinct factors, although some items exhibit cross-loadings that may require further investigation or revision. Items with clear and strong loadings on a single factor contribute to the clarity and interpretability of the factor structure, strengthening the construct validity of the instrument. Future confirmatory factor analysis (CFA) could help to further validate and refine this factor model.

	Factor									
	1	2	3	4	5	6	7	8	9	10
A12		-.429	.455							
A11	.421		-.425							
D9		-.420		.584						
A5				-.472						
C13				-.435						
B4					-.511					
B6					-.414					
C14						.461				
C3								-.480		
D11										.409

Table 8 *Factor Matrix*

4.3 Is the Malay version of Multicultural Supervision Inventory (MSI) reliable among registered counsellors in Malaysia?

4.3.1 Cronbach's Alpha

Cronbach's alpha coefficients for each of the four subscales measured in the study. Internal consistency is considered acceptable with alpha values above 0.70, although some researchers accept slightly lower thresholds depending on the construct being measured (Taber, 2018). The Knowledge & Understanding subscale exhibited the highest internal consistency with a Cronbach's alpha of 0.816, followed closely by Relationship at 0.813. The Skills & Practices subscale demonstrated good reliability as well, with an alpha of 0.786. Although slightly below the conventional threshold, the Attitudes & Beliefs subscale reported an alpha of 0.695, after 7 item deleted such as item number 2,6,7,8,9,12 and 15 which may still be considered acceptable given the exploratory nature of the research or the complexity of the construct. These findings suggest that the instruments used in this study are generally reliable, with strong internal consistency across most subscales.

Subscale	Number of Item	Cronbach's Alpha
Attitudes & Beliefs	15	.695
Knowledge & Understanding	9	.816
Skills & Practices	23	.786
Relationship	19	.813

Table 9 Cronbach's Alpha

4.3.2 Split Half Reliability

Split-half reliability was assessed using both Spearman-Brown and Guttman Split-Half coefficients to determine the internal consistency of each subscale. The results showed that the Attitudes and Beliefs subscales had relatively low reliability, with a Spearman-Brown coefficient of 0.553 and a Guttman Split-Half coefficient of 0.532. This indicated moderate internal consistency. The Knowledge and Understanding subscales showed good reliability, with coefficients of 0.808 and 0.802, respectively. Similarly, the Skills and Practices subscales showed strong reliability, with both coefficients at 0.849. The Relationships subscale had the highest internal consistency, with a Spearman-Brown coefficient of 0.873 and a Guttman coefficient of 0.868. These findings indicate that most subscales, except for Attitudes and Beliefs, showed good to excellent internal consistency based on the split-half method.

Subscale	Spearman-Brown Coefficient	Guttman Split-Half Coefficient
Attitudes & Beliefs	.553	.532
Knowledge & Understanding	.808	.802
Skills & Practices	.849	.849
Relationship	.873	.868

Table 10 Split Half Reliability

4.4 Is the Malay version of Multicultural Supervision Inventory (MSI) acceptable to be used among registered counsellors in Malaysia?

The first objective, which is to confirm the validity of the Malay version of the MSI among registered counselors in Malaysia, can be achieved through several systematic steps such as back-translation by a language teacher, content validity assessment by a panel of counseling experts, calculation of the Content Validity Index using the Sidek and Jamaludin (2005) Formula and Exploratory Factor Analysis (EFA) to examine the factor structure and ensure item compatibility with theoretical constructs. The results show that this translated version maintains the original meaning of the items well and reflects the conceptual structure of multicultural competence. This supports that the Malay version of the MSI has satisfactory validity for use in the Malaysian cultural context.

Next, for the second objective, which is to assess the reliability of the Malay version of the MSI. Reliability tests were conducted on 150 respondents using two approaches, namely Cronbach's Alpha showing good internal consistency for the three main subscales (>0.78), with the "Attitudes & Beliefs" subscale showing increased reliability after the removal of weak items. These results prove that the Malay version of the MSI is consistent, stable and reliable, making it suitable for assessing multicultural supervision competence among Malaysian counselors.

This statement assesses the overall acceptance level of the Malay version of the Multicultural Supervision Inventory (MSI) among registered counsellors in Malaysia. Based on the findings of the study, this instrument showed sufficient content validity through expert assessment (CVI above 70% for all subscales) as well as good reliability through high Cronbach's Alpha and Split Half Reliability values for most subscales. Furthermore, Exploratory Factor Analysis (EFA) showed a significant and appropriate factor structure. Therefore, based on the results of the validity test (content validity & EFA), the results of the reliability test (Cronbach's Alpha & Split Half) and the findings from 150 registered respondents, this study concludes that the Malay version of

the MSI is acceptable and suitable for use in the context of counselling supervision in Malaysia which is multi-racial and multicultural.

Research Objectives	Research Question	Findings
To validate the Malay version of the Multicultural Supervision Inventory(MSI) among registered counsellors in Malaysia	Is the Malay version of Multicultural Supervision Inventory (MSI) valid among registered counsellors in Malaysia?	Acceptable
To evaluate the reliability of the Malay version of the Multicultural Supervision Inventory (MSI) among registered counsellors in Malaysia	Is the Malay version of Multicultural Supervision Inventory (MSI) reliable among registered counsellors in Malaysia?	Acceptable
To produce an acceptable Malay version of the Multicultural Supervision Inventory (MSI)	Is the Malay version of Multicultural Supervision Inventory (MSI) acceptable to be used among registered counsellors in Malaysia?	Acceptable

Table 11 *Summary of Findings*

4.5 Summary

This chapter presented the findings of the study on the Malay version of the Multicultural Supervision Inventory (MSI). The results showed that the instrument is both valid and reliable for use among registered counsellors in Malaysia. Content validity was confirmed through expert evaluation, while factor analysis supported its construct structure. The reliability analysis also indicated good internal consistency across most subscales. These findings suggest that the Malay version of the MSI is suitable for assessing multicultural supervision in the Malaysian counselling context.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter discusses the findings of the study based on three main research objectives. This discussion aims to analyze and interpret the results of the study with reference to the empirical data presented in chapter 4 as well as the theory and results of previous studies detailed in chapter 2. The main focus is given to understanding the validity, reliability and feasibility of using the Multicultural Supervision Inventory (MSI) Malay version in the context of counseling supervision in Malaysia.

In addition, this chapter also examines the strength of the developed instrument, the improvements made during the translation and validation process and the practical implications for counseling education and professional development in Malaysia, the findings obtained are used as a basis for assessing the effectiveness and suitability of this tool in improving the competence of culturally sensitive supervision.

5.1 Discussion

This section discusses in detail the findings of the study based on the three research objectives, namely the validity, reliability and acceptability of the Malay version of the Multicultural Supervision Inventory (MSI) among registered counselors in Malaysia. These findings are also critically referenced based on previous literature reviews as discussed in chapter 2.

I. To validate the Malay version of the Multicultural Supervision Inventory (MSI) among registered counsellors in Malaysia.

This study has successfully proven that the Malay version of the MSI has an acceptable level of content and construct validity. Three expert panels rated each item in the four main subscales (Attitudes & Beliefs, Knowledge & Understanding, Skills & Practices, and Relationships), and almost all items obtained a Content Validity Index (CVI) above 70% in line with the content validity standards set by Sidek & Jamaludin (2005).

Next, Exploratory Factor Analysis (EFA) confirmed the factorability of the construct with a KMO value of 0.780 and a significant Bartlett Test ($p < .001$), indicating appropriate correlations between items and further justification for continuing with the factor structure analysis. This proves that the structure of the Malay version of the MSI has suitability in the Malaysian cultural context, in line with the recommendations of DeHaven et al. (2020) and Sue et al. (1992) who emphasized the need for instrument adaptation in non-Western contexts.

II. To evaluate the reliability of the Malay version of Multicultural Supervision Inventory (MSI) among registered counsellors in Malaysia

The reliability of the instrument was tested using two main methods, namely Cronbach's Alpha and Split Half Reliability. The findings showed that all the main subscales obtained good reliability levels such as Knowledge & Understanding $\alpha = .816$, Skills & Practices $\alpha = .786$, Relationship $\alpha = .813$. The Attitudes & Beliefs subscale originally recorded a low α value (0.499). However, after the removal of seven items that affected internal consistency (items 2,6,7,8,9,12, and 15), the value increased to 0.685 indicating increased stability.

The removal of items was done based on low content validity scores, redundancy, and a tendency towards

social desirability bias where respondents may give answers that are considered socially correct, such as admitting to “never making racist statements” or “not being aware of their own cultural biases”, as stated by Sadowsky et al. (1994) and Constantine (2001).

This finding is in line with the literature in chapter 2 which emphasizes that instruments such as the MSI require a stable and reliable structure to assess multicultural competence, especially when used for educational and professional training purposes (Pedersen, 2002; Sue & Sue, 2019).

III. To produce an acceptable Malay version of the Multicultural Supervision Inventory (MSI)

Overall, the combined validity and reliability results support that the Malay version of the MSI is acceptable for use among registered counsellors in Malaysia. This is evidenced in section 4.4, where all study objectives were achieved. By taking into account the demographic context of the respondents which includes various races and organizational settings (schools, IPTs, government and private agencies), these results strengthen the generalizability of the instrument in various counseling practice settings. Furthermore, these results provide practical feedback to counselor training institutions and professional bodies such as the Malaysian Counsellor Board to consider using the Malay version of the MSI as a formal assessment tool in the supervision and professional development of counselors. This supports the suggestion by Vekaria et al. (2023) that culturally responsive supervision should be assessed through instruments that are relevant in terms of language and local cultural context.

5.2 Implications

5.2.1 Theoretical Implication

The findings of this study offer significant theoretical implications in the field of multicultural supervision. First, by validating the Malay version of the Multicultural Supervision Inventory (MSI), this research contributes to instrument development in a local context, emphasizing the importance of assessing supervisory practices using culturally sensitive tools, especially in non-Western settings such as Malaysia. This supports the view that effective supervision requires tools that reflect the linguistic and cultural realities of the target population. Second, the construct validity of the validated MSI reinforces the existing multicultural supervision framework, which states that supervisory quality is shaped by core dimensions such as attitudes, knowledge, skills, and supervisory relationships. These results are consistent with established models of multicultural counseling competencies, including those proposed by Sue et al. (1992) and Bernard and Goodyear (2014). Finally, this study provides a foundation for future cross-cultural research by demonstrating that the construct of multicultural supervision can be meaningfully measured across different cultural and professional contexts. This opens up opportunities for comparative studies that can expand global understanding of culturally responsive supervisory practices.

5.2.2 Practical Implication

This study presents several practical implications for the counseling profession in Malaysia. The validated Malay version of the Multicultural Supervision Inventory (MSI) can now be confidently used by counseling institutions, training programs, and supervisors to assess and improve the quality of multicultural supervision. Its use ensures that the assessment process is based on culturally and linguistically relevant measures (Kūkea Shultz & Englert, 2021). In addition, the findings offer guidance for supervisor training, particularly by identifying areas such as multicultural skills and supervisory relationships that may require stronger emphasis in training modules or professional development programs. Beyond individual practice, the results can support policy and program development, offering evidence to inform the creation of culturally responsive supervision guidelines by national counseling boards or education authorities (Taylor & Evans, 2025). Most importantly, the availability of locally adapted tools empowers Malaysian counselors to critically evaluate and strengthen their supervision practices, ultimately enhancing their professional effectiveness and their ability to work in the diverse cultural landscape of Malaysia.

5.3 Recommendations

Based on the findings and limitations of this study, several recommendations are suggested for future research. First, future studies should broaden the demographic sample by including a more diverse group of counselors from various regions, cultural backgrounds, and institutional settings such as hospitals, NGOs, and private practices. This will increase the generalizability of the findings across different professional settings. Second, while this study used exploratory factor analysis (EFA), future studies should consider conducting confirmatory factor analysis (CFA) to confirm the underlying factor structure and further strengthen the construct validity of the instrument. In addition, examining criterion-related validity such as correlations between MSI scores and outcomes such as supervision effectiveness or client satisfaction would offer valuable insights into the predictive utility of the instrument. Longitudinal and intervention-based studies are also recommended to observe the development of multicultural supervision competence over time or in response to targeted training programs. To promote inclusivity, future work could explore the translation and validation of the MSI into other regional languages, such as Tamil and Mandarin, reflecting the multilingual counseling landscape in Malaysia. Finally, qualitative follow-up studies involving interviews or focus groups may provide a richer understanding of counselors' lived experiences with multicultural supervision and offer contextual depth that complements the quantitative findings.

