

**DEVELOPMENT OF A GERONTOLOGY COUNSELING COMPETENCY  
MODEL FOR COUNSELORS:  
A DESIGN AND DEVELOPMENT RESEARCH**

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**ABSTRACT**

*This paper proposes the development of a gerontology counseling competency model aimed at enhancing counselors' ability to meet the needs of older adults. The model is designed to foster a comprehensive and supportive counseling environment that promotes well-being and protects the social rights of older adults, in alignment with the Malaysian National Policy for Older Persons. Adopting a three-phase Design and Development Research (DDR) approach, the study incorporates diverse research methods and tools to construct the model. Collaboration with experts and user groups is emphasized to ensure cultural relevance and practical applicability within the Malaysian context. The resulting competency model seeks to improve the quality of counseling services for older clients while strengthening the counseling profession in Malaysia. It underscores the importance of addressing the holistic well-being of older adults and contributes to the advancement of gerontology counseling.*

**Keywords:** *Gerontology counseling, design and development research, competency, competency model, older adults*

## **INTRODUCTION**

Demographic projections for Malaysia suggest a substantial increase in the population aged 60 and above, which is expected to comprise approximately 14.5% of the total population by 2040 (Department of Statistics Malaysia, 2016). This trend reflects the global phenomenon of aging, which, as highlighted by the World Health Organization (2021), has profound implications, including a rise in health challenges and a gradual decline in both physical and mental well-being. Among the mental health issues commonly experienced by older adults, depression, anxiety, feelings of isolation, and social loneliness are particularly prevalent (Lee et al., 2021).

The aging population faces a broad range of physical and mental health challenges (Ashaari et al., 2022). The increasing prevalence of mental disorders among older adults underscores the pressing need for enhanced access to effective mental healthcare services (Raaj et al., 2021). Supporting active aging is crucial to improving the quality of life for older adults, which includes access to healthcare, opportunities for participation, and ensuring safety (Ai Jing & Mohd Noor, 2022). At the individual level, active aging involves the pursuit of well-being through engagement in activities aligned with personal aspirations, functional abilities, and available opportunities (Rantanen et al., 2019).

As Malaysia is projected to become an aging nation by 2030, with individuals aged 60 and above expected to comprise at least 15% of the population, there is an increasing demand for mental health professionals equipped to address the psychosocial and mental health challenges of this demographic (Chin & Ismail, 2023). This demographic shift presents significant challenges for healthcare systems, as the need for support among older adults continues to grow (Safian et al., 2021).

In light of these demographic shifts, the role of counselors is critical in promoting both individual and community physical and psychological well-being (Wan Marzuki, 2016). Counselors working with the elderly must therefore possess specialized knowledge, skills, and a solid theoretical foundation in gerontology or geriatrics to ensure their competence (Adnan et al., 2020). The development of a gerontology counseling competency model is particularly relevant within the framework of the Malaysian National Policy for Older Persons 2011, which recognizes the valuable contributions of older adults to society. This model aims to empower counselors by fostering professional development, enhancing mental well-being, and improving the overall quality of life for older clients.

## **PROBLEM STATEMENT**

The rise in mental health issues among older adults in Malaysia is concerning, yet stigma around mental health continues to hinder effective counseling (Munawar et al., 2022). Many older adults avoid seeking help due to negative societal perceptions, worsening their psychological challenges. While raising awareness and educating the public are important, these efforts alone are insufficient (Subramaniam et al., 2020).

A key factor in effective gerontology counseling is the specialized training of counselors, equipping them to address the complex physical, psychological, and social changes of aging. However, Malaysia's public universities lack structured programs in

gerontology counseling, limiting counselors' ability to provide high-quality care (Adnan et al., 2020; Gatchel, Schultz, & Ray, 2018).

As the aging population grows, developing a gerontology counseling competency model is crucial. This model would enable counselors to better support older adults in managing life transitions, improving health outcomes, and achieving well-being (Ilgaz & Gozum, 2019; Fullen, 2016). Hence, the aim of this research is to create a competency model that will guide counselors in delivering more effective and culturally relevant care for older adults in Malaysia.

