Beliefs and Perceptions about Young Gifted Children

Writer: Hayfa Jeathen AL-Mabrouk

Supervisor: Dr Kerry Hodge

Unit Convenor: Dr Greg Robertson

I declare that:

This assignment is entirely my own work based on my personal study and/or research.

- *I have acknowledged all material and sources used in the preparation of this assignment, including any material generated in the course of my employment*
- *I have not copied in part, or in whole, or otherwise plagiarised, the work of others.*
- *The assignment, or substantial parts of it, has not previously been submitted for assessment in any formal course of study in this or any other institution, unless acknowledged in the assignment and previously agreed to by the Unit's Convenor*
- *The assignment is within the word and page limits specified for the assignment*
- *The use of any material in this assignment does not infringe the intellectual property/ copyright of a third party*
- *I understand that this assignment may undergo electronic detection for plagiarism and a copy of the assignment may be retained on the University's database and used to make comparisons with other assignments in the future*

Abstract

Research in the field of gifted children has received scant attention, especially in regard to identifying their advanced abilities at an early age. It important to identify giftedness in early age that it is because the majority of cognitive and physical developments occur in childhood period. So, gifted children in their childhood have to be nurture differently from norm children. As a result of their especial needs. On the other hand, ignore gifted children advanced abilities may influence negatively on their social and emotional lives. So, many researchers who interested in this filed have used variety of approaches to identify gifted children. For example, IQ test, parent and teachers observations, nominations or questionnaires. Although there are many methods used to identify high abilities in gifted children, parent and teacher beliefs and perceptions of gifted children in preschools play an essential role in the process of identifying and nurturing them. However, parents can identify giftedness in their children easier than kindergarten teachers, The perspectives that parents and teachers have in regard to gifted children are likely to affect the display and maintenance of their advanced behaviours from an early age. Identification of giftedness allows parents and kindergarten teachers to provide appropriate environments to nurture and enhance the abilities of gifted children.

الكلمات المفتاحية : المعتقدات- التصورات- الأطفالالموهوبين

المعتقدات والتصورات حول الأطفال الموهوبين

الكاتب: هيفاء جيثين المبروك

المشرف: د/ كيري هودج

مشرف الوحدة: الدكتورجريجروبرتسون

.

تم إجراء هذه الدراسة عن الأطفال الموهوبين الذين حازوا قدراً كبيراً من الاهتمام والذين يظهرونمهارات متقدمة في سن مبكرة. من المهم التعرف على الأطفال الموهوبين في سن مبكرة حيث أن التطورات البدنية والإدراكية تحدث في هذه الفترة؛ ومن ثم فمن الطبيعي أن يكون الأطفال الموهوبين أكثر نضجاً من الأطفال العاديين. ونتيجة لذلك فإن الأطفال الموهوبين لديهم احتياجات خاصة. ومن ناحية أخرى فإن تجاهل المهارات المتقدمة للأطفال الموهوبينربما يؤثر على حياتهم الاجتماعية والعاطفية. وقد أجرى العديد من الباحثين في هذا المجال دراسات مختلفة للتعرف على الأطفال الموهوبين. ومن بين طرق التعرف على الأطفال الموهوبين ، اختبارات اي كيو IQ Test، ملاحظات الوالدين والمعلمين، نتائج الاستبيانات. ورغم وجود طرق كثيرة للتعرف على المهارات المتقدمة للأطفال الموهوبين، إلا أن إدراك الوالدين لأطفالهم ذوي المهارات المتقدمة في سن ما قبل المدرسة يلعب دوراً كبيراً في سرعة التعرف عليهم وتنمية مهاراتهم. وعلى أي حال، فمن السهل على الوالدين التعرف على المهارات المتقدمة لأبنائهم الموهوبين أكثر وأسرع من المعلمين في الحضانة. كما أن للوالدين ومعلمي الحضانة تأثير كبير على المهارات المتقدمة للأطفال الموهوبين في هذا السن المبكر. التعرف على الأطفال الموهوبين في سن مبكر يسمح للوالدين ومعلمي الحضانة أن يوفروا لهم البيئة المناسبة لتعزيز قدراتهم.

Beliefs and Perceptions about Young Gifted Children

Children are an important group who need significant attention from educators and experts. In fact, most development in the physical, social-emotional and intellectual domains occurs in early childhood (Schiller, 2010). Therefore, this vital development in children in early childhood has encouraged many scientists and educators to examine and analyse this early development period.

Children's intellectual, social-emotional and physical abilities appear differently from child to child even when they are the same age. These abilities develop normally in the majority of children. However, some abilities develop in a disorderly manner, which can lead to disabilities or other additional needs.. Gifted children are classified in the 'additional needs' group when their development is advanced and they have particular characteristics that make them different from their peers.

> A gifted child is one who performs or has the potential to perform at a level significantly beyond his or her age peers and whose unique abilities and characteristics require special provisions and social and emotional support from the family, community and educational context. (Harrison, 2003, p. 8).

Gifted children exhibit their abilities in a variety of domains (Porter, 2005; Robinson, 2008; Koshy & Robinson, 2006) and also display high capabilities in one or more performance areas (Lupkowski, 1985). Gross (2006) provided an example of a student who had high ability in a variety of domains such mathematics, languages , science, and music.

This literature review will focus on the beliefs and perceptions that parents and teachers have of gifted children who are aged from three to six years. During these years advanced abilities in young gifted children may appear. According to Koshy and Robinson (2006), gifted children are likely to exhibit their advanced

abilities during their early childhood.