5.4 Summary

In summary, this study aimed to examine the validity and reliability of the Malay version of the Multicultural Supervision Inventory (MSI) among registered counselors in Malaysia. The findings provided strong support for both content and construct validity, as well as acceptable internal consistency across most subscales. These results confirm that the MSI is a culturally and psychometrically appropriate tool for assessing multicultural supervision competence in the Malaysian context. This study also contributes theoretically by strengthening the established supervision framework and practically by offering a reliable instrument for use in supervision training, evaluation, and policy development. Despite some limitations, such as sample size and the need for further validation analyses, the study lays a solid foundation for future research and cross-cultural applications. Overall, the validated Malay MSI offers a valuable resource for advancing multicultural supervision practice and promoting culturally competent counseling in Malaysia.

5.5 Conclusions

In summary, this study aimed to examine the validity and reliability of the Malay version of the Multicultural Supervision Inventory (MSI) among registered counselors in Malaysia. The findings provided strong support for both content and construct validity, as well as acceptable internal consistency across most subscales. These results confirm that the MSI is a culturally and psychometrically appropriate tool for assessing multicultural supervision competence in the Malaysian context. This study also contributes theoretically by strengthening the established supervision framework and practically by offering a reliable instrument for use in supervision training, evaluation, and policy development. Despite some limitations, such as sample size and the need for further validation analyses, the study lays a solid foundation for future research and cross-cultural applications. Overall, the validated Malay MSI offers a valuable resource for advancing multicultural supervision practice and promoting culturally competent counseling in Malaysia.

REFERENCE

- American Psychological Association. (2020). Ethical principles of psychologists and code of conduct. *American Psychological Association*. <https://www.apa.org/ethics/code>
- Decino, D., Strear, M., Chronister, J., Liao, H.-Y., Chou, C.-C., & Chesnut, S. (n.d.). *A Validation Study of the Multicultural Counseling Inventory for School Counselors*. <https://files.eric.ed.gov/fulltext/EJ1301292.pdf>
- Etikan, I., & Bala, K. (2017). Sampling and Sampling Methods. *Biometrics & Biostatistics International Journal*, 5(6), 215–217. <https://doi.org/10.15406/bbij.2017.05.00149>
- Ferron, J. M., Moeyaert, M., Van den Noortgate, W., & Beretvas, S. N. (2014). Estimating causal effects from multiple-baseline studies: Implications for design and analysis. *Psychological Methods*, 19(4), 493–510. <https://doi.org/10.1037/a0037038>
- Field, A. (2018). *Discovering statistics using IBM SPSS statistics* (5th ed.). Sage Publications.
- Green, R. G., KiernanStern, M., Bailey, K., Chambers, K., Claridge, R., Jones, G., Kitson, G., Leek, S., Leisey, M., Vadas, K., & Walker, K. (2005). THE MULTICULTURAL COUNSELING INVENTORY: A MEASURE FOR EVALUATING SOCIAL WORK STUDENT AND PRACTITIONER SELFPERCEPTIONS OF THEIR MULTICULTURAL COMPETENCIES. *Journal of Social Work Education*, 41(2), 191–208. JSTOR. <https://doi.org/10.2307/23044001>
- Gutkin, T., Wise, S., & Gargi Roysircar. (1994). *Development of the Multicultural Counseling Inventory: A self-report measure of multicultural competencies*. *Journal of Counseling Psychology*. https://www.academia.edu/17660474/Development_of_the_Multicultural_Counseling_Inventory_A_self_report_measure_of_multicultural_competencies

- Harun, M. M., Marzuki, W., Ismail, A., & Noah, S. M. (2021). Reliability and Validity of Translated Multicultural Course Racial Experiences Inventory (MCREI) on the sample of Malaysian Counsellor Trainees. *International Journal of Academic Research in Business and Social Sciences*, 11(4), 103–119. <https://hrmars.com/index.php/IJARBSS/article/view/8940/Reliability-and-Validity-of-Translated-Multicultural-Course-Racial-Experiences-Inventory-MCREI-on-the-sample-of-Malaysian-Counsellor-Trainees>
- Noah, S. (2021). *Psychometric Properties of the Multicultural Counselling Competence Training Survey-Revised (MCCTS-R): Application for Counsellor Trainees in Malaysia*. Education, Training and Counseling: Implication on the Post-COVID-19 World Pandemic. [https://www.academia.edu/93021055/Psychometric Properties of the Multicultural Counselling Competence Training Survey Revised MCCTS R Application for Counsellor Trainees in Malaysia](https://www.academia.edu/93021055/Psychometric_Properties_of_the_Multicultural_Counselling_Competence_Training_Survey_Revised_MCCTS_R_Application_for_Counsellor_Trainees_in_Malaysia)
- OpenLibrary.org. (2025). *Understanding multicultural Malaysia by Asma Abdullah*. | Open Library. Open Library. https://openlibrary.org/books/OL3376793M/Understanding_multicultural_Malaysia
- Shannonhouse, L., O'Hara, C., & Erford, B. (2018). Psychometric Synthesis of the Multicultural Counseling Inventory. *Measurement and Evaluation in Counseling and Development*, 53(2), 131–148. <https://doi.org/10.1080/07481756.2018.1476028>
- SUE, D. W., ARREDONDO, P., & McDAVIS, R. J. (1992). Multicultural Counseling Competencies and Standards: A Call to the Profession. *Journal of Counseling & Development*, 70(4), 477–486. <https://doi.org/10.1002/j.1556-6676.1992.tb01642.x>
- Sue, D. W., & Sue, D. (2019). *Counseling the Culturally Diverse*. John Wiley & Sons.

- World Medical Association. (2013). *WMA - The World Medical Association-Declaration of Helsinki*. Wma.net; WMA - The World Medical Association-Declaration of Helsinki. <https://www.wma.net/what-we-do/medical-ethics/declaration-of-helsinki/>
- World Medical Association. (2024, December 13). *WMA - the World Medical Association-WMA Declaration of Helsinki – Ethical Principles for Medical Research Involving Human Participants*. Wma.net; WMA - the World Medical Association-WMA Declaration of Helsinki – Ethical Principles for Medical Research Involving Human Participants. <https://www.wma.net/policies-post/wma-declaration-of-helsinki/>
- Sodowsky, G. R., Taffe, R. C., Gutkin, T. B., & Wise, S. L. (1994). Development of the Multicultural Counseling Inventory: A self-report measure of multicultural competencies. *Journal of Counseling Psychology*, 41(2), 137–148. <https://doi.org/10.1037/0022-0167.41.2.137>
- Sodowsky, G. (1996). 8. The Multicultural Counseling Inventory: Validity And Applications In Multicultural Training. *Multicultural Assessment in Counseling and Clinical Psychology*. <https://digitalcommons.unl.edu/burosbookmulticultural/13>
- Anthonyamy, L., Ah Choo, K., & Soon Hin, H. (2021). INVESTIGATING SELF-REGULATED LEARNING STRATEGIES FOR DIGITAL LEARNING RELEVANCY. *Malaysian Journal of Learning and Instruction*, 18(Number 1), 29–64. <https://doi.org/10.32890/mjli2021.18.1.2>
- Curtis-Boles, H., Chupina, A. G., & Okubo, Y. (2020). Social justice challenges: Students of color and critical incidents in the graduate classroom. *Training and Education in Professional Psychology*, 14(2), 100–108. <https://doi.org/10.1037/tep0000293>
- Sue, D. W., Sue, D., Neville, H., & Smith, L. (2022). *Counseling the culturally diverse: Theory and practice* (9th ed.). John Wiley & Sons, Inc.

