

## Perceptions about special education and giftedness between psychologists and psychology students: some reflections

Percepções sobre educação especial e altas habilidades/superdotação entre psicólogos e estudantes de psicologia: algumas reflexões

Percepciones sobre educación especial y dotación entre psicólogos y estudiantes de psicología: algunas reflexiones

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### Abstract

Due to the different possibilities of psychology in special education, an exploratory study was carried out on the perception of psychologists (n = 64) and psychology students (n = 70) about this area. Participants answered a questionnaire containing two parts. The first had six open questions, and the second, 14 myths associated with giftedness. The results indicated, in general, gaps in training to work in the subject, to demonstrate little preparation to work in this area due to the limited presence of disciplines and, consequently, the lack of knowledge of professional practices. Professionals and students indicated the belief in false myths. Participants also reported that they do not feel prepared to work with this audience, especially gifted individuals. Overall, the study indicated the importance of reformulating psychology training to work in special education so that its professionals feel prepared to deal with this specific audience that they may be asked to attend in their professional practice.

**Keywords:** Gifted student; Psychology training process; Conceptions; Curriculum.

### Resumo

Considerando as diferentes possibilidades de atuação da psicologia na educação especial, foi realizado um estudo exploratório sobre a percepção de psicólogos (n = 64) e estudantes de psicologia (n = 70) sobre esta área. Os participantes responderam a um questionário contendo duas partes. A primeira apresentava seis questões abertas e, a segunda, 14 mitos associados as altas habilidades/superdotação. Os resultados indicaram, de forma geral, lacunas na formação para atuar na temática, de modo a indicarem pouco preparo para atuar nessa área, devido à presença limitada de disciplinas e, conseqüentemente, o desconhecimento das práticas profissionais. Profissionais e estudantes indicaram a crença em mitos equivocados. Os participantes relataram ainda que não se sentem preparados para trabalhar com esse público, principalmente indivíduos superdotados. De modo geral, o estudo indicou a importância de uma reformulação da formação em psicologia para atuação na área da educação especial, a fim de que seus profissionais se sintam preparados para lidar com esse público específico que podem ser solicitados a atenderem em sua prática profissional.

**Palavras-chave:** Aluno superdotado; Processo de formação em psicologia; Concepções; Currículo.

### Resumen

Considerando las diferentes posibilidades de la psicología en la educación especial, se realizó un estudio exploratorio sobre la percepción de psicólogos (n = 64) y estudiantes de psicología (n = 70) sobre esta área. Los participantes respondieron un cuestionario que consta de dos partes. El primero tenía seis preguntas abiertas y el segundo, 14 mitos asociados con altas capacidades / superdotación. Los resultados indicaron, en general, brechas en la formación para trabajar en la asignatura, lo que indica poca preparación para trabajar en esta área, debido a la escasa presencia de disciplinas y, en consecuencia, al desconocimiento de las prácticas profesionales. Profesionales y estudiantes

indicaron la creencia en mitos equivocados. Los participantes también informaron que no se sienten preparados para trabajar con esta audiencia, especialmente con personas talentosas. En general, el estudio señaló la importancia de reformular la formación en psicología para trabajar en el área de educación especial, de manera que sus profesionales se sientan preparados para tratar con este público específico al que se les puede pedir que asistan en su práctica profesional.

**Palabras clave:** Estudiante superdotado; Proceso de formación en psicología; Concepciones; Currículo.

## 1. Introduction

Over the past decades, an increase in interest by scholars and researchers about gifted student has been noted. Considering that early intervention is essential to gifted students' development and that assessment is the first step to identification (Silverman, 2018) the psychology role can be highlighted. In this subject, the variety of approaches and definitions in the study of giftedness represents the multitude of manifestations of the phenomenon (Ivleva, 2017).

In a general way, within special education, one important challenge of the psychology of education is contributing to students with special needs. By identifying teaching strategies and learning contexts, professionals can act to avoid the development of behavior difficulties among students from special education (Duque et al., 2020). If we consider that the identification process is usually done based on psychological assessment, the importance of this professional is greater.

Psychology can help gifted children to reach their positive development, personal life trajectory, academic success, and meeting their potential (Armstrong et al., 2019). Literature review has shown that the process of nurturing giftedness in children is determined by an interaction between the environment and the individual strengths (Papadopoulos, 2020). In this sense, well-formed psychologists can work to offer a supportive tools to support the gifted development.

In the field of gifted education, assessment serve as an important link between identification, learning, development, curriculum planning, and instruction (Cao et al., 2017). The assessment is also an important step in recognizing gifted educational needs, identifying the psychological patterns presented by these students (Salakhova et al., 2020) and the eligibility for education provisions. Testing can help to know the degree of advancement, guide grade placement, educational decisions, help the student find true peers, know their strengths and weaknesses, offering opportunities for an adequate development (Silverman, 2018).

According to a definition given by Ivleva (2017), the following parameters of giftedness is distinguished: potential capabilities in areas as intellectual, academic, artistic areas, creativity, communication and psychomotor skