

Need Analysis Study for the Development of the Career4gifted Module for Muslim Gifted and Talented Students

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Abstract

Gifted and Talented Students (GTS) often face challenges in choosing a career path due to their diverse talents and interests, a phenomenon known as multipotentiality (Renzulli, 2012). This study explores the need for a specialized Career Interests and Multiple Intelligences Module designed for GTS. Using the ADDIE model as a framework, the research focused on the Needs Analysis phase through a qualitative approach. Thematic analysis was conducted on data collected from six participants: three experts in gifted and talented education and three Muslim GTS from a gifted high school institution in Negeri Sembilan. The findings highlight a clear need for a structured module to help GTS better understand their strengths and make informed career choices based on their dominant intelligences. By addressing this gap, the study aims to support GTS in aligning their skills and interests with fulfilling career pathways. The insights from this research contribute to the development of meaningful educational tools that empower Muslim GTS to navigate their future with confidence.

Keywords: Gifted Education, Career Interests, Multiple Intelligences, Muslim Gifted Students, ADDIE Model, Multipotentiality

Introduction

Gifted and Talented Students (GTS) constitute a unique population within the education system, characterised by advanced cognitive abilities, heightened motivation, and the capacity to excel across multiple domains. While these attributes position them as valuable human capital, they also present distinctive developmental challenges, particularly in the area of career decision making. One of the most frequently reported issues among GTS is multipotentiality, defined as the ability and inclination to perform at high levels in more than one area of competence (Renzulli, 2012). Although multipotentiality is often viewed as a strength, it can also contribute to confusion, indecision, and prolonged uncertainty when students are required to commit to a specific career pathway.

Career indecision among gifted students has been widely documented in the literature, with evidence suggesting that individuals with multiple talents and interests often struggle to

prioritise one domain over another (Kerr, 1991; Robinson et al., 2007). Without appropriate guidance, this condition may persist into adulthood, resulting in career dissatisfaction, underachievement, or the underutilisation of talent (Nauta & Corten, 2017). From a counselling perspective, early and structured career intervention is therefore essential to support gifted students in making informed and meaningful career decisions that align with both their abilities and aspirations.

For Muslim GTS, career decision making may involve additional layers of complexity. In addition to managing multipotentiality, these students may need to reconcile personal interests with cultural, religious, and societal expectations. Historical and contemporary Islamic scholars exemplify multipotentiality through their mastery of multiple disciplines; however, modern Muslim GTS often lack structured support systems that help them navigate this condition within contemporary educational and career contexts. Despite the existence of specialised gifted education programmes in Malaysia, such as PERMATA@Pintar and PERMATA Insan, career guidance interventions tailored specifically to the unique needs of Muslim GTS remain limited.

Theoretical frameworks commonly used in career counselling, such as Holland's RIASEC model, offer valuable insights into career interests and work environments, while Gardner's Multiple Intelligences (MI) theory provides a comprehensive understanding of individual strengths and intellectual profiles. Prior studies have demonstrated associations between multiple intelligences and career preferences; however, much of the existing research has been descriptive or correlational in nature. Empirical intervention based studies, particularly those involving systematic module development that integrates both career interest and multiple intelligences frameworks, are still scarce especially within the context of gifted education and Muslim learners.

Furthermore, the literature highlights a methodological gap in the use of structured developmental approaches, such as Design and Development Research (DDR) or ADDIE-based frameworks, for producing empirically grounded career guidance modules for gifted students. This gap underscores the need for preliminary needs analysis studies to inform the development of effective, contextually relevant interventions.

In response to these gaps, the present study aims to examine the need for a structured Career Interests and Multiple Intelligences module specifically designed for Muslim gifted and talented students. By exploring the perspectives of both experts in gifted education and Muslim GTS, this study seeks to identify key challenges related to multipotentiality and career planning, as well as essential elements required in a career guidance module. The findings are expected to contribute to the fields of gifted education and counselling by providing empirical justification for the development of a targeted intervention that supports Muslim GTS in aligning their strengths, interests, and future career pathways.

Methodology

This study adopted a qualitative approach under the Needs Analysis phase of the ADDIE model (Branch, 2009). The research process began with the development of an interview protocol and validation of the interview protocol. Three field experts reviewed the questions

to ensure clarity, relevance, and appropriateness for the target participants. After incorporating their feedback, the finalized protocol was endorsed for use in data collection.

Following this, interviews were conducted with six participants: three experts in gifted education and three Muslim gifted students from a Gifted High School Institution in Negeri Sembilan. These interviews aimed to explore the students' experiences, challenges, and needs in career exploration.

Once the interviews were completed, the next step involved expert validation of the identified themes. Three field Experts reviewed the emerging themes to confirm their accuracy, coherence, and relevance to the research objectives. Finally, the validated data were analysed using thematic analysis, helping to determine key insights of the career development needs for Muslim gifted students. In particular, the analysis highlighted the challenges faced by students with multiple interests and talents, who often struggle to choose a clear career path.