Conceptual Framework

In the field of gifted education, there are many theories about what giftedness is and how it develops (Sternberg, Jarvin & Grigorenko, 2010). In of these theories is Gagné's theory (2004), which he called a Differentiated Model of Giftedness and Talent. He differentiated the terms of giftedness and talent by defining gifts as high aptitude or potential, whereas talents are measurable achievement that places a child in the top 10 percent of his or her age peers. He provided an explanation of his DGMT model by demonstrating major five catalysts that could facilitate or hinder the process of transforming potential into highly trained or developed skills. He catalogued these factors as a complex interaction of chance, gifts, intrapersonal catalysts, learning and practice, and environmental factors. He pointed out that in young children it is high aptitudes that should be recognised because environmental factors and systematic schooling have only had a moderate influence at that stage. This theory explains the importance of providing a positive and nurturing environment could transform young gifted children into talented adults.

Significance of this Topic

Gifted children have often been overlooked. In many countries in the world, young gifted children have been neglected by educators, experts, and government policies (Koshy & Robinson, 2006). In fact, some government policies include nurturing giftedness in preschool in their agenda and some of them do not (Koshy & Robinson).In fact, some government policies include nurturing giftedness in preschool in their agenda and some of them do not (Koshy & Robinson). For several decades the field of gifted education has been well established in the USA, whereas in the UK it was only brought to attention in 1999 by the Labour government (Koshy & Robinson). In Australia recently, the National Quality Standard (Australian Children's Education and Care Quality Authority [ACECQA], 2012) has a new statement in its glossary that includes young "children who are gifted or have special talents" as a group with additional needs "who require or will benefit from specific considerations or adaptations" (p. 202).

According to Walsh, Hodge, Bowes, and Kemp (2010), gifted preschool children have been fundamentally neglected by some educators in both the early childhood and gifted education fields. They stated that workers in the two fields misunderstood some areas such as "the identification of young gifted children, the labelling of young gifted children and the application of appropriate gifted education strategies in early childhood context" (Walsh et al., p. 47). Some educators believed that giftedness is not permanent as the main reason for neglecting this group (Koshy & Robinson, 2006).

Identifying gifted children in preschool may create a powerful generation in the future. According to Koshy and Robinson (2006), if we underestimate supporting the optimal development of gifted children we will lose a huge resource because many gifted children can become leaders. In an earlier study by Hollingworth (1942) cited in Gross (2006, p. 425), " the most successful intervention occurred when the children were identified earlier, rather than later".A longitudinal study by Gross (2006) also highlighted the idea of identification and acceleration of highly gifted children at an early age and she found that gifted children who were accelerated one or two years had high positions in their workplaces. Nonaccelerated gifted students were less successful. Thus, this group may become an economic power for their countries.

Although identifying giftedness in preschool's children is essential, appropriate environments are also important to maintain and nurture their giftedness. Gifted children need special teaching strategies, specific equipment and suitable educational settings created for them (Koshy & Robinson, 2006). Providing curriculum and programs specifically designed for gifted children that could assist in developing their abilities in different domains is important. According to Morelock and Morrison (1999) cited in Koshy and Robinson, p. 119), "development of appropriate curriculums for young gifted children must take their advancement into account''. Walsh et al. (2010) and Valpied (2005) discussed the idea of grouping gifted children or placement in friendship groups who were equal or matched with their cognitive abilities created a successful environment to them and could solve many of their social isolation problems.

They also clime that there is no research to show that young gifted children may become bored in the educational sittings are not achieved their needs.

Parents and teachers are important sources to identify giftedness in young gifted children. According to Walsh et al. (2010), parents' information is important in the process of identification of giftedness in the preschool setting. Teachers, on the other hand, can identify giftedness in children depending on their knowledge or experience (Smutny,1999)., However, some teachers are unaware or misunderstand some characteristics of giftedness that they may find difficulties in identifying gifted children (Gross, 2006; Walsh et al.). This situation may place gifted children at risk because of misunderstandng of their advanced behavours. Valpied (2005) pointed out that some gifted children may be misunderstood in their school environment and thus be at risk emotionally as well as educationally. Therefore, teachers have to understand the 'flip side' of giftedness (Valpied). That means, although gifted children have positive characteristics, teachers need to be able to identify some of the negative behaviours associated with giftedness.. According to Valpied (2005) and Walsh et al (2010), while some educators are familiar with the positive characteristics shown by gifted children, they may be unaware of the negative side of gifted traits. As a result, teachers have to be trained to be able to identify gifted children. Patti (2006), Valpied (2005), and Walsh et al (2010) agree teachers need to attend training classes in gifted education to make the process of identifying gifted children easier.

Communication between parents and teachers is essential for understanding and identifying gifted children. Valpied (2005) stressed the importance of an interactive relationship between the family and the school in dealing with gifted childrens' needs. According to Lupkowski (1985), teachers may need to use information from gifted children's parents to help identify giftedness in their children.

Criteria for Choice of Literature

Literature for this review related to research on the beliefs and perceptions of parents and teachers about giftedness in young children. 'Young children' were defined as in the age period of 3 to 6 years. The majority of research has focused on giftedness on primary, secondary and high school students more than preschool children. Research since the 1970s was included because it was in the 1970s and 1980s the main studies about the abilities' of preschool teachers and

parents to identify gifted children in preschools were conducted.

The following databases were searched for peer-reviewed articles: A+ Education, Academic search premier, Educational research abstracts online and ERIC. Keywords used for searching were ‘gifted children’, ‘preschool children’, ‘parents’, ‘teachers’.

This literature review will highlight some significant areas of study that have emerged in the research on perceptions of giftedness in preschool children. The first area is parents’ perceptions of giftedness in their children. Teachers are the second focus, as a means of perceiving giftedness children in the preschool setting. The third focus is the comparison of parents’ and teachers’ perceptions of gifted children. Finally, this review will outline the characteristics of giftedness that have emerged from the reviewed studies.

