
Self-Concept of Gifted and Talented Students: A Systematic Literature Review

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ABSTRACT

Self-concept is critical in enhancing the academic performance of gifted and talented students. This study aims to explore more on self-concept of gifted and talented students across the global. The first aspect of the searched literature allowed us to understand the importance of self-concept among the gifted and talented students. This systematic review was conducted based on Preferred Reporting Items for Systematic Reviews and Meta-Analyses criteria. Twelve papers were chosen and assessed. Findings from several journal sources collected in various settings, countries, and years were assimilated to achieve a better understanding of self-concept in gifted and talented students.

Keywords: Self-concept, self-identity, self-development, gifted and talented students

INTRODUCTION

Gifted and talented students are individual with gifts and talents perform or have the potential to perform at greater levels in one or more domains than students of the same age, experience, and environment. However, because of its unique characteristics, gifted and talented students can have learning and processing disorder that require special intervention and accommodation, need support and guidance to develop socially and emotionally as well as in their areas of talent. Due to asynchronous, high expectations, unchallenging learning which frequently monotonous and difficulty adapting in social interactions (Scott, 2012; Bakar & Alias, 2009; Alias & Yamat, 2009) contributed to several problem such as emotional intensity, high anxiety, high sensitivity, overexcitability, strong feeling to social justice, high self-criticism, lack of social adjustment and communication skills, as well as difficulties adapting to new surroundings (Bakar & Ishak, 2016; Fouladchang, Kohgard & Salah, 2010) which lead to low self-esteem, self-motivation, underachievement, and anxiety to the gifted and talented students (Yusof, Ishak & Hassan, 2016). Therefore, it is very important to balance the intellectual intelligence and other psychological issues in comprehensive self-identity development (Yusof, Radzi, Muda, Amat & Idris, 2022).

Self-concept, also known as self-identity, differs from consciousness in that it refers to the level to which one's knowledge is defined, consistent, and currently applicable to one's attitudes and dispositions. Self-concept varies from self-esteem in that it is a cognitive or descriptive aspect of one's personality (Punithavathi, 2001). Self-concept refers to a broad description of oneself and impact how the individual respond to life. Sanchez and Roda (2005) observed a closer relationship between academic self-concept and measures of academic performance that demonstrated the total self-concept and academic self-concept are good predictors of general performance of the students. A strong sense of self is a powerful stimulant to help the sustainable development of gifted and talented students. There is several previous research has emphasised the significance of psychological well-being so important in motivating a population gifted and talented students to achieve their full potential. High-performing gifted and talented students experience higher levels of well-being than underachieving gifted and talented students which high-achieving students possessed a more positive self-concept and experienced fewer psychological problems than the underachievers (Kroesbergen, van Hooijdonk, Van Viersen, Middel-Lalleman & Reijnders, 2016). Therefore, a well-developed self-concept helps oneself responds in ways that are more positive and beneficial.

This review aims to explore more on self-concept/self-identity of gifted and talented students across the global. The first aspect of the searched the literature allowed us to understand the importance of self-concept/self-identity among the gifted and talented students. The second stream of literatures focused on classifying the best possible solution under different scenario as an outcome of the current situation. The mapped of the literature are to understand what lessons learned from the past and discuss the possible future scenario and finally provide a future agenda.

METHODOLOGY

This systematic review was derived from an area of interest which in self-concept of gifted and talented students around the world. A search strategy conducted to retrieve literatures related to the aim of the review. Objectives of the review served as a guideline of the literature research from different resources.

The Search Strategy

For this systematic search, a strategic search was conducted to identify relevant literature by using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses criteria (Moher, Liberati, Tetzlaff & Altman, 2009). Due to limited number of articles within five years (2018-2022), the search been broadened to ten years (2013-2022) of publications. All searches spanned from database inception included journal articles, review papers, research reports and published in

English or Bahasa Malaysia. This search strategy was tailored to three databases: Scopus, Web of Science and Google Scholar and the search terms used were the following: “self-concept” OR “self-identity” OR “gifted and talented students”. The initial search indicates high number of articles responding to this field but reduced and by implementation of inclusion and exclusion criteria as shown in Table 1 and 2.

Table 1: Inclusion criteria of the systematic review

Criteria	Particulars	Literature Identified	Remaining Literatures
Scopus		21	
WoS		323	650
Google Scholar		306	
Key terms	Self-concept, self-identity, gifted and talented students	298	298
Year	From year 2013 to 2022	222	222
Participants	Gifted and talented students, counselors, and/or teachers in preschool, primary, and/or secondary school, college and/or university	222	222

The study is based only on original research articles, review paper and conference papers. As to maintain the quality of the review, all duplications were checked thoroughly. All articles except English language and Bahasa Malaysia are excluded. The abstracts of the articles were checked deeply for the analysis and purification of the articles to ensure the quality and relevance of academic literature included in review process.

Table 2: Exclusion criteria of the systematic review

	Particulars	Excluded Literatures	Remaining Literatures
Inclusion Criteria			222
Exclusion criteria	Duplication	32	190
	Language	2	188
	Review paper	6	182

Parent & Family involvement	4	176
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The selection criteria were based on the PRISMA Statement (Moher, Liberati, Tetzlaff & Altman, 2009). The search mainly focused on the mapping existing literature on self-concept or self-identity of gifted and talented students in the field of social sciences, psychology, education special, psychology educational, psychology social and education educational research. Figure 1 show the flow of literature inclusion and exclusion at every stage of this systematic review process.

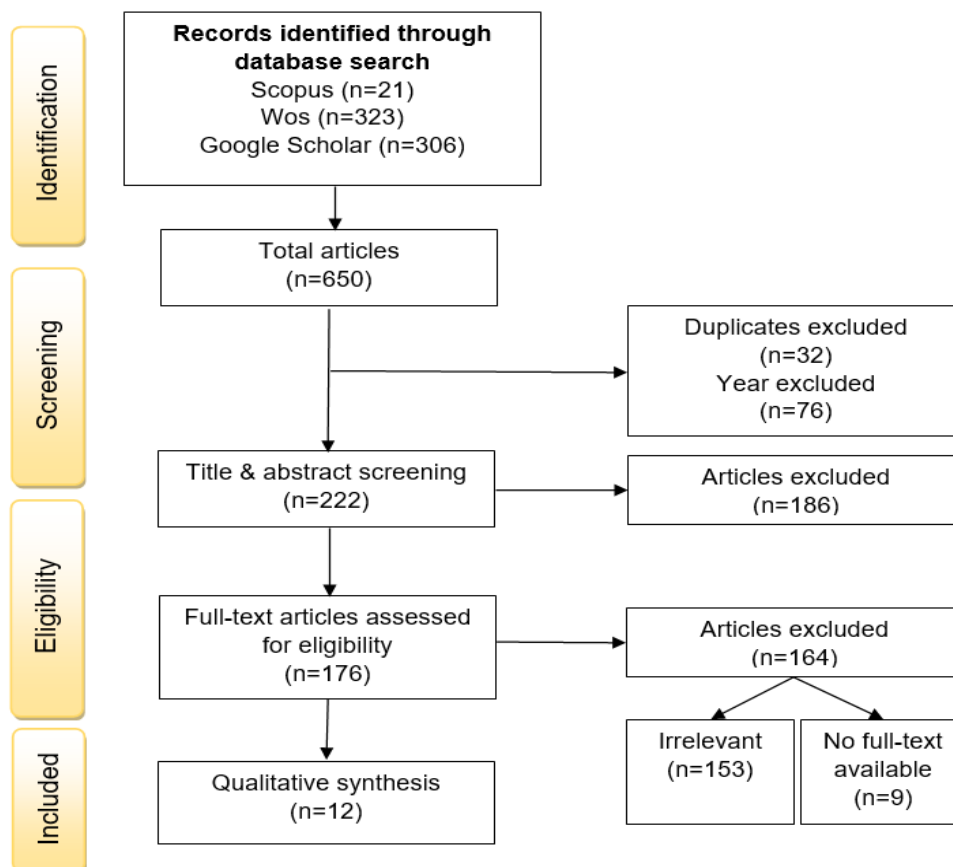


Figure 1: PRIMA flow diagram of systematic review process.

In the data extraction phase, 12 articles were selected, and the characteristics were as follow:

- must be an original paper, review paper and conference paper. Book and book chapter were excluded.
- must be in English language or Bahasa from the field of social sciences, psychology, education special and psychology educational.
- were published between years 2013 to 2022.
- articles which consist of parental and family involvement was excluded.

Findings of Literature Review

The information of selected articles is shown in Table 3.

Table 3: Summary of Selected Literatures

Author/Year/Location	Title of the Article	Participants	Main Finding
Foley-Nicpon, Assouline, & Fosenburg 2015 USA	The relationship between self-concept, ability, and academic programming among twice-exceptional youth	64 subjects with high ability (IQ score at or above the 90th percentile) and were diagnosed with either an autism spectrum disorder (ASD; n = 53) or specific learning disability (SLD; n = 11)	There was no relationship between ability, educational services, and self-concept, implying that high cognitive ability and related educational interventions are independent of how twice-exceptional students feel about themselves. However overall self-concept profiles were average.
Bakar, A. Y. A. 2016 Malaysia	Self-identity and behavioral tendencies among gifted and talented students: A case study	194 gifted and talented students of PERMATA Pintar™ Negara, Universiti Kebangsaan Malaysia	The development of student's self-identity profile provides basic information on the importance of the need to provide psycho-socio-emotional support services to develop excellent character of gifted and talented

students.