## LITERATURE REVIEW

Gerontology counseling involves a broad range of essential activities, including intervention, consultation, and ongoing education tailored to the specific needs of older adults (Bar-Tur, 2021). Counselors with experience in this field are more likely to pursue specialized continuing education focused on age-related issues, reflecting an increased sense of competence in gerontology (Schmidt & Steffen, 2022). This specialized domain is dedicated to supporting seniors and their families by promoting physical and mental well-being, addressing challenges, and ultimately improving their quality of life (Dev & Narayan, 2021).

Competency assessments in gerontology counseling are essential to ensure that practitioners possess the necessary skills to support older adults effectively. The lack of evidence-based guidelines for conducting these assessments may result in negative consequences not only for older adults and their families but also for society at large (Cohen et al., 2018). Although many general practitioners provide mental health services to adults, they often encounter challenges in addressing cognitive issues and symptoms of depression in older clients (Segal et al., 2020). This underscores the need for specialized training in geriatric mental health care as a critical component for successfully engaging with older adults (Blando, 2014; Schmidt et al., 2022).

To address the complex needs of a diverse aging population, psychologists and practitioners must develop foundational skills in *geropsychology*. This includes a comprehensive understanding of age-related changes, the impact of social and cultural factors, and the application of evidence-based interventions tailored to older adults (Moye et al., 2019).

Gerontology counseling is inherently linked to multicultural counseling due to its engagement with individuals from diverse cultural backgrounds (Vasquez & Johnson, 2022). Developing cultural competence is crucial for counselors, enabling them to navigate potential misconceptions and communication barriers when working with clients from various cultural contexts (Gopalkrishnan, 2019). To provide high-quality services to clients from different backgrounds, counselors must cultivate competencies in multicultural counseling (Amat et al., 2020).

The concept of competence has gained significant traction across various fields, including education, human resource management, and professional development (Suhairom et al., 2014). Competence encompasses the integration of knowledge, skills, and attitudes essential for proficient and ethical professional practice (Chuenjitwongsa, Oliver, & Bullock, 2016). It is characterized by observable attributes that enhance individual effectiveness and success (Elliot, Dweck, & Yeager, 2017). Boyatzis (1982) emphasized that competency models provide frameworks and guidelines for employees,

which contribute to improved evaluation processes (Staskevica & Aija, 2019). However, the absence of comprehensive guidelines presents challenges in defining and measuring competencies (Suhairom et al., 2014).

As research on competencies continues to expand, particularly in counseling and psychology, numerous studies have investigated areas such as multiculturalism (Benuto et al., 2018; Worthington, Soth-McNett, & Moreno, 2007), counseling psychology training (Ali & Sichel, 2014), and psychological practice (Von Treuer & Reynolds, 2017).

## RESEARCH OBJECTIVE

The primary objective of this study is to design and develop a gerontology counseling competency model that serves as a professional guideline for counselors.

## METHODOLOGY

Research designs serve as strategic blueprints that guide the process of collecting, evaluating, and presenting research outcomes, whether within qualitative or quantitative methodologies (Cresswell & Guetterman, 2021). These designs encompass a comprehensive structure, methodologies, and sequential steps that facilitate the acquisition and analysis of data concerning specific variables involved in a given research inquiry (Ranganathan & Aggarwal, 2018).

This study will adopt a Design and Development Research (DDR) approach, systematically grounded in problem-solving criteria derived from scholarly literature and empirical evidence. This approach significantly contributes to the advancement of scientific knowledge by offering essential insights into the conceptualization, construction, and evaluation of instructional products and tools (Richey & Klein, 2007). Within this framework, DDR plays a critical role in bridging the gap between theoretical inquiry and practical application, fostering the development of impactful educational resources.

The DDR approach can be categorized into two distinct types. The first category directly investigates products or tools and is closely associated with their design and development. Richey, Klein, and Nelson (2004) refer to this category as Type 1 development research. Conversely, Type 2 development research, also known as model research, focuses on issues related to the construction, validation, and application of models. Thus, this study will employ Type 2 development research as a model. The comparison between Type 1 and Type 2 development research is illustrated in Table 1 below, which highlights their key distinctions.