The Importance of Measuring Giftedness

Importantly, there are different methods used to determine whether children are gifted. Formal methods, such as IQ tests, give a numerical or quantitative measure of the level of the child’s intellectual ability. An IQ score of 130 or above is usually accepted to show that a child is gifted (Ciha, Harris, Hoffman, & Potter, 1974; Lewis & Louis, 1992).Informal methods of identifying giftedness, including observations of children and questionnaires for parents and teachers based on research-based characteristics of giftedness, provide qualitative information on the wide range of ways that children show their advanced abilities (Hodge & Kemp, 2000; Sankar-Deleeuw, 2004, 2007). .It is clear from Table 1 that most of the reviewed studies compared the IQ scores of children to the characteristics that teachers and/or parents perceived in the children.

[Insert Table 1 here]

Parents’ Perceptions of Gifted Children

Silverman, Chitwood and Waters (1986) published their Silverman/Waters checklist in a daily newspaper and asked parents to respond if their children met between 10 and 16 items on the checklist. Twenty-one children aged 3 to 8 were then tested on the Stanford-Binet Form L-M (Terman & Merrill, 1960) and their results were grouped into four levels of ability: not gifted (below IQ 120), mildly gifted (IQ 120-131), moderately gifted (IQ 132-147) and highly gifted (IQ 148 and above). Similarly, Louis and Lewis (1992) asked parents to answer a questionnaire about their children to see if they could identify gifted characteristics. The questionnaire was quite detailed and asked about behaviour, ability in numerous areas, giftedness within the family, developmental history of the child and any stressful events within the family. One hundred and eighteen families responded and all children were subsequently tested on the Stanford-Binet, Form L-M with the exception of four younger children who were tested using the Bayley Scales of Infant Development (Bayley, 1970). The children's scores were initially divided into four groups: average (IQ 97-115), high average (IQ116-131), superior (IQ 132-149) and very superior (IQ 150-185). They were then divided again into two groups: lower and higher IQ, IQ 97-131 (39%) and IQ 132-185 (61%) respectively.

Hodge and Kemp (2000) invited parents to nominate their three or four year-old children for a gifted preschool program. Eleven families completed a questionnaire with open-ended questions about the child's abilities and specific questions about academic skills. The children were not given IQ tests but were tested on the Peabody Picture Vocabulary Test - Revised (Dunn & Dunn, 1981) and the Raven Coloured Progressive Matrices (Raven, Court & Raven, 1995), as well as given literacy and numeracy tests with norms for young children. The children were also observed as they participated in the gifted preschool program.

There were some similarities in the selection of the parents for these studies. Silverman et al.'s (1986) study published their checklist in a daily newspaper. Hodge and Kemp also advertised in newspapers but did not give characteristics to guide parents. It could be said that those who did respond were more likely to be interested in the giftedness of their children. In Louis and Lewis's (1992) study, the parents had already contacted the Gifted Child Clinic to enquire about

their children. In all three studies the parents were likely to be highly interested in the giftedness of their children.

There were several differences in the studies' approaches. First, in the Silverman et al. (1986) and the Hodge and Kemp (2000) studies, small numbers of families were involved, whereas in Louis and Lewis's (1992) study, 118 children with a mean age of 33.9 months were tested. Second, the studies that included IQ scores divided the levels differently with the Silverman et al. study including children in the mildly gifted range (IQ 120-131) and the Lewis and Louis (1992) study restricting giftedness to IQ 132-185.

Research findings.

Researchers have found that the perceptions of parents are highly valuable in identifying giftedness in their children. The Silverman et al. (1986) and Louis and Lewis (1992) studies found that the majority of parents were accurate about their judgement of giftedness in their children. Silverman et al. found that 66 percent of children were in the gifted range (IQ 125 and above), while 61 percent of parents in the Louis & Lewis study were accurate (children's IQ 132 and above. Although the percentage of identified gifted children was similar in both studies, Louis and Lewis's study identified more children in the higher range than Silverman et al.'s study. This is possibly due to the larger sample size in Louis and Lewis's study.

Hodge and Kemp (2000) found that parents' observations of characteristics and academic skills were mostly confirmed by the tests given to the children and by observations of the children in the program.

Nevertheless, some parents did overestimate their children. According to Louis and Lewis, parents of children with lower IQs chose rote skills, whereas parents of children with high IQs chose creativity, memory and abstract thinking as the main characteristics in their children.

Parents have different expectations, which may impact on the giftedness in children. Silverman et al. (1986) and Louis and Lewis (1992) agreed that different parental beliefs of giftedness affect their children's development. In other words, if parents expect and believe in their children's giftedness, the

confidence in their talent will become stronger. In contrast, if parents do not believe in their children's abilities that will impact negatively on their performance. However, Louis and Lewis concluded that the relationship between the parental belief system and the level of IQ was unclear in this study. That is, parents' belief systems affected children's outcomes. If parents strongly believe in their children's abilities that positively affected their result in IQ tests that became higher, whereas parents who did not believe in the giftedness of their children that affected negatively their children's outcome in the IQ test. The education level of the parents in the Louis and Lewis and Hodge and Kemp studies was found to be higher than averag.That may influence their perceptions of giftedness.

Teachers' Perceptions of Gifted Children

Only one study was located that focused entirely on the teacher perceptions of giftedness in young children. Early research in the USA on teachers' perspectives on the identification of gifted children compared teacher and parent perspectives and found that teachers were not always successful identifiers of giftedness in young children (Ciha, Harris, Hoffman & Potter, 1974; Jacobs, 1971; Silverman, 1986). These studies are reviewed in a later section of this literature review.

Research approach.