Findings

Four main themes emerged from the thematic analysis:

1. Characteristics of Gifted and Talented Students
2. Issues Related to Multipotentiality
3. Career Inclination Issues
4. The Need for a Career Guidance Module

Characteristics of Gifted and Talented Students

Participants highlighted intellectual giftedness, high motivation, socio-emotional challenges, and perfectionism as key traits of gifted students. One expert stated:

“Intellectually, these students are highly advanced. However, there is often an imbalance between their intellectual and emotional development.” (NAEX2)

Additionally, perfectionism was frequently identified as both a strength and a challenge:

“Gifted students tend to strive for perfection in all areas of interest, which can sometimes lead to stress.” (NAEX1)

Issues Related to Multipotentiality

The ability to excel in multiple areas was found to contribute to difficulty in selecting a single career path. One student expressed:

“My interests change frequently from wanting to be a scientist to an astrophysicist, then a doctor, and now back to astronomy.” (NAST2)

Another participant emphasized the enthusiasm gifted students have for exploring diverse fields:

“They are highly motivated to explore various subjects, sometimes beyond what is offered in their school curriculum.” (NAEX2)

Career Inclination Issues

Participants noted that gifted students struggle with long-term career planning due to their overlapping interests:

“Some students do not know what they want to pursue. They feel they can succeed in multiple fields, which makes decision-making difficult.” (NAEX2)

Another expert stated:

“Even after conducting career interest tests, some students remain unsure of their path.” (NAEX3)

The Need for a Career Guidance Module

All participants agreed on the necessity of a structured module to support gifted students in career exploration. One expert stressed:

“There is a critical need for career guidance tailored to gifted students so they do not end up in fields that do not align with their true potential.” (NAEX3)

A student also emphasized the importance of long-term career support:

“A career guidance module should not be a one-time activity but an ongoing process throughout our education.” (NAST2)

Discussion

The findings from the needs analysis phase provide valuable insights into the characteristics, challenges, and requirements of Muslim GTS in their career development journey. The key themes that emerged from the study highlight their intellectual strengths, socioemotional challenges, multipotentiality, career planning difficulties, and the need for a career guidance module tailored to their unique needs.

Characteristics of Gifted and Talented Students

The results indicate that GTS possess high intellectual capabilities, as evidenced by their ability to grasp concepts quickly and their intrinsic motivation to seek knowledge. Participants described these students as having a strong desire to explore subjects beyond the standard curriculum, often demonstrating deep passion in their areas of interest. However, despite their intellectual strengths, the findings also highlight socioemotional challenges such as difficulty in balancing intellectual and emotional development. Some students experience an imbalance between their IQ and emotional intelligence (EQ), leading to difficulties in social interactions and emotional regulation. Furthermore, perfectionism was identified as a common trait among these students. While this trait drives them to achieve excellence, it can also result in stress and anxiety when expectations are not met.

Challenges Related to Multipotentiality

A significant theme that emerged is the issue of multipotentiality, where students have diverse interests that evolve over time. Respondents reported that many gifted students frequently shift their career aspirations, making it difficult for them to commit to a specific

field. This characteristic stems from their natural curiosity and eagerness to explore various disciplines, often excelling in multiple areas simultaneously. However, this can create confusion and indecisiveness regarding future career choices, leading to uncertainty and potential dissatisfaction in their career paths.

Career Planning Difficulties

The study found that many gifted students struggle with career decision-making due to their wide-ranging interests. Some students expressed uncertainty about which field to pursue, as they feel capable of succeeding in multiple domains. Educators and experts also noted that traditional career guidance methods may not be effective for these students, as they require a more tailored approach that considers their unique cognitive and emotional needs. Without proper guidance, gifted students may face difficulties in identifying a career that aligns with both their strengths and personal aspirations.

Need for a Career Guidance Module

The findings strongly support the need for a structured career guidance module specifically designed for Muslim gifted students. Experts emphasized the importance of providing a systematic approach to help students navigate their career paths effectively. Such a module should not only assist in identifying their strengths and interests but also provide strategies to manage their multipotentiality. Additionally, the module should be implemented throughout their academic journey, rather than as a one-time intervention, to support their evolving interests and aspirations.

Implications for Educational Practice

Given these findings, it is crucial for educators and counsellors to adopt a more personalized and dynamic approach in guiding gifted students. Schools and institutions should integrate career guidance programs that cater to the unique needs of these students, ensuring that they receive continuous support in making informed career decisions. Future research should explore the effectiveness of various career development interventions tailored for gifted students, particularly those with multipotentiality.

In conclusion, the study underscores the need for a specialized career guidance module that accommodates the intellectual strengths, socioemotional challenges, and diverse interests of Muslim gifted students. Addressing these factors will enable them to make well-informed career decisions, ultimately leading to more fulfilling and successful professional journeys.

Conclusion and Implications

This study underscores the need for a Career Interests and Multiple Intelligences Module for Muslim gifted students, addressing their multipotentiality and career indecision challenges. The module should incorporate continuous career guidance, align with the MI framework, and consider cultural and religious factors. Future research should focus on designing and testing such a module using the full ADDIE development process.

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