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Research Article

The culturally valued domains in talent studies in Iran: experts views

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Abstract

Talent and giftedness is one of the cultural concepts to identify a person who is eminent in one or numerous domains that society highly regards. So, finding the culturally valued domains in talent studies is a priority, and this has led to the development of measures used in gifted assessment and educational programs in each society. This study aimed to investigate the culturally valued domains in Iran. In this regard, fourteen interviews with educational and psychological experts were carried out. Purposive and snowballing samplings were used, and the participants took part in an unstructured interview. An unstructured interview is an interview with a comprehensive and open question in which the interviewee can lead the conversation. Usually, in an unstructured interview, the interviewer listens and reflects more than speaks. In this study, the experts were asked to describe their idea regards the culturally valued domains in Iran. For analysing data, open, axial, and selective codings of grounded theory were used. Finally, eleven culturally valued domains for identifying talented and gifted students were introduced by the experts. These domains included: Logical and Mathematical, Science(Academic), Artistic, Leadership, Literacy, Technology, Spatial, Athletic, Social Relationship, Existential, Spiritual and religious and Entrepreneur. This research suggests that these domains should be considered for use in Iran in talent and giftedness studies. Identifying talented students in Iran, which is an Islamic country and culturally different from westerns countries, also considering developmental and educational programs for the identified students could play a significant role in talented studies literature. Furthermore, researching culturally valued domains in other Islamic countries is highly recommended.

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Introduction

Talent refers to the possession and use of untrained natural ability in at least one ability domain (Gagné, 2004). Talent Developmental Models have been introduced based on the determination of gifted and talented students across talent domains. The ability domain is one of the crucial factors in Talent Developmental Models (VanTassel-Baska, 2021). For instance, a differentiated model of giftedness and talent (DMGT), introduced by Gange (2000), refers to six natural ability domains: intellectual gifts, creative gifts, social gifts, perceptual gifts, muscular gifts and motor control gifts.

Pfeiffer (2012) has proposed his model of the tripartite model of giftedness by seeing giftedness through the lens of high intelligence, outstanding accomplishment, and potential to excel. Based on this theory, he made the Gifted rating scale (GRS) by introducing six subscales: intellectual, academic, artistic, creativity, leadership and motivation. One of the other most popular models of giftedness is Renzulli's three-ring model (Renzulli, 1984, 2009). He considers

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two types of giftedness: schoolhouse and creative, productive giftedness. The Scales for Rating the Behavioural Characteristics of Superior Students (SRBCSS) was developed in this regard with fourteen subscales: Learning, Reading, Leadership, Science, Dramatics, Creativity, Motivation, Artistic, Musical, Communication (Precision), Communication (Expressiveness), Planning, Mathematics and Technology characteristics.

Perleth, Sierwald, & Heller (1993) also refer to intellectual ability, creativity, social competence, artistic ability, and psychomotor ability in the Munich Longitudinal Study of Giftedness model. On the other hand, the role of culturally valued domains has been emphasised in talent developmental models. Renzulli (1984, 2009), in his Three-Ring Conception of Giftedness model, emphasised producing creative things in culturally valued domains. Also, Pfeiffer has claimed that "giftedness is a culture-bound conceptualization, not something real in nature" (Nicpon & Pfeiffer, 2011; Pfeiffer, 2002). Sternberg (1985) has mentioned that cultural forces will influence domains of the abilities in talented studies. Cross and Cross (2020) have suggested a school-based definition of giftedness by concentrating on the various domains of giftedness that the educational system search for and recognises. Subotnik et al. (2011) have also introduced the "megamodel" in which they have mentioned giftedness shows society's values.

The concept of talent and giftedness is applied in each society as a label to identify the person who is doing excellence in one or several domains that society highly regards (Pfeiffer, 2015). For instance, what is considered as talent and giftedness in industrial culture differs from the talent and giftedness definition in hunting and agricultural societies (Pfeiffer, 2015). In other words, one individual may be considered talented in one society, while in different communities, maybe not. So, it is needed to identify the culturally valued domains in talent search and identification. The list of domains is indefinite, but society's values and culture can limit it (Pfeiffer, 2015). The discussed models introduced in Western countries, but they also were applied in East countries. In other words, Most Asian countries use Western rating scales in talent studies regardless of cultural differences. For instance, the Gifted Rating Scale (GRS) of Pfiffer and Jarosewich (2003), which introduced in the United States, was applied in China (Li et al. 2008), Korea (Lee & Pfeiffer, 2006), and Oman (Hassan Hemdan, et al. 2017). Although the acceptable reliability and validity of GRS were reported in these countries, it can be because of some shared ability domains. Hence, some abilities that may play a substantial role in these countries may be neglected by GRS.

