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<td>Title</td>
<td>A study on the perceptions of parents and teachers on savant skills of individuals with ASD</td>
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Abstract

Savant syndrome is an uncommon but extraordinary condition. It is a phenomenon whereby individuals with challenging intellectual disabilities, including autism spectrum disorder (ASD), may display some areas of brilliance which are in contrast with their overall low level of general functioning (Bennett & Heaton, 2017; Finocchiaro et al., 2015; Jeon, 2016). One in ten persons with ASD have savant abilities in varying degrees (Finocchiaro et al., 2015; Treffert, 2014). Today, parents and teachers of individuals with ASD are focused on the individual’s deficits rather than on his or her strengths. Even when parents perceive their child’s savant skill to be beneficial, and wish to nurture this skill, they face the challenge that there are few programs dedicated to supporting the development of such a skill. By understanding the connection between parental perception and its impact on the support for the development of savant skills, the author hopes to promote awareness amongst parents of individuals with ASD, and to provide additional impetus for governmental and non-governmental organisations to promote such awareness. Furthermore, the author hopes that these organisations will develop programs dedicated to nurturing the savant skills of individuals with ASD.

Researchers used to consider savant skills as unimportant. However, the savant syndrome has become an area of research for scientists who are making attempts to understand the complexities and intricacies of the human mind. The savant syndrome has been used to describe individuals who have intellectual disabilities and challenges, yet possess extraordinary abilities in reading, arithmetic, calendar calculations, art or music (Finocchiaro et al., 2015; Jeon, 2016). The first goal of this study was to investigate the percentage and frequency of savant skills as reported by parents and teachers in a sample population of individuals with ASD. Secondly, this study sought to document the perceptions that parents have with regards to these savant skills and
how these parents nurture and support these skills. The savant skills that will be examined are as follows: memory, hyperlexia, math, art, music, pitch, spatial reasoning, calendar, sensory and athletics. The specific research questions addressed in this study include the following:

1a. What is the proportion of individuals with ASD who show savant skills as reported by parents and teachers?
1b. What is the most common form of savant skills reported as reported by parents and teachers?
1c. How often do savants with ASD show more than one form of savant skills as reported by parents and teachers?

2a. What are the perceptions parents of the study have regarding their child’s talents?
2b. How do parents of individuals with ASD who display savant skills support their child’s talents?

This study was carried out in two phases. Phase I involved the administration of a questionnaire to both parents and teachers of children with ASD from various types of educational institutions including special schools, mainstream schools and private education centres. Questionnaires were distributed to 1000 parents whose children were diagnosed with ASD. One hundred and thirty-five parents completed the questionnaires. The teachers of the children whose parents had completed the questionnaires were also invited to complete a similar questionnaire. Forty teachers responded for their respective student. Phase II involved interviewing parents and two individuals with ASD who have special talents and analysing the data using thematic analysis. Twenty parents whose children were identified from the questionnaires to possess savant skills were interviewed and their answers analysed. Additionally, two case studies were conducted to establish a more in-depth understanding of parental perceptions.
From the parents’ responses, 55.6% of the 135 children were reported to have savant skills based on the criteria that the skills had to be special at least in comparison with other individuals of similar age. This was in contrast with the 25% reported by teachers. Using the strictest criteria of ‘would be considered exceptional in the normal population’, 32 children or 23.7% would qualify as having savant skills, which is higher than the 10% frequency as reported by Rimland (1978).

Through the analytic process of the interviews, four themes emerged indicating both the positive and negative perceptions of parents. These themes were: occupying time, genius, utility of skills and future aspirations. Parents who had positive perceptions of their child’s savant skills tried to help their child enhance their skills while those with negative perceptions were less likely to help their child. Parents tended to invest more in their child’s savant skills that were considered useful.

There are several notable implications of this study. The first is that the quantitative findings indicate that there may be a larger percentage of individuals with ASD who possess savant skills than established in prior literature. Secondly, the qualitative findings suggest that developmental success of savant skills is highly dependent on parental perceptions and their corresponding support. Thirdly, the high frequency of savant skills amongst individuals with ASD determined in this study lends further support to the theory that there is a close connection between ASD and the occurrence of savant skills (Boso et al., 2010; Clark, 2001). Thus, this study has implications for the way parents and professionals engage with individuals with ASD.

In most settings, professionals tend to work on the deficits and shortfalls of individuals with ASD. An alternative approach is to work on the positive traits and strengths of individuals with ASD to enhance their interests and talents. This may require significant rethinking of professional practices towards individuals with ASD.