Falls (2006) studied seven teachers in Western Sydney early childhood centres. Her major focus was to ascertain preschool teachers' views on gifted children and how they provided for the gifted children in their classrooms. In order to determine this, Falls used qualitative methods such as questionnaires, face-to-face interviews and classroom observations.

A questionnaire consisting of ten questions was given to the teachers to complete. The questions that related to teachers' perceptions of giftedness asked the teachers to provide descriptions and characteristics of giftedness and gifted children, the importance of certain methods in the identification process and the

importance and difficulty of identifying children from the ages of 0–8 years. Falls also systematically observed the teachers' interactions with the children in the classroom. This gave an opportunity to observe the children perceived as gifted as well. Teachers' responsiveness to the children, their willingness to develop the child's knowledge base and the tone they used with the children were all recorded. An analysis of the data collected in the observations was used as a basis for writing the questions for the interviews.

A major limitation of the Falls (2006) study is that the researcher did not assess the children to see whether they were actually gifted. Falls asked the teachers to provide their own criteria for selecting gifted children, and although she found that the children did, in fact, fit these criteria, the accuracy of this selection process was not addressed.

The teachers' selection of children they thought were gifted was subjective and based on their own perceptions of what is considered as giftedness and on their academic knowledge and observational experience of developmental stages of children in the general population. Thus, Falls concluded that children who displayed characteristics superior to their age peers could be said to be gifted, without confirmation of the children's ability levels.

Research findings.

While the teachers in the Falls (2006) study had prior knowledge of checklists and the notion of testing as a means of identification of giftedness, only two of them used checklists and none had used testing. Parent nomination was also perceived by them as not useful for identification, thus was not taken into account in the process. Teachers used only observation of the children and felt that the time spent with the children in the preschools was enough for them to identify giftedness. Although this study did not assess the accuracy of teachers' selection in identifying gifted children, Falls (2006) found that teachers in this study were confident that the strategies they used and their understanding of gifted children's development and interests were important in identifying giftedness in the preschool setting. Furthermore, Falls noticed that teachers in this study identified as gifted children who belonged to culturally In the

questionnaire teachers were asked to provide five words they thought of when they heard the words ‘gifted and talented’. While many words were given, six were mentioned the most: ‘inquisitive’, ‘curious’ and ‘creativity’, followed by ‘bright’, ‘quick’ and ‘smart’. Some negative words were used such as ‘challenging’, ‘bored’, ‘frustrated’ and ‘demanding’, although Falls mentioned that she felt these were not intended as negative traits (Falls, 2006, p. 26). The questionnaire also asked for the characteristics that teachers would consider to be evident in a gifted child. The characteristics generally agreed on by the teachers are reported in a later section of this review.

Comparison of Parent and Teacher Perceptions

Although both parents and teachers have significant roles in their judgment of gifted children, there is debate regarding the different degrees of their accuracy in identifying gifted children. This section presents a review of studies that have compared the perceptions of parents and teachers.

Research approaches.

In the earliest studies—Jacobs (1971) and Ciha et al. (1974)— the effectiveness and accuracy of parents and teachers in identifying gifted children was the aim of the investigation. Both involved the participation of a large number of parents and children. While Jacobs’ study tested 654 by using a Wechsler Preschool and Primary Scale of Intelligence (WPPSI) and the cut-off was IQ 125 or above, Ciha et al. (1974) determined IQ 132 or above to be a gifted child by using the Slosson Intelligence Test (SIT) and Weschsler Intelligence Scale for Children. Additionally, parents and kindergarten teachers participated in both studies.

Nomination was used as a measure by 654 parents and twelve teachers to identify gifted children in Jacobs’ study (1971) wthout giving them a criterion or definition of gifted children. On the other hand, Ciha et al. (1974) used different approach to assess the accuracy 465 parents and 14 kindergarten teachers in identifying gifted children. Parents and teachers were answering questions about whether the children in their homes or classrooms were gifted or not according to criteria provided to them. The use of more specific criteria provided by Ciha et al (1974) may give more credence to their study compared with Jacobs’ study (1971).

However, using specific criteria by Ciha et al. may have given the results in their study more accurate results compared with Jacobs' study.

In response to the Ciha et al (1974) questionnaire, parents nominated 276 child as gifted, whereas teachers nominated 54 of their students were gifted. The children's scores were initially divided into three groups: gifted, hidden gifted (child who do not display his/her giftedness) and non-gifted. However, in Jacobs'(1971) study children were divided into two groups gifted and non-gifted. That may made Ciha et al.'s study more important because they mentioned about the gifted children who hid their giftedness, which is rarely mentioned in studies about gifted children.

Hodge and Kemp (2000) and Sankar-DeLeeuw (2007) undertook later studies that were interested in the area of validity of parents and teachers in identifying gifted children in preschool. Hodge and Kemp (2000) aimed explore what characteristics parents and teachers observed in the children. However, Sankar-Deleeuw (2007) aimed in her study to discover how parents and teachers used different methods to identify gifted traits in the gifted children and how they perceived the characteristics of gifted children. Her 2007 study was an extension of her 2004 study in which she explored the characteristics of gifted children in preschool. This 2004 study will be discussed in the next section of this review. Both Hodge and Kemp (2000) and Sankar-DeLeeuw (2007) recruited small samples that were chosen in a non-random way. Both studies used advertisements to find local participants. Various methods were used to assess children. The Stanford-Binet Intelligence Scale was the main instrument used to test gifted children by Sankar-DeLeeuw. She tested 5 children and their result had to be IQ 130 or above to be considered as gifted. Hodge's and Kemp's (2000), on the other hand, used parents to nominate 11 children aged 3- 4ears. Also, Sankar-DeLeeuw (2007) used the Expressive One-Word Picture Vocabulary Teat-Revised as another criteria for identifying gifted children. The expressive language score had to be equal or above the 75^{th} percentile. All 5participants in Sankar-DeLeeuw's study (2007) were older than the children in Hodge's and Kemp's research.