The investigation of talented and giftedness research publications in recent years demonstrates a Western bias in giftedness studies. 84% of research were conducted in Western countries, 10% in East Asia, 4% in Islamic countries and 2 % in South East Asia and India (Pfeiffer et al. 2018). What is more, only a few cross-cultural studies can be found in talent and giftedness literature, while talent and Giftedness are cultural concepts, and cultural diversities needed to be considered in these kinds of studies (Phillipson, 2020). Culture and Society play a crucial role in identifying talented students. For instance, GRS tried to cover the six domains that have been introduced by the Ministry of Education (1994) in the United States based on United States society. These domains included: general intellectual ability, specific academic attitude, creative or productive thinking, leadership ability, music, visual and performance arts, and psychomotor abilities. Public Law 91-23g, Section 806, states" the Commissioner of Education shall define "gifted and talented" for purposes of Federal education programa"(Marland, 1971).

Remarkably, the role of culture and society will be seen in identifying talented girls when the culture and society do not let them show their performance and talents (Bernal, 2001; Castellano & Frazier, 2021). For instance, in Islamic countries, some talented girls who are good at rhythm, melody, and media communication will not be recognised as talented. In other words, because of the cultural conditions and some religious values, the females will not have the opportunity to develop their performance and be recognised as talented in these types of art. So, the artistic ability in the western version of the giftedness scale, such as GRS, is not as much useable as spiritual talent in religious cultures. Nevertheless, in most Asian countries such as some Arab countries, GRS is being used in identifying talented students. Culture-sensitive researchers and advocates of giftedness and gifted studies in Asian societies are concern about applying the western scale in these countries without considering a cultural grounding. In other words, they are concern about imposing western values in gifted education. Previous studies of talent and giftedness have not dealt extensively with talent studies' cultural views. Only cross-cultural research has been conducted, in which the Western talent models and scales were applied in different cultures such as Eastern cultures. While, there might be some talent domains exclusively related to one culture, which the western scales might not measure. For instance, a society where hunting is valuable might develop skills and talents in the hunting domain (Pfeiffer, 2015), as talents are influenced by the environment (Heller et al. 2013). Hence, a scale that the other society has made might not be suitable to be used in a hunting society. In Southeastern Asian countries, Buddhist, Hindu, and Islamic religious values assume significant importance, so they should be considered in giftedness and talented studies (Chan, 2018). Hence, this study investigated the culturally valued domains in Iran, a religious country.

Method

Reserch Model

This study used grounded theory to collect, analyse, and interpret data (McCann, & Polacsek, 2021). Grounded theory starts with individual cases, experiences, incidents and develops conceptual categories to understand and explaining data. Grounded theory methods help the researchers to apply qualitative research proficiently in structuring data collection and analysis (Charmaz & Thornberg, 2020).

Participants and Sampling

The sample included 14 Iranian educational and psychological experts. Seven of them were National Organization for Development of Exceptional Talents (NODET) members, who were executors of identifying and guiding talented students, four were eminent psychologists in giftedness, and exceptional children and three were the experts of the Iran's National Elites Foundation (INEF). The experts' age ranged from 40 to 73 years, and the majority were male (n = 71.42%). Academically, four of the experts were professors, and the rest had at least a PhD degree in Education and Psychology. Years of the experts' experiences in the talent and giftedness field was from 10 to 50 years. The participants were selected to attend an unstructured interview by applying purposive and snowballing sampling. All interviews were recorded by an encrypted electronic device. The experts individually were asked to choose a suitable place for the interview. The experts were told that the interview time would be between 15 and 45 minutes. The participants took part in individual face-to-face interviews with consent.