Yusof, R., Ishak, N. M. & Hassan, S. A. 2016 Malaysia	A study of identity and socioemotional stress among intelligent and talented students	194 gifted and talented students of PERMATApintar™ Negara, Universiti Kebangsaan Malaysia	The educational curriculum has a positive impact on the development of self-identity among the students. However, the self-identity leadership needs to be given closer attention due to the moderate level among the students.
Košir, K., Horvat, M., Aram, U. & Jurinec, N. 2016 Slovenia	Is being gifted always an advantage? Peer relations and self-concept of gifted students	404 Slovenian elementary school students; among them 85 (21%) were identified as gifted	Gifted students higher academic and general but not peer relations self-concept. No differences in social acceptance and self-concept between the groups of gifted students. There is a significant interaction effect between gender and giftedness for peer relations self-concept.
Lee, K. M., Jones, M. K. & Day, S.X. 2017 USA	The impact of academic competency teasing and self-concept on academic and psychological outcomes among gifted high school students	200 artistically and academically gifted students (62.2% female) recruited from two high schools	Gifted and talented students are susceptible to the consequences

				of academic teasing which victimization may lead to the deterioration in academic. Challenges in self-concept caused by teasing more significantly related to grade among academically students than to artistic student of gifted and talented.
Maharmeh, L. 2018 Jordan	The level of academic self-concept among gifted students with low academic achievement	110 gifted students with low academic achievement		Gifted students with low academic achievement have low level of academic self-concept. There is no significant different between the gender and the school stage.
Lo, A.& Abbott, M. J. 2019 Australia	Self-concept certainty in adaptive and maladaptive perfectionists	103 university students which 26 adaptive perfectionists; 28 maladaptive perfectionists; and 49 non-perfectionists		There is significant different in context of self-beliefs about personality attributes between the groups of perfectionist. The adaptive expressing more positive beliefs and positive personality attributes than to the

maladaptive perfectionists.

Casino-García, A. M., Llopis-Bueno, M. J., & Llinares-Insa, L. I. 2021 Spain	Emotional intelligence profiles and self-esteem/self-concept: An analysis of relationships in gifted students	118 identified gifted and 122 non-identified of Spanish students	Having a positive social self-concept and high self-esteem are essential for professional success, collaborative work, and leadership activities. Important to find balance between feeling competent (intrapersonal) and getting along with the peers (interpersonal) and establish strategies to be accepted by the peer who have difficulties to understand them.
Lindt, S., Rutherford, E. & Wagner, H. 2021 USA	Social and emotional needs of gifted elementary students: understanding the development of self-concept identification	Gifted and talented students, parents, and teachers in five school districts	Gifted and talented student's self-concept weakened as they progressed through the grades, and it was significantly linked to the type of gifted programme and the method of

				notification for admission into the gifted programme.
Fernández-Bustos, J. G., Infantes-Paniagua, Á., Cuevas, R., & Contreras, O. R. 2019 Spain	Effect of physical activity on self-concept: Theoretical model on the mediation of body image and physical self-concept in adolescents	652 students between 12 and 17 years	Spanish	Physical activity can help students develop a positive self-concept and increase psychological well-being through improving physical perceptions and body satisfaction.
Tokmak, F., Sak, U. & Akbulut, Y. 2021 Turkey	Big-fish-little-pond effect on gifted students' academic self-concepts: What if the big fish has adaptable academic self-concepts?	50 sixth-grade gifted students		Student's academic self-concept declined through the programs compared to their perceptions at the school due to the awareness of Big-Fish-Little Pond effect which they realise their capacity through peer comparisons. The decline does not indicate as profoundly devastating to their academic achievement or academic self-concept.

Yusof, R., Radzi, A. M., Muda, T. E. A. T., Amat, S. & Idris, F. 2022 Malaysia	Holistic self-identity model of 21 respondents consisted of two gifted and talented experts, 6 educational counsellors, seven gifted and talented teachers, three Human Development Faculty lecturers, and three industrial leaders.	Intellectual-identity, Emotional-identity, Social-identity, Physical-identity, Spirituality-identity, Leadership-identity, Citizenship-identity, and Adversity-identity are eight developing categories and 25 fundamental themes that reflect the categories of a holistic self-identity of gifted and talented students.
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DISCUSSION

The Relevance of the Self-Concept/Self-Identity Enhancement

Self-concept enhancement is identified as a major focus of concern in diverse settings of gifted and talented students especially in academic setting. Regardless of which country research was carried out, comprehensive self-concept/self-identity of gifted and talented is crucial. Self-concept enhancement helped students to achieve high standard of learning and to develop self-confidence, optimism, high self-esteem, respect to others and personal achievement of excellence. The pervasive significance of enhancing self-concept as reflected in education policies held beliefs that enhancing self-concept is a desirable education goal itself and is also likely to enhance academic achievement. Much previous research that prioritizes self-concept development in parallel with academic achievement such as studies have been done by Maharmeh (2018) shows that gifted students with low academic achievement is caused by low level of academic self-concept of the students. Therefore, it is important to give more attention to this issue by providing the intervention that will maintain the high level of academic self-concept of gifted and talented students.