- Degtiar, I., & Rose, S. (2023). A Review of Generalizability and Transportability. *Annual Review of Statistics and Its Application*, 10(1), 501–524. <https://doi.org/10.1146/annurev-statistics-042522-103837>
- DeHaven, M. J., Gimpel, N. A., Gutierrez, D., Kitzman-Carmichael, H., & Revens, K. (2020). Designing health care: A community health science solution for reducing health disparities by integrating social determinants and the effects of place. *Journal of Evaluation in Clinical Practice*, 26(5). <https://doi.org/10.1111/jep.13366>
- Ortega-Villalobos, L. (2003). Initial development of the Multicultural Supervision Inventory: Exploring Validity and Reliability. *Figshare*. <https://doi.org/10.7274/xs55m90381b>
- Sahu, A., Bell, A.-S., Ridley, C. R., & Tran, V. (2024). Multicultural counseling skills evaluation form: A tool for clinical supervision. *The Counseling Psychologist*, 52(6). <https://doi.org/10.1177/00110000241248099>
- Taber, K. S. (2017). The Use of Cronbach's Alpha When Developing and Reporting Research Instruments in Science Education. *Research in Science Education*, 48(6), 1273–1296. <https://doi.org/10.1007/s11165-016-9602-2>
- Teoh, S. H., Mohamed, S. S. E., Singh, P., & Kor, L. K. (2020). IN SEARCH OF STRATEGIES USED BY PRIMARY SCHOOL PUPILS FOR DEVELOPING FRACTION SENSE. *Malaysian Journal of Learning and Instruction*, 17(Number 2), 25–61. <https://doi.org/10.32890/mjli2020.17.2.2>
- Vacha-Haase, T., Elman, N. S., Forrest, L., Kallaugher, J., Lease, S. H., Veilleux, J. C., & Kaslow, N. J. (2019). Remediation plans for trainees with problems of professional competence. *Training and Education in Professional Psychology*, 13(4), 239–246. <https://doi.org/10.1037/tep0000221>

- Vekaria, B., Thomas, T., Phiri, P., & Ononaiye, M. (2023). Exploring the supervisory relationship in the context of culturally responsive supervision: a supervisee's perspective. *The Cognitive Behaviour Therapist*, 16. <https://doi.org/10.1017/s1754470x23000168>
- Nguyen, M. H., Gruber, J., Marler, W., Hunsaker, A., Fuchs, J., & Hargittai, E. (2021). Staying connected while physically apart: Digital communication when face-to-face interactions are limited. *New Media & Society*, 24(9). <https://doi.org/10.1177/1461444820985442>
- Kūkea Shultz, P., & Englert, K. (2021). Cultural Validity as Foundational to Assessment Development: An Indigenous Example. *Frontiers in Education*, 6(1).
<https://doi.org/10.3389/educ.2021.701973>
- Taylor, C. S., & Evans, C. M. (2025). Culturally Responsive Assessment. *Routledge EBooks*, 359–380.
<https://doi.org/10.4324/9781003392217-26>

Final Year Project (I) Assessment Rubric – Supervisor (80%)

Name of Student: DAYANG SITI ZULAIKHA BINTI AWANG SARAN
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Matric Number: COUNSELLING

Program of Study: VALIDITY AND RELIABILITY OF THE MALAY VERSION OF MULTICULTURAL
SUPERVISION INVENTORY (MSI) AMONG REGISTERED COUNSELLORS IN MALAYSIA

Title of FYP:

KMC3104 Final Year Project (II) Assessment Rubrics – Supervisor (80%)

Categories	Exemplary 4	Good 3	Developing 2	Insufficient 1
Title & Abstract (5%)				
Title	Title is informative, succinct, and descriptive of key issues/topic, context, and methodology of the proposed study.	Title is relevant, descriptive of key issues/topic, context, or methodology of the proposed study.	Title is relevant but lacks description of key issues/topic, context, or methodology of the proposed study.	Title is irrelevant or fails to offer appropriate details of the proposed study.
Abstract	Concisely states the background, research question, objectives, methodology, results, and conclusion.	Clearly states the background, research question, objectives, methodology, results, and conclusion.	States the background, research question, objectives, methodology, results, and conclusion. but includes vague or confusing information.	- Does not clearly state background, research question, objectives, methodology, results, and conclusion. - Information provided is inaccurate or irrelevant to the study.
Chapter 1, 2 & 3 Introduction, Literature Review & Methodology (15%)				
Introductory paragraph(s), research questions, or hypotheses	Clearly identifies and discusses research focus/purpose of research	Limited discussion of research focus/purpose of research	Minimal discussion of research focus/purpose of research	Little or no discussion of research