Additionally, in Sankar-DeLeeuw (2007), all 5 parents and 5 teachers answered a questionnaire to gain valuable information. Parents were asked about their children's personal experiences and medical history. Moreover, teachers' completed a questionnaire in order to provide information about their students' cognitive and social function. Also, both parents' and teachers' observations occurred in different settings (homes, schools and other places) where children were involved.

In addition, nomination was used by parents and teachers to assess gifted children. Three children were nominated by parents and teachers whereas, two children were nominated by teachers. Only this study interviewed children to add information to the data that was collected from parents' and teachers' observations and questionnaires.

Data collection methods were similar in the Hodge and Kemp (2000) and Sankar-DeLeeuw (2007) studies. Both used parent and teacher observations and questionnaires to describe children's social skills and behaviours.. Hodge and Kemp also used a program called *The Preschool Enrichment and Extension Program* (PEEC), to help the parents of gifted children understand their children's needs. Additionally, they provided a number of educational programs providing for the special needs of gifted children. Teachers in Hodge and Kemp's study had been trained in gifted education, unlike those in the Jacobs (1971), Ciha et al, (1974) and Sankar-DeLeeuw (2007) studies. Thus, the various measures used by both Sankar-DeLeeuw and Hodge and Kemp in their studies may contribute towards more reliable research in the area of parent and teacher perceptions of giftedness.

Research findings.

There was agreement in some studies that parents were more accurate than teachers in identifying giftedness in young children. As shown in Table 1, the percentage of correct identification of giftedness in young children by parents was higher than teachers in both the Ciha et al. (1974) and Jacobs (1971) studies: 76% for parents versus 9.5% for teachers in Ciha et al. (1974) and 67% for parents versus 22% for teachers in Jacobs' (1971) research.

Ciha et al (1974) and Jacobs (1971) found that parents were more reliable in identifying giftedness in young children than teachers. On the other hand, Hodge and Kemp (2000) found that parents and teachers partially agreed about the characteristics they observed. Sankar-Deleeuw (2007) discovered parents could easily identify giftedness in their children in early childhood compared with teachers who found difficulties in this process due to their disbelief and distrust in children's social and emotional skills

According to Jacobs (1971), 26 parents thought their children were gifted. Sixteen of them were gifted according to WPPSI scores of IQ 125 or above, while 10 of those nominated were non-gifted. On the teachers' side, they selected 46 children they thought had high abilities or gifted. Two of them were gifted with IQ 125 or above. The remaining 44 children were average ability (IQ= 97 to 118).

However, Ciha et al. (1974) pointed out that some parents tended to overestimate their children's abilities. In the Hodge and Kemp (2000) study, the majority of characteristics of giftedness that parents observed were confirmed by teacher observation. Sankar-DeLeeuw (2007) found that parents identified children who had advanced language as gifted, whereas teachers identified non-verbal skills such as strong memory and solving problem as some characteristics of gifted children. Unlike the studies of Ciha et al.,Jacobs (1971) and Sankar-DeLeeuw (2007), only Hodge and Kemp (2000) found that teachers indicated characteristics more than parents did. That may be because the training they had encouraged them to create motivating environments which allowed the gifted children to display their high abilities differently from in their homes. This result suggested that kindergarten teachers qualified in gifted education may enhance their abilities to identify gifted children in their classrooms.

However, in Ciha et al (1974), parents identified 39 children who had high potential (IQ 132 or above), 36 who hid their abilities (IQ 120) in (WPPSI and below IQ 132 in (WISC) and 201 who were non-gifted. In contrast, teachers indicated 13 students were gifted in their classrooms who had IQ 132 or above, 7 were hiding their giftedness and 34 who had average ability. Ciha et al suggested that using non-verbal methods may be more effective in identifying gifted children who are hiding their giftedness.

Although both studies were disparate in the criteria they used, their percentage in identification of young gifted children were quite similar. Parents in Jacobs' study (1971) identified 76% of gifted children from their nomination sample, whereas 9.5% were identified by teachers. Similarly, in the Ciha et al. (1974) study, parents correctly identified 73% of the gifted children while 22% were identified by teachers. .

Through these studies, it can be seen that parents were more accurate in identifying gifted children than teachers. Parents are closer to children more than teachers, which makes their judgment of their children more reliable. Teachers could improve their diagnosis skills with more training about gifted education. This statement suggests further research could be worthwhile in this area..

Characteristics of Gifted Children

Gifted children have intellectual abilities that distinguish them from children who are not gifted. Some of the review studies focused on the behavioural characteristics of gifted children. Hodge and Kemp (2000), Sankar-DeLeeuw (2004), Falls (2006), Louis and Lewis (1992) and Silverman et al. (1986) focused on characteristics of giftedness in preschool children identified by using parents' and teachers' perceptions of these children's abilities

Research approaches.

Those characteristics or abilities can be discovered using various measures. For instance, parents and teachers completed questionnaires or interviews or characteristics of giftedness checklists. It can be seen from Table 1 that the majority of studies in this review used IQ scores as a main measure in identifying intellectual levels in the children. Most researchers decided on an IQ of 130 or above as a cut-off score to categorise children who have advanced cognitive abilities from children who could not achieve this level.

Hodge and Kemp (2000) did not use IQ scores but they did use brief ability tests and also academic achievement tests. However, Falls' study (2006) relied on teachers' observation as a main measure in identifying characteristics of

giftedness of children in their classrooms. That may make her study less accurate compared with the rest of the studies in this review.