Data Collection and Analysis

The project's purpose was explained to the experts, and data collection started with an open-ended question. The experts were asked to explain the "The Culturally Valued Domains in Talent studies in Iranian culture?" Interviews were audiotaped and transcribed. One of the experts who was a member of the NODET asked to do one more interview with him. He wanted to share some more information regarding giftedness and talented students. Open, axial, and selective coding were used for analysing data (Williams & Moser, 2019). Open coding is the line-by-line coding of the text by breaking up the text into discrete parts, which is substantial in the first phase of research and data collection. Axial coding is grouping the initial codes based on a pattern in developing categories (Bitsch, 2005). Thematic or selective coding, combines the related categories and subcategories to make a central concept (Corbin & Strauss, 2014).

Rigor

Multiple approaches to raise rigor were considered. For instance, regarding originality, categories that caused new viewpoints based on present literature were investigated (Charmaz, 2014). Memoing also was conducted after each data analysis session. Memo-writing is the stage between coding and the first draft of the completed analysis (Charmaz & Belgrave, 2007). Data analysis was conducted with a research team included experienced grounded theory methodologist. Member checking (Bowen, 2009) was also done, in which the experts verified that the culturally valued categories found as talent domains in Iran were compatible with their experience.

Results

The terms, concepts, and phrases that the participants stated regards the research question were extracted after transcribing the interviews. The researchers used "open coding" of grounded theory to conceptualise the terms and the concepts that the experts had mentioned. In each set of open codes, the common concepts were extracted as the axial codes. At the final level of coding data, a single category emerged from the organised Axial categories (Table 1).

Table 1
Selective, Axial, Open Categories and An Example

Selective	Axial	Open	Example
Logical and Mathematical	Logical-Analytical thinking, Mathematic ability	Analytical ability, Logical Ability, Problem Solving, Cognitive Ability, Measuring Ability, Numeric ability, Understanding the shapes	*"Mathematics is one of the crucial domains in talent studies with broad fields. For instance, Mathematics includes numeric, measuring, and shape fields."*
Science (Academic)	Academic curriculum Science and Academic Subject	Science, Academic Progress, Academic Curriculum, Academic Course, Academic failure, Academic subject, Academic discipline	*"Sometimes, the educators apply Academi talent as Mathematics and logical talent. While Academic talent and Mathematics are not the same; some similarities might be seen between them, but they should not be considered the same"*
Artistic	Different types of Art	Art competition, Music, Artistic Ability, visual arts, handicrafts, Calligraphy and Marquetry, Painting, drawing	*"We have to concentrate on all kinds of art and developed them. We shouldn't restrict the art ability to drawing or music. Furthermore, there is a discussion regarding whether music ability is an art or a different ability"*
Leadership	Managing, Controlling, Leasdership	Managing of future of society, Management ability in coordinating programs, controlling situation, Managing natural resources, Managing and controlling discussion	*" Leadership talent is the primary talent to be recognised; if we don't manage our natural resources, such as water, we won't make suitable dams to control the flooding. If we do not know how to manage the forests, we will lose them."*
Literacy	Reading, Writing, Speaking	Literacy, Poem, Poet, Reading, Writing, Literacy, Verbal,Culture, Classic literacy, Verbal, Essay, Language Speaking	*"Some people have literacy ability. They are good at writing essays, Reading, and Poems. In other words, they have been developed in verbal ability"*
Technology	Engineering and Practical abilities	Mechanic, Electronic, Computer, Engineering, Programming, Skill Carpentry, Sewing	*"In this modern world, Technology has dominated peoples' life. So, identifying talented students in this domain are in priority"*
Spatical	Visualization and Navigation ability	Visual-Spatial,Finding direction, Finding Address,Visualising, Three dimension visualisation Imagination	"The students with *Spatial talent are good at finding address, direction and anything that relates to navigation"*
Athletic	Sport and Motor ability	Motor skills, Gross motor skills, Fine motor skills, Movement-Athletic intelligence, Sports, Motor development, Psychomotor ability, Sports types, Physical ability	"If *we found that a student is good at movement activities, we have to encourage him to be involved in Athletics activities and ask his parents to support him".*
Social Relationship	Good relationship and Being Sociable	Good relationship, Social relationship, Communication, Empathy skill, Social Skills, Social development, Social intelligence, Social interaction	*"In human science, knowing social skills is crucial. You need to know how to communicate and empathise with people in your personal life and workplace"*
Spiritual and religious	Religious and Spiritual information and behaviour	Religious information, Religious behaviour, Religious culture, Spiritual intelligence	*"Although religion and spirituality are not the same, in my idea, we can consider them as one point. The difference between religion and spirituality is that religion includes spirituality, while spirituality might not involve religion"*
Entrepreneure	Being creative and challengeable With risk ability	Creativity, Risk ability, Discovering the relationship between phenomenons, Challengible behaviour, Having different and special view to the phenomenons	*"To identify the students with Entrepreneur ability, we need to identify the students with the risk ability in schools and support them"*