**Table 1:** Comparison of Type 1 and Type 2 Developmental Research (DR)

	<i>Product and Tool Research Or Type 1 of DR</i>	<i>Model Research Or type 2 of DR</i>
<b>Emphasis</b>	Study of specific product or program design, development, &/or evaluation project	Study of design, development, or evaluation processes, tools, or models (can focus only on one phase)

<b>Product</b>	Lessons learned from developing specific products and analysing the conditions that facilitate their use	New design, development, and evaluation procedures &/or models and conditions that facilitate their use
	<b>CONTEXT-SPECIFIC CONCLUSION</b>	<b>GENERALIZED CONCLUSION</b>

Source: Adapted from Sahril et. al. (2012).

According to Richey and Klein (2007), the Design and Development Research (DDR) approach involves systematic and organized processes for conducting development studies. DDR can be effectively utilized to test theories as well as the practical usability of models or products. Its application in this study is particularly well-suited for the development of various areas, including learning strategies, program development, model development, and product development (Mohd Ridhuan & Nurulrabihah, 2021; Saedah et al., 2021).

The DDR approach facilitates research through multiple suitable applications tailored to specific research objectives and questions. It supports a multimethod strategy, allowing for qualitative, quantitative, or a combination of both methodologies at each phase (Richey & Klein, 2007). Common methods that can be employed in DDR are summarized in Table 2.

**Table 2:** Common Methods Employed in Design and Development Research

<b>Type of Research</b>	<b>Project Approach</b>	<b>Research Method</b>
Product & Tool Research	Comprehensive Design & design project	Case study, content Analysis, field observation, in-depth-interview
Product & Tool Research	Design and development phase	Case study, content analysis, expert evaluation Field Observation, Interview, survey
Product & Tool Research	Tool development and the use of model development	Expert evaluation, interview, survey
Model	Model development	Case study, Delphi method, interview, Literature Review, survey, think aloud method
Model	Evaluation of model	Experiment, expert evaluation, interview, in-depth interview
Model	Usability of model	Case study, content analysis, field observation, interview, survey, think aloud method

Source: Richey and Klein (2007, pg 46)

In designing a model, several multimethod approaches can be adopted, allowing for qualitative, quantitative, or a combination of both methodologies at each phase (Richey & Klein, 2007). These approaches include, but are not limited to, the Fuzzy Delphi Method (FDM), Nominal Group Technique (NGT), Partial Least Squares Structural Equation Modeling (PLS-SEM), Structural Equation Modeling (SEM), Interpretive Structural Modeling (ISM), Analytical Hierarchy Process (AHP), and Social Network Analysis (SNA) (Saedah et al., 2021; Mohd Ridhuan & Nurulrabihah, 2021).

To effectively formulate a distinct model, Richey and Klein (2007; 2014) advocate for a multifaceted methodological approach throughout each phase of the study. Research focusing on DDR emphasizes the importance of model validation, incorporating both internal and external validation. Internal validation during the model's construction pertains to verifying its constituent components, while external validation seeks to corroborate the model's efficacy through field or experimental studies (Richey & Klein, 2007; Saedah et al., 2021).

Exploring further into the developmental aspects, Richey, Klein, and Nielson (2004), along with Van Den Akker (1999), categorize developmental studies into two primary forms. The first type focuses on creating specific products or programs, while the second type involves the development of processes, tools, or models. To achieve the objective of model development, Richey and Klein (2007; 2014) recommend employing a multiple-method approach throughout each phase of the study. DDR-based research places significant emphasis on model validity, which is ensured through both internal and external validation. Internal validity can be established through expert reviews, assessing document usability, or closely examining model components to ensure the soundness of these constituents (Richey & Klein, 2007). In contrast, external validity, obtained through field assessments or experimental testing, seeks to evaluate the real-world effects and implications of applying the developed model (Richey & Klein, 2007).

Richey and Klein (2007) emphasize the importance of a systematic and organized process in developmental studies, which serves as a valuable framework for testing theories and assessing the practical applicability of models or products. The four phases of DDR are as follows:

- i. Need analysis phase (first phase)
- ii. Design phase (second phase)
- iii. Development phase (third phase), and
- iv. Evaluation of usability phase (fourth phase)

However, this study diverges in its implementation by adopting a modified framework that consolidates the second and third phases into a single phase, consistent with the approach advocated by Saedah et al. (2021). This adaptation preserves the integrity of the original DDR framework while maintaining the number of phases outlined by Richey and Klein (2007).

In alignment with the aforementioned principles of DDR, this study is structured around three research phases: the needs analysis phase, the design and development phase, and the model usability testing phase. The development of the gerontology counseling competency model involves a literature review to identify the key constructs and elements of competence required for this model. Competency models proposed by

scholars, including Competency Theory (Boyatzis, 1982; 2008), the Iceberg Model (Spencer & Spencer, 1993), and the Crawford Model of Competence (Crawford, 2005), will guide this process. The design process for developing the gerontology counseling competency model is illustrated in Table 3 below.

**Table 3:** Phases of Research Design

Research Phase	Research Instrument	Data analysis	Expected results
<b>First Phase:</b> Need Analysis	Interview Protocol	Verbatim transcript analysis	Conclusion on the need of model development
<b>Second Phase:</b> Design and Development	Fuzzy Delphi Method (FDM) FDM1 - Construct validation FDM2 - Element validation	Threshold (d) $\leq 0.2$ Percentage of experts consensus $\geq 75\%$ and $\alpha \geq 0.5$	Prototype of a Gerontology Counseling Competency Model
<b>Third Phase:</b> Model evaluation	Survey– Research Questionnaires	Fitness indexes based on Structural Equation Modelling (SEM)	Final Model

The detail of process of developing the gerontology counseling competency model for this current study are as follows:

***Phase 1: Needs Analysis:***

The steps undertaken for the for the need analysis phase are as follows:

- i. Draft Interview Protocol for the Need of the Development of a Competency model based on research objectives and research questions
- ii. Identification and appointment of panel experts for validation of the interview protocol: 3 experts in the field
- iii. Identification of 15 users i.e., registered counselors with more than 10 years of experience in counseling and handling older adults (purposive sampling)
- iv. Conduct a pilot test with three registered counselors with more than 10 years of experience
- v. Conduct a semi-structured interview with 15 registered counselors with more than 10 years of experience in working with older adults
- vi. Interview protocol; verbatim analysis of transcripts Formulation of development needs for the model.
- vii. Data analysis
- viii. Findings of Phase I of the study

The first phase of the needs analysis involves selecting participants who meet the criteria established for the interview, utilizing a purposive sampling approach. The outcome of this phase will address the research question regarding the necessity for developing a gerontology counseling competency model tailored for counselors working with older adults.

### ***Phase 2: Design and Development***

In Phase 2, the design and development of the gerontology counseling competency model involve conducting a literature review to identify the key constructs and elements of competence required for the model. Competency frameworks proposed by scholars, such as Competency Theory (Boyatzis, 1982; 2008), the Iceberg Model (Spencer & Spencer, 1993), and the Crawford Model of Competence (Crawford, 2005), will serve as foundational references. Additionally, existing models related to competencies in other areas, such as management and human resources, will be examined and integrated into this gerontology counseling competency model.

The subsequent step involves employing the Fuzzy Delphi Method (FDM) to further refine the model. In this phase, 13 experts in leadership and competency will participate to finalize the design and development processes. Prior to administration, content and language experts will develop and validate a questionnaire instrument using fuzzy linguistic scales. The FDM1 instrument will be used to validate the model constructs based on the literature review, while allowing the expert panel to add or eliminate suggested constructs. Following this, the FDM2 instrument will be developed to achieve expert consensus on the elements to be included in the model constructs, specifically relevant to the context of middle-level leaders. Upon completion of these steps, a prototype model will be developed as the foundation of the final model.

The design and development of the model using the Fuzzy Delphi Method (FDM) will adhere to the following criteria:

- i. FDM1: Proposed elements or components of the model.
- ii. FDM2: Confirmation of elements or components of the model.
- iii. Threshold (d):  $\leq 0.2$
- iv. Expert agreement percentage:  $\geq 75\%$
- v.  $\alpha$ -cut:  $\geq 0.5$

The prototype design and development will be based on the constructs and elements agreed upon by the experts.