Parents' and teachers' questionnaires are measures that can be used to demonstrate the characteristics of gifted children. Hodge and Kemp (2000), Sankar-DeLeeuw (2004) and Louis and Lewis (1992) used questionnaires for parents to answer many questions in detail about their children's giftedness history, describe their children's abilities and personal experiences. Similar to these studies, teachers in Falls' study (2004) had to answer many questions about their opinion of gifted children.

Silverman et al. (1986) took a different approach. They gave parents the Silverman/Waters Checklist of 16 characteristics. These characteristics were selected from a number of previous studies using parent questionnaires and observations. Silverman et al. concluded that the checklist was an effective framework for parents to identify high achieving gifted children as well as underachievers.

Interviews were also used by two researchers to assess parents' and teachers' judgment of gifted children's characteristics. They used interviews to confirm the data in questionnaires or observations. Falls (2006) used interviews with teachers. Unlike Falls (2006), Sankar-DeLeeuw (2004) used interviews with children to confirm the information she collected from questionnaire information and observations provided by parents and teachers.

Research Findings.

It can be seen from Table 2 that there were many characteristics of giftedness as a result of these studies. In this section a range of characteristics that the majority of the studies had found will be presented. In the Silverman et al. (1986) study the frequencies of the separate characteristics were not given, but it was stated that all of the parents who nominated their children as gifted thought the majority of the characteristics fitted their children. However, only 6 parents ticked all 16 characteristics.

[InsertTable 2 here]

Advanced language kills

Across all five studies that focused on the characteristics of gifted children, advanced language skill appeared. Sankar-DeLeeuw (2004) found that all five children had excellent language skill which emerged when they started speaking under one year of age. This was also obvious when she talked with the students in the classrooms and they had "very good understanding of classroom concepts and directions" (Sankar-DeLeeuw, 2004, p. 13). In addition, Falls (2006) mentioned that all the teachers noticed that all gifted children had advanced verbal skills. She also pointed out that each teacher noticed that even when gifted children spoke English as a second language, they had extensive vocabulary and well developed language skills.

Louis and Lewis (1992) found children who had higher IQ scores had more advanced language skill than children who had lower IQ scores. Also, Hodge and Kemp (2000) discovered advanced language was one of the common abilities that appeared in the majority of gifted children in their study. Also, advanced language skill was included in the Silverman /Waters Checklist of characteristics. Thus, it can be seen through these studies advanced language ability commonly appeared in gifted children.

Creativity.

Creativity was an important characteristic of gifted children for the majority of children involved in four of these studies (see Table 2). According to Falls (2006, p. 78), " 'Creativity' was a word that teachers generally associated, or linked with giftedness". Similarly, Louis and Lewis (1992) found that just parents of children with higher IQs strongly believed in the creative ability of their children. Sliverman et al (1986) also mentioned about the creativity in the checklist. Consequently, It seems that, across the majority of studies creativity emerged among the majority of gifted children.

Strong memory.

Strong memory appeared in many children who participated in the majority of those studies. Table 2 indicates this.

Curiosity.

A child who usually asks many questions in different domains is categorized as a gifted child. This can be seen across two studies in this review

(see Table 2). One of the teachers in the Falls (2006) study explained that curiosity was one of the important abilities of gifted children to learn about their environment.

Sense of humour.

Sense of humor is an ability that can be seen among many gifted children in the reviewed studies. See Table 2.

Perfectionism.

Some gifted children tend to become perfectionists. According to Falls (2006), all teachers observed the behavior of perfectionism in young gifted children. However, 4 of the teachers commented that perfectionism may have negative effects on gifted children's behaviours because it excludes them from participating in a variety of activities as a result of the unconfident feeling they have of their abilities.

Sankar-DeLeeuw (2004) pointed out that perfectionism appeared differently in gifted children in her study. Three of the participants tended to gain unrealistic goals in their academic work. However, two of the gifted children tended to procrastinate or not complete work on their activities in order to achieve perfection. So, perfectionism may affect negatively gifted children's emotions.

Problem solving.

Problem solving was commonly found in the study sample of the Hodge and Kemp (2000) research. Silverman et al. (1986) also added problem solving to their checklist as one of the main characteristics that often appear among young gifted children. Thus, some gifted children may tend to have this behavior.

Imagination.

As seen in Table 2, gifted children seem to have a strong imagination. Sankar-DeLeeuw (2004) found that 3 of her 5 participants had an imaginary friend who was incorporated as a real friend.

Skill with puzzles and mazes

The teacher in the Hodge and Kemp (2000) study observed most children had strong ability in mazes and puzzles. In addition, Silverman et al. (1986) added the ability with puzzles and mazes to their development checklist.

Other characteristics.

There are several characteristics that appeared once or twice through these studies. Leadership emerged into two studies: those by Falls (2006) and Louis and Lewis (1992). Rapid learning was found in the Silverman et al. (1986) checklist as well as in the sample of the Hodge and Kemp (2000) research. A long attention span and an eye for detail appeared only in the gifted children in Falls' (2006) study. Advanced ability in mathematics was revealed only by the participants of Sankar-DeLeeuw (2007) and Hodge and Kemp (2000) studies.

Some characteristics were found only in the Sankar-DeLeeuw's (2004) study (for instance, academic abilities, motivation, disruptive behaviour, need for stimuli and concealment of ability). However, sensitivity was found by Sankar-DeLeeuw (2004) and by Silverman et al. (1986). Abstract thinking was mentioned by parents of children with higher IQ as one of the significant characteristics of gifted children in the Louis and Lewis (1992) study.

It can be seen through these studies not all gifted children had all these characteristics to be gifted. Some gifted children had many of these characteristics whereas some of them had some characteristics of giftedness. Thus, these characteristics are used as signs to identify gifted children.