In this study, the core categories found were the experts' views regarding culturally valued domains in Iran that were realised as crucial domains in talent identification (Table 2).

Table 2

Code Frequency Table for Research Question

Code No	Structural Codes	f
1	Logical and Mathematical	13
2	Science (Academic)	5
3	Artistic	10
4	Leadership	6
5	Literacy	8
6	Technology	6
7	Spatical	4
8	Athletic	11
9	Social Relationship	7
10	Existential, Spiritual and religious	6
11	Entrepreneure	3

Table 2 shows that the many experts agreed on the Logical and Mathematical, Athletic, and Artistic domains. Thirteen experts referred to the Logical and Mathematical domain, eleven experts referred to the Athletic domain, and ten experts referred to the Artistic domain. Some of the experts agreed on literacy(8 experts), social relationships(7 experts), leadership(6 experts), technology, existential-spiritual-religious(6 experts), and science(5 experts) domains. Also, a few of the experts mentioned spatial(4 experts) and entrepreneur(3 experts) domains.

Discussion and Conclusion

The Logical and Mathematical Domain

This study investigated the culturally valued domains in talent studies in Iran based on experts' views. The unstructured interviews were conducted with fourteen experts. Grounded theory was used to collect, analyse, and interpret data. After analysing interviews with open, axial, and selective coding, which are vital concepts in grounded theory, eleven domains were identified as culturally valued. However, the experts emphasised some domains over others. For instance, thirteen experts emphasised Logical and Mathematical talent. The importance of mathematics can be seen in Iran when the students' mathematics performance in Trends in International Mathematics and Science Study (TIMSS) were low. So, Iran's education system and curricula decided to exert a real radical change in the mathematic curriculum in 2011 (Den Heuvel-Panhuizen, Sangari, & Veldhuis, 2021). The logical and mathematical domain introduced as a priority valued domain in this study, is consistent with the Universal Abilities Scale (UMAS; McCallum & Bracken, 2012), which aims to screen pupils' behaviour in numerous domains such as mathematics. Furthermore, the Munich Longitudinal Study of Giftedness model, designed in Germany (Heller, Perleth, & Lim, 2005), and the Gifted Rating Scale (GRS) designed in the United States also refer to logic ability as intellectual ability. In addition, Renzulli, a prominent theorist in talent studies, points to logic ability as a mathematical characteristics in his scale (Renzulli, 2010).

Athletic Domain

The second domain that was emphasised more by the experts was the Athletic domain. All 11 experts who mentioned the Athletic domain believed that investment in the Athletic domain is necessary for each society as sports competitions globally are valuable. Interestingly, one of the experts also referred to the difference between Athletic ability and muscular-motor control gifts introduced by Gagne (2004) and the psychomotor domain in the Munich Longitudinal Study of Giftedness model, designed in Germany (Heller, Perleth, & Lim, 2005). The expert who was the deputy manager of the NODET believed that in talent studies, three strata should be considered. He stated that " I am going to speak about athletic ability, which is seen in the performance of athletes. The athletes' performance originates from three strata. The first step is the speed and accuracy of processing information with regards to kinetic ability. It causes the second step, which Munich Longitudinal Study of Giftedness model refers to it as psychomotor ability, and Gagne (2004) refers to it as muscular-motor control gifts. The two strata interact with the environment, and as a result, stratum three will appear. In other words , when the performance of an individual can be seen in society, it is called athletic ability. He emphasised that Athletic ability is something that is seen at a society level, whereas psychomotor ability is apparent at the individual level. It would be interesting to consider the possibility of differences between psychomotor an athletic abilities, as there is a lack of research in this area. About the Athletic

domain, these days, some opportunities have been created in Iran regards to sports. For instance, Iran's government has invested in privatisations and commercialising sports clubs, the collaboration between sports institutions and clubs, and supporting the Ministry of Sports (Pishva et al. 2021).