### ***Phase 3: Model Evaluation***

The third phase will evaluate the prototype of the gerontology counseling competency model through a structured quantitative approach. A questionnaire instrument will be designed to measure various aspects of the model's usability, including its practicality and relevance for use.



The evaluation process will involve 500 participants, randomly selected from a population of practicing counselors who work with older adults. This random sampling will ensure a diverse and representative sample. Data collection will be conducted via an online survey platform, facilitating broad geographic reach and ease of participation.

To ensure the validity and reliability of the questionnaire, the following steps will be implemented:

- i. **Pre-testing for Content and Language Validity:** The questionnaire will undergo an expert review to assess the clarity, relevance, and comprehensiveness of its items, ensuring both content and language validity.
- ii. **Pilot Study:** A pilot test will be conducted with a smaller sample group to evaluate the reliability of the instrument. Cronbach's alpha will be calculated to assess internal consistency, and item-total correlations will be examined.
- iii. **Exploratory Factor Analysis (EFA):** EFA will be conducted to determine the underlying factor structure of the questionnaire, ensuring that the instrument accurately reflects the constructs of the model.

Following validation, the survey will be distributed to the full sample. The data will be analyzed using SPSS (version 27) to conduct both descriptive and inferential statistics. Structural Equation Modeling (SEM) will be employed to assess the model's fit with the field data, utilizing fitness indices such as the Comparative Fit Index (CFI), Root Mean Square Error of Approximation (RMSEA), and Chi-square statistics. This evaluation will ensure that the competency model is empirically validated, providing a reliable framework for its application in gerontology counseling.

## DISCUSSION

To develop a gerontology counseling competency model, a variety of research methods can be utilized, including qualitative, quantitative, or a combination of both. However, upon reviewing the literature and insights from previous scholars, the Design and Development Research (DDR) approach emerges as a highly suitable method for achieving the objectives of this study. DDR provides a structured, empirical process that integrates multiple methods throughout the research phases (Richey & Klein, 2007).

What makes DDR particularly effective is its adaptability to different stages of research, allowing for the use of specific methods to address particular research questions. Furthermore, DDR is recognized for its capacity to solve practical problems within specific contexts (Saedah et al., 2013). It incorporates a variety of research tools, including the Fuzzy Delphi Method (FDM), Nominal Group Technique (NGT), Interpretive Structural Modeling (ISM), and Structural Equation Modeling (SEM). Despite its complexity, DDR harmonizes effectively with traditional qualitative and quantitative approaches, utilizing expert panels or user groups as key participants. This versatility positions DDR as an ideal framework for developing a competency model tailored to the needs of gerontology counseling.

## CONCLUSION

The development of a gerontology counseling competency model is a crucial step in addressing the unique needs of counselors working with older adults. By employing a Design and Development Research (DDR) approach, this study utilizes a systematic and empirical methodology. In the first phase, qualitative interviews are conducted, while subsequent phases incorporate diverse research tools, such as the Fuzzy Delphi Method (FDM) and Structural Equation Modeling (SEM). This comprehensive framework effectively addresses contextual challenges and provides a solid foundation for competency development in gerontology counseling.

With Malaysia's aging population on the rise, the implementation of this competency model is both timely and essential. It equips counselors to manage the complexities of aging more effectively and promotes healthy and active aging, further emphasizing the role of counselors in fostering the well-being of older adults (Jaafar, Pau Kee, & Aslina, 2023). Overall, this research offers valuable insights into the competencies necessary for an effective gerontology counseling model for counselors.

## **AUTHOR CONTRIBUTIONS**

Nik Nazlan Nik Jaafar, Writing-Original Draft Preparation; Pau Kee & Aslina Ahmad, Supervision and review manuscript.

## **CONFLICT OF INTEREST**

The manuscript has not been published elsewhere and is not under consideration by other journals. All authors have approved the review, agree with its submission and declare no conflict of interest on the manuscript.

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