Further Research

It can be seen that, although the teachers' perceptions of gifted children are important, studies in this area are few. It is not known how training in giftedness makes a difference to early childhood teachers' perceptions of gifted children. Additionally, the question of how teachers can collaborate with parents to understand children's abilities also needs to be considered. Importantly, the majority of studies about parents' and teachers' perception of gifted children were done in the Western world. In non-Western countries perceptions might be different.

Conclusion

The beliefs and perceptions of parents and teachers about young gifted children are important in identifying gifted children in early age. The importance of early intervention in identifying gifted children their kindergarten age is to provide suitable settings or environments to nurture their special needs and abilities in an appropriate manner.It can be seen in this literature, ignore this abilities in gifted children may create negative behavouis that will affect gifted children socially and emotionally. The diversity of methods were used such as IQ tests, parents and teachers nominations, questionnaire, interviews and observations allow to discover some group of gifted children their hiding their giftedness. Additionally, through these measures, many research found out that parents were more accurate than teachers in identifying giftedness inchildren. Therefore, they have to be trained about gifted education to become able to identify gifted children. However, one research that done by Falls (2006) found out that teachers were able to identify gifted children in their classroom with out asking gifted children's parents about. Building strong relationship between parents and teachers because they have a lot of information about children that allows to them to develop and nurture gifted children. In fact, there is a few research that mention about teachers qualify them in gifted education and enhance their abilities to identify gifted children. This statement may open question to future research.

References:

Australian Children's Education and Care Quality Authority. (2011). Guide to the

national quality standard. Retrieved April 29, 2012.

Chance, Patti L. (1990). Kindergarten and first grade: A time for developing and nurturing gifted behaviors in young children. *Early Child Development and Care, 63*(1), 75-81. doi: 10.1080/0300443900630110.

Ciha, Thomas E, & Others. (1974). Parents as Identifiers of Giftedness, Ignored

but Accurate . *Gifted Child Quarterly, 18*(3), 191-195. doi: 10.1177/001698627401800318.

Gagne′, F. (2004). transforming gifted talents: The DMGT as a Developmental Theory. In N Colangelo & Gary Davis (Eds.), Handbook of gifted education (Vol. 15, pp. 119-147). Boston: Customer Services for Taylor & Francis Group Journals, 325 Chestnut Street, Suite 800, Philadelphia, PA 19106. Tel: 800-354-1420 (Toll Free); Fax: 215-625-8914.

Falls, J. M. (2006). *An investigation of early childhood teachers and their views and*

behaviours concerning children nominated as gifted. Master of Education,

Maquarie University, Australian Centre for Educational Studies. Available

from Macquarie University Library Catalogue.

Freeman, Joan. (2006). Giftedness in the long term. [Article]. *Journal for the*

Education of the Gifted, 29(4), 384-403.

Gross, Miraca U. M. (2006). Exceptionally gifted children: Long-term outcomes of

academic acceleration and nonacceleration. *Journal for the Education of*

the Gifted, 29(4), 404-429.

Harrison, C. (2003). Giftedness in early childhood (2nd ed.). Sydney: GERRIC, University of New South Wales.

Hodge, K. A., & Kemp, C. R. (2000). Exploring the nature of giftedness in

preschool children. *Journal for the Education of the Gifted*, *24* (1), 46-73.

doi: 10.4219/jeg-2000-593.

JJacobs, Jon C. (1971). Effectiveness of teacher and parent identification of gifted

children as a function of school level. *8*(2), 140-142. doi: 10.1002/1520-

6807(197104)8:2<140::AID-PITS2310080210>3.0.CO;2-K.

Koshy, Valsa, & Robinson, Nancy M. (2006). Too long neglected: Gifted young

children. *European Early Childhood Education Research Journal, 14*(2), 113-

126. doi: 10.1080/13502930285209951

Louis, B. & Lewis, M. (1992). Parental beliefs about giftedness in young children

and their relation to actual ability level. *Gifted Child Quarterly, 36*(1), 27-

31. doi: 10.1177/001698629203600107.

upkowski, A. E. (1985). Characteristics of gifted preschool children. *Paper presented at the Annual Convention of the Council for Exceptional Children*, 13.

Robinson, N. M. . (2008). Critical Issues And Practices In Gifted Children. In Jonathan A. Plucker & Garolyn M. Callahan Early Childhood, Ph.D (Ed.). Waco, Texas: National Association For Gifted Children.

Sankar-DeLeeuw, Naomi. (2004). Case Studies of gifted kindergarten children: Profiles of promise. [Article]. *Roeper Review, 26*(4), 192-207.

Sankar-DeLeeuw, NaomI. (2007). Case Studies of Gifted Kindergarten Children Part II: The Parents and Teachers. . *Roeper Review, 29*(2), 93 - 99.

Schiller, Pam. (2010). Early brain development research review and update. *Exchange magazine*(196), 26-30. doi: www.ChildCareExchange.com.

Silverman, L.K., Chitwood , D.G and Waters, J, L. (1986). Young gifted children : can parents identify giftedness. *Topics in Early Childhood Special Education, 6*(1), 23 - 38. doi: 10.1177/027112148600600106.

Smutny, F.J. (1999). A special focus on young gifted childen. *Roeper Review, 21*(3), 172.

Walsh, Rosalind, Hodge, Kerry, Bowes, Jennifer, & Kemp, Coral. (2010). Same age,

different page: Overcoming the barriers to catering for young gifted children in prior-to-school settings. [Article]. *International Journal of Early Childhood*, *42*(1), 43-58. doi: 10.1007/s13158-010-0004-8.

Table 1

Studies Investigating Perceptions of Parents and/or Teachers of Gifted Preschool Children

Study	Research focus	Participants	Measures	Findings
Louis & Lewis (1992) USA	The relationships between parental beliefs about their children's abilities and the cognitive outcome	Parents (*n*=118) Children (*n*=118), (aged 32.91 months)	Parents: Questionnaire Children: IQ Stanford-Binet (L-M) or Bayley Scales of Infant Development (gifted = IQ132+)	1. Children of mothers who estimated their ability correctly performed better than children whose mothers inaccurately estimated them. 2. Parents were good judges of their children's giftedness. 3. Parents of higher IQ children chose different skills as indicators of giftedness than parents of children

				with lower IQ. 4. A relationship was found between parental beliefs and IQ but the effect was not clear.
Study	Research focus	Participants	Measures	Findings
Silverman, Chitwood, & Waters (1986) USA	The ability of parents in identifying gifted children by using checklist	Parents (*n*=21) Children (*n*=21), aged 3-8	Parents: Silverman/ Waters Checklist Children: IQ Stanford-Binet (L-M) (gifted = IQ132+)	Parents can identify signs of giftedness in their young children by evaluating their children through a given framework.
Jacobs (1971) USA	Effectiveness of teachers and parents in identifying gifted children	Kindergarten teachers (*n*=12) Parents (*n*= 654) Children (*n*=654), kindergarten	Teacher nomination (no criteria given) Parent nomination (no criteria given)	1. Parent opinion of children's ability is useful. 2. Parents were more effective in identifying giftedness

		age	Children: IQ WPPSI (gifted = IQ125+).	than teachers (76% v. 9.5%) 3. 38% of children nominated by parents were average ability vs 96% nominated by teachers 4. Teachers considered children who were verbally strong and cooperative as gifted.
Study	Research focus	Participants	Measures	Findings
Ciha, Harris, & Potter (1974) USA	Are parents more accurate in identifying gifted children than teachers?	Parents *(n*= 465) K teachers *(n*= 14) Children *(n*= 465), kindergarten age	Parents: questionnaire (criteria given) K teachers: questionnaire (criteria given) Children: Slossen Intelligence	1. Effective identification by teachers was 22% . 2. Teachers in most advantage areas were least effective. 3. Effective identification by parents

			Test) (gifted = IQ 132+)	was 67%. 4. 37% of parents overestimated their child's abilities.
Falls (2006) AU	Teachers' views and behaviours toward gifted children	Preschool teachers *(N*=7) who believed they were teaching a gifted child	Questionnaire Observations of teacher and children in class Interviews	1. Teachers used only observation of the children and thought that was enough to identify giftedness. 2. Teachers did not ask for parent nominations of children as gifted.
Study	Research focus	Participants	Measures	Findings
Sankar-DeLeeuw (2004) Canada	The lives of kindergarten children to categorise development of characteristics of gifted children and explore	Children *N*=5 (aged 5 to 6)	Parents: questionnaire, interview Teachers: questionnaire, interview Children: Stanford-Binet (gifted	1. All parents identified the gifted characteristics but teachers looked for high achievement. 2.

	educational needs		= IQ130+); Expressive One Word Picture Vocabulary Test; interview; observations; achievement tests	Extraordinary abilities in the intellectual / achievement domain, memory, philosophical thinking and reading. 3. Emotional intensity, perfectionism and sensitivity in the affective domain 4. Varying results in the social domain, physical domain and aesthetics and creativity.
Study	Research focus	Participants	Measures	Findings
Hodge & Kemp (2000)	To explore the nature of giftedness in preschool	Children (n=11) (age from 36-49	Parents' nomination. Questionnaire	1- Parents identified gifted children who had

Australia	children.	months) Parents (n=11) Teachers (did not tell)	s for parents'. Parents and children Observation. Norm-Reference Measure for children. Teacher records verbal and non-verbal children's skills. The Preschool Enrichment and Extension Program (PEEC) for Parents.	characteristics which were found in the gifted literature. 2- There was a sensible agreement between parents and teachers in their finding of the gifted children. 3- Teacher saw some behaviours parents did not aware of. 4- Teacher reported greater evidence of gifted characteristics than parents

Table 2

Characteristics of Young Gifted Children From Reviewed Literature

Characteristics	Studies					
	Falls (2006)	Sankar-DeLeeuw (2004)	Louis & Lewis (1992)	Sankar-DeLeeuw (2007)	Hodge & Kemp (2000)	Silverman, Chitwood & Waters (1986)
Curiosity	✓			✓		
Creativity	✓	✓	✓		✓	
Strong memory		✓	✓		✓	✓
Advanced verbal ability	✓	✓	✓		✓	✓
Problem solving					✓	✓
High level in mathematics				✓		
Imagination		✓	✓			

Silverman Chitwood & d Waters (١٩٨٦)	Hodge Kemp & ٢٠٠٠-	-Sankar DeLeeuw ٢٠٠٧-	Louis Lewis & ١٩٩٢-	-Sankar DeLeeuw ٢٠٠٤-	Falls ٢٠٠٦-	Characteristics
✓		✓		✓		Sense of humour
					✓	Independent
✓				✓	✓	Perfectionism
			✓		✓	Leadership
	✓					Advanced reading ability
✓		✓			✓	Long attention span
					✓	Eye for detail
✓		✓				Ability in puzzles mazes
			✓			Abstract thinking
				✓		Academic abilities
				✓		Motivation
Silverman Chitwood & d Waters (١٩٨٦)	Hodge Kemp & ٢٠٠٠-	-Sankar DeLeeuw ٢٠٠٧-	Louis Lewis & ١٩٩٢-	-Sankar DeLeeuw ٢٠٠٤-	Falls ٢٠٠٦-	Characteristics
✓				✓		Sensitivity
✓	✓					Rapid learning
				✓		Disruptive behaviours
				✓		Need for stimuli
				✓		Hiding ability