Artistic Domain

The third domain was the Artistic domain, which ten experts pointed out. Six experts referred to drawing, visual arts, handicrafts, Calligraphy and Marquetry. Furthermore, five experts believed that artistic ability should not be limited to visual arts in the educational system. They thought that the musical domain should be considered within artistic ability or as a separate domain in talent studies because of its importance in peoples' lives. Because some experts have mentioned musical talent, it comes to mind if the artistic domain of GRS, which refers to musical ability, will be useable in talent identification in Iran or no. On the question of that, religious values, especially the crucial role of religious values regarding females in Islamic countries, will restrict the use of GRS in Islamic countries. Rhythm, melody and media communications are factors that are mentioned as substantial questions in the Artistic subscale of GRS. At the same time, there are few opportunities for people, especially for females, to perform their ability in musical domains and being recognised as artistic talent. Hence, the questions for the artistic domain should be designed according to culturally artistic valued domains in Iran.

Literacy Domain

The fourth domain was literacy. Six of the eight experts interviewed stated that Iran is outstanding in the literacy field. They also referred to the roles of Iranian Poems and literature in Persian civilizations and the importance of identifying talented students in these fields. In this regard, Shiraz is a city in Iran known as "the city of knowledge" because of forms of knowledge, notably history and poetry. Shiraz had remarkable effects on the civilization of Iran , social and ethical behaviour among Iranian people (Manoukian, 2012). The Literacy domain emphasised by the Iranian experts has also been introduced in UMAS for screening pupil's behaviour. In addition, Renzulli (2010) referred to reading characteristics in SRBCSS.

Leadership and Social Relationship Domain

The other domains discussed were Leadership and Social relationship domains. Six of the experts argued that the social relationship is an aspect of the leadership domain and not separate. However, seven of them thought that the social relationship is a separate domain and not necessarily an important factor in leadership which could depend upon power rather than social communication. They also pointed out that somebody who has an excellent social relationship may not have leadership ability. In this regard, the Munich Longitudinal Study of Giftedness model and the DMGT model introduced by Ganier point to social competence and social gifts, respectively. Furthermore, Kafashpoor et al. (2013) have reported that leadership and organizational culture are pivotal factors in the success of organizations in Iran. Panahi (2021) also refers to transformational leadership, innovative leadership and genuine leadership in the effectiveness of organisations in Iran. So, it is needed to find the students who have leadership abilities and support them. These students can play a significant role in the success of organisations in future.

Technology Domain

Six experts emphasised by explaining that technology has revolutionised peoples' daily lives. So, identifying talented students in the technology domain can significantly impact peoples' lives in this modern world. It is consistent with Renzulli (2010). Iran is one of the top countries in the world regarding the number of graduates in engineering and technology disciplines. In contrast, there are not enough job opportunities for graduated people (Heshmati, & Dibaji, 2019). If Iran concentrates correctly on this discipline, finds talented students in this field and considers appropriate technical and vocational training at the college level, it can play an essential role in the technology world.

Existential, Spiritual and Religious

The next domain that was stressed by six experts was the existential, spiritual and religious domain. Gardner (1999) also referred to this domain as spiritual and existential intelligence. The first interviewee raised the point that Iran is a religious country, and the spiritual-religious domain needs to be considered in Iran as one of the essential domains in talent studies. Three experts strongly emphasised the importance of this domain, which caused some discussion among the research team, and it was agreed by the research team members that this domain should be asked about separately at the end of the interview if the experts did not mention it. When the experts responded to the question regarding the religious domain, eight of them claimed that this domain should not be considered as a talent domain; they stated that religion depends on nurture more than nature. Interestingly, they noted that religion is not a talent, and it originates from the context, environment, education and nurture. One of the experts used an example to explain about it. He said, " imagine that you have grown up in a religious family; so you will be influenced by your

family's and the environment's values that you have grown up with ". The other expert referred to the religious ability by stating that "Religion is not a talent, but the ability to understand spiritual and existential events and interpret them is a talent. As arm strength is not talent but the ability to use it to do sports is a talent."