	• Research focus is clearly grounded in previous research/ theoretically relevant literature • Significance of the research is clearly identified (how it adds to previous research) • Research questions/hypotheses are clearly articulated.	• Research focus is less well-grounded in previous research/ theoretically relevant literature • Significance of the research is not as clearly identified (how it adds to previous research) • Research questions/ hypotheses are described but not as well articulated.	• Research focus is not well-grounded in previous research/ theoretically relevant literature • Significance of the research is not clearly identified (how it adds to previous research) • Research questions/hypotheses are not well articulated.	focus/purpose of research • Research focus not grounded in previous research/ theoretically relevant literature • Significance of the research is not identified (how it adds to previous research) Research questions/hypotheses are poorly articulated or are absent altogether.
Literature Review/Theoretical Framework	• Comprehensive literature review. Includes current and landmark literature highly relevant to the topic. Establishes an advanced theoretical/conceptual framework for the research topic.	• Complete literature review with sound organization. Includes very few non-referred sources and provides current research relevant to the field and the topic. Establishes a sound and proficient theoretical/conceptual framework for the research topic.	• Partially complete and somewhat disorganized. Includes few non-refereed sources. Establishes a basic theoretical/conceptual framework for the research topic.	• Incomplete or disorganized. Includes an inappropriate number of non-refereed sources. Fails to establish an appropriate theoretical/conceptual framework for the research topic.
Methodology	• Provides accurate, thorough description of how the data was collected, what/how many data sources were analysed, plan of analysis or measurement instrument, research context. • Methods are highly appropriate and are directly linked to the purpose and research questions.	• Description of how the data was collected, what/how many data sources were analysed, plan of analysis or measurement instrument, research context is adequate but limited. • Methods appear sound, appropriate, and related to purpose and research questions.	• Description of how the data was collected, what/how many data sources were analysed, plan of analysis or measurement instrument, research context is somewhat confusing/not clearly articulated. • Methods appear to be appropriate and related to purpose and research questions	• Description of how the data was collected, what/how many data sources were analysed, plan of analysis or measurement instrument, research context is very confusing/not articulated sufficiently.

				Methods appear inappropriate or unrelated to purpose and research questions. Data analysis is incomplete and inappropriate.
Chapter 4 Findings/Results & Discussion (20%)				
Presentation (Tables, Figures)	Data are clearly organized using appropriate styles (tables, graph, chart, etc).	Data are organized using appropriate styles (tables, graph, chart, etc.).	Data are moderately organized using appropriate styles (tables, graph, chart, etc.).	Data are not organized using appropriate styles (tables, graph, chart, etc.).
Accuracy of Results Interpretation	- Results are accurate and scientifically presented. - Statistical analyses (if used) are appropriate tests and are accurately interpreted.	- Results are mostly accurate and scientifically presented. - Statistical analyses (if used) are appropriate tests but are not accurately interpreted.	- Results are partially accurate and scientifically presented. - Statistical analyses (if used) are inappropriate tests and/or are not accurately interpreted.	- Results are inaccurate, and not scientifically presented. - Statistical analyses (if used) are inappropriate tests and/or are not accurately interpreted.
Addressing Research Objectives/Questions	Interpretations/ analysis of results are thoughtful and insightful, are clearly informed by the study's results, and thoroughly address how they supported, refuted, and/or informed the research questions/hypotheses	Interpretations/ analysis of results are sufficient but somewhat lacking in thoughtfulness and insight, not as clearly informed by the study's results, and do not as thoroughly address how they supported, refuted, and/or informed the research questions/hypotheses.	Interpretations/ analysis of results lacking in thoughtfulness and insight, are not clearly informed by the study's results, and do not adequately address how they supported, refuted, and/or informed the research questions/hypotheses	Interpretations/ analysis of results severely lacking in thoughtfulness and insight, are not informed by the study's results, and do not address how they supported, refuted, and/or informed the research questions/hypotheses.
Discussion	Able to explain the strength and weakness, justify the main results, compare, and criticise	Able to explain the strength and weakness of the results in line with the objectives of the study and compare the	Able to explain the strength and weakness of the results in line with the objectives of	Able to discuss but limited to current findings. Not able to