Self-concept enhancement is not only lingering to enhance the academic performance of individual. Additionally, students' self-concept should be developed holistically, including strengthening students' personalities and morals. Bakar (2016) emphasises gifted and talented students who have great self-concept have tendency to behave positively which help the students from getting caught up in negative learning setting. Like other students, gifted and talented students are not immune to psychosocial issues. This is because the higher the IQ (intellectual intelligence) of gifted and talented students, the higher the risk for them to be exposed to social and emotional adjustment issues (Hollingworth, 1942). However, Yusof, Ishak and Hassan (2016) discover that higher the level of self-concept of gifted and talented students, the lower the socio-emotional stress experienced, and conversely the lower the level of identity, the higher the socio-emotional stress. Therefore, self-concept enhancement is one of important essential markers in encouraging gifted and talented students dealing with their academic and socio-emotional issues that hinder self-development.

Yusof, Radzi, Muda, Amat and Idris (2022) discover comprehensive concept of self-identity is by maintaining a well-balance inner-self quality (holistic identity). Comprehensive concept of self-identity encompasses intellectual, emotional, social identity and physical identity. Fernández-Bustos, Infantes-Paniagua, Cuevas and Contreras (2019) highlighted that physical activity helped students to develop a positive self-concept and improve the perceptions and body satisfaction.

Self-Concept Module and Intervention

Over the years, many research works have conducted multiple interventions to help enhancing self-concept of gifted and talented students especially enhancing academic self-concept or self-identity in every aspect such as twice-exceptional, socio-emotional, perfectionists and many more. Modules and interventions play a significant role improving self-concept of gifted and talented students. Many studies have emphasised the need of conducting frequent evaluations because the skill of gifted and talented students can decline as time goes by because of their unique features.

Being cognitively gifted or receiving specialised interventions may not be adequate to meet the psychological requirements of twice-exceptional students (Foley-Nicpon, Assouline, & Fosenburg, 2015). Most of gifted and talented students have different unique needs such as levels of ability, interests, self-concept, mental health, habits, motivation and many more. As a result, the implementation of different modules and interventions is actively advocated based on their specific needs and academic stages. This fact has been proved by previous study which shown difference level of academic self-concept requires to the difference academic stages (Maharmeh, 2018). In

addition, Bakar (2016) also found that student of gifted and talented who expose to various activities in the 'differentiates' education curriculum, found to have high self-concept. Therefore, to achieve an accurate picture of the presenting concerns and appropriate interventions, a comprehensive assessment that encompasses several measurements from multiple level and assessment is required.

The Role of Teachers, Counselors and Relevant Parties

Given the aspect of psychological well-being is important in driving the excellence of the gifted and talented student population especially in the aspect of self-concept, the process of nurturing self-identity should be done formally and informally with careful planning, creative and innovative which full fill demands of learning method that suitable with their uniqueness. Guidance and coaching will tend to raise the level of self-confidence and self-concept of the students. Professionals who work with gifted and talented students (educators, counselors, licenced psychologists, schools) must be aware of characteristics of students' capabilities and limitations, as well as how these may intersect with self-concept (Foley-Nicpon, Assouline, & Fosenburg, 2015).

The guidance and counseling service program needs to consider the holistic development aspect that covers the whole aspect of self-concept (Bakar, 2016). Educational policymakers and Physical Education teachers should implement strategies to promote physical activity in the schools and provide a Quality Physical Education programs to increase physical activity of students (Fernández-Bustos, Infantes-Paniagua, Cuevas and Contreras, 2019). It is essential for teachers, counselors and relevant parties to acquire training in the educational care of gifted and talented students. This initiative will provide opportunities for gifted and talented students to develop their potential and talents to the maximum at the hand of professional. Thus, it becomes a responsibility of educators and administrators of a gifted and talented education program to develop personality and character of gifted and talented students (Yusof, Radzi, Muda, Amat&Idris, 2022).

CONCLUSION

Everyone's self-concept is distinct, demonstrating their individuality. Self-concept aids gifted and talented students in defining themselves via specific roles focus on the given context and allowing themselves to navigate and adapt to the surroundings. To sum it up, self-concept plays an important role not only in enhancing the academic performance of gifted and talented students but also ensures that they have a comprehensive self-concept development.

ACKNOWLEDGMENT

Authors are grateful to the Ministry of Higher Education (MOHE) that funds the research and publication of this article via internal grant (Code: FRGS/1/2019/SSI09/UKM/02/3).

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