Six of the experts believed that the religious domain should be considered as one of the talent domains. In Iran, the remarkable role of religion, such as Zoroastrianism and Islam, can be seen in Persian identity and culture's "practical" definition. For example, some famous poets in Iran, such as Saadi, Roudaki, Ferdowsi, Attar, Hafez, Rumi and Nezami, are more influenced by Islamic thoughts (Davari, 2018). The Islamic Revolution restrengthened religion in Iran, and religion always has been the core of the Islamic Revolution (Fazeli, 2006). In literacy of talent and giftedness, the religious domain just has been mentioned by Gardner, and non of the other researchers such as Renzulli (2002) and Pfeiffer (2015) have considered the spiritual domain a talent domain.

Academic Domain

The other domain that the experts underlined was the academic domain. Five experts explained that some students are good in some academic domains such as science and history and the other fields according to their curriculum. The Science domain is one of the underlying domains in Iran. Iran reached first place in the world in the growth rate of scientific publications (Akhondzadeh, 2013; MacKenzie, 2010). It is remarkable growth that has been mentioned in the American National Science Foundation's report as well (White, 2019). The Science domain, which experts emphasized, was also consistent with the Universal Abilities Scale (UMAS; McCallum & Bracken, 2012), in which science has been considered as one of the subscales. Their opinion was also supported by the Gifted Rating Scale (Pfeiffer & Jarosewich, 2003) and the Behavioral Traits Assessment Scale (Renzulli et al. 2010) that applied academic subscale and science characteristic respectively.

Spatial Domain

Spatial domain was the other domain that four experts referred to that. They believed that some students are good at navigation, finding addresses and reading maps. For instance, one expert said, " I had a student who was very good in geography, but he was not good in other subjects. I asked his parents to have a meeting together, and I explained to them the academic situation of their child; during our conversation, his parents mentioned that he is very good at finding addresses, locations and navigation". Shahab National Plan in Iran was designed based on Gardner's intelligence, and spatial intelligence was one of the important domains reported with high reliability in Alipoor, Ayati and Soorgi (2019) research. Shahab aim was to identify students' talent in primary schools with teacher's reports. In talent and giftedness literature, spatial intelligence has been mentioned by Gardner (1983) as a mental skill to solve spatial problems of navigation, visualization of objects from different angles and notice details. But the spatial domain is not supported by the other scales such as GRS or UMAS.

Enterprenurial Domain

The final doman discussed was the enterprenurial domain.The term "entrepreneur" refers to the founder of a new business or a person "who started a new business where there was none before" (Gardner, 1985). Three experts highlighted this domain. The research team also thought this domain particulary significant because of the need for investment and business. The experts who focused on this domain agreed that one of the problems in Iran is the lack of investment in entrepreneur ability, while according to Iran's situation, because of sanctions, finding the people who can be entrepreneurs are a priority. What is more, they discussed a difference between entrepreneurship and creativity. one of the experts pointed out that " The thing that we need to look for is the entrepreneur ability, not just creativity. He also said that being creative is one of the features of entrepreneurship ability. The other feature is being a risk-taker; not only do we need to find creative people, but we also need to find the risk-taker people".

Recognizing students with entrepreneurial talent and developing their abilities will be crucial in Iran's economic system. Recently, the Iranian government has started a master policy programme for developing economic resilience mainly through creative entrepreneurial and knowledge-based activities (Abdolmaleki, 2014). Smith (2002) also has highlighted the role of creating entrepreneurial opportunities in childhood and being an entrepreneur in adulthood. From the interviews conducted with the Iranian experts, eleven culturally valued domains were considered in talent and giftedness identification. Instead of applying western countries methods in identifying talented students, it is suggested that more culturally appropriate eastern methods are chosen for eastern countries, particularly in Islamic countries, to develop the literature of talent and giftedness studies based on their culture policies. Previously there has been limited literature in this regard, and western methods have influenced the literature of talent and giftedness studies in many eastern countries. It is suggested for future studies to identify the priority talented domains in each culture and prepare a scale basesd on identified domain in each society. It is suggested for future studies to identify the priority talented domains in each culture. These domains can be applied to a scale for identifying individuals'

talents. The culturally-based scale for identifying talents would have been more helpful if it had been applied for universal talent screening among students.

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