	results with previous studies/literature to satisfy and support the objectives of the study.	results with previous study or standard.	the study. No comparisons with other study.	explain the strength and weakness of the results.
Chapter 5 Summary, Conclusion & Recommendation (20%)				
Implication	Potential implications of study clearly outlined.	Potential implications of study outlined.	Potential implications of study not clearly outlined.	Little or no discussion of the potential implications of the study.
Limitation	Discusses the limitations of the study and how these limitations moderate conclusions; offers appropriate solutions.	Discusses the limitations of the study and how these limitations moderate conclusions; offers reasonable solutions.	Minimal discussion of the limitations of the study and how these limitations moderate conclusions; does not offer solutions.	Little or no discussion of the limitations of the study and does not offer solutions.
Further Recommendations	- Recommendations for using this research in other fields of study is considered and examples of potential uses are given. - Consideration is given to how this research might be continued in the future.	Recommendations are made and consideration is given to how this research might be continued but there is little to no discussion of the potential use of the study.	The need for future research is included yet the discussion is vague and does not address other fields of research.	Little or no mention of future research.
Summation and Conclusion	- Have a basic conclusion to the chapter and thesis. - Re-articulates research question. - Summarize key concepts in chapter. - Provides a profound ending, make it engaging and meaningful to the reader.	- Have a basic conclusion to the chapter and thesis. - Re-articulates research question. - Summarize key concepts in chapter.	- Have a basic conclusion to the chapter and thesis. - Re-articulates research question.	Have a basic conclusion to the chapter and thesis.
Writing and Formatting (10%)				
Writing Style, Clarity & Formatting	The FYP is very well written. Sentences and flow of content are easy to read and understand.	- The FYP is well written but occasionally some points are difficult to understand. - Minimal spelling & grammar mistakes	- The FYP is well written but occasionally some points are difficult to understand. - Noticeable spelling and grammar mistakes	The FYP is too difficult to understand, or

	- No spelling & grammar mistakes - FYP follows standard APA format.	Standard APA format is fairly used.	Standard APA format is fairly used.	- plagiarized works are presented. - Excessive spelling and/or grammar mistakes - FYP does not follow standard APA format.
Citation & References	All facts and information are clearly cited with references.	- Some facts and information are not clearly cited. - Some missing references.	- Minimal citations - Missing references	- No citations - Missing references
Aptitude & Logbook (10%)				
Meeting Frequency (The minimum number of formal contacts between FYP students and Supervisor(s) is 6 per semester)	=> 6 meetings	5 meetings	< 5 meetings	Hardly meet, < 2 meetings
Logbook Report	Comprehensive description of progress from the beginning of the FYP. Process.	Adequate description of progress from the beginning of the FYP process.	Brief description of progress from the beginning of the FYP process.	Does not include any description of progress from the beginning of the FYP process.
Work Ethic	Student has kept continuous contact during the work and has been on time in sending deliverables	With only a few exceptions, the student has been on time in sending deliverables and in reporting their progress.	- The student has been late in sending deliverables in a way that have hampered the process. - The supervisor had to prompt the students with questions about the status of the work.	- The student has a serious problem with keeping to deadlines. - The supervisor has not been able to get a picture of the status of the work during the FYP.
Initiative & Effort	Student has an excellent initiative to complete the FYP, with extra ideas exploration, two-way discussion, and exchange of information.	Student has a good initiative to complete the FYP and demonstrated effort to explore ideas outside the proposed idea by supervisor.	Student has adequate initiative and effort to complete the FYP.	Student lacks initiative and effort to complete the FYP.

Notes:

Mark calculation:

If mark given is 1: $1/4 \cdot 10 = 2.5 \%$

If mark given is 2: $2/4 * 10 = 5.0 \%$

If mark given is 3: $\frac{3}{4} \times 10 = 7.5\%$

If mark given is 4: $4/4 * 10 = 10.0 \%$

General Comments (Suggestion for Improvement)	

Supervisor: _____

Date: _____

	Marks awarded
Title & Abstract (5%)	
Chapter 1, 2 & 3: Introduction, Literature Review & Methodology (15%)	
Chapter 4: Findings/Results & Discussion (20%)	
Chapter 5: Summary, Conclusion & Recommendation (20%)	
Writing & Formatting (10%)	
Aptitude & Logbook (10%)	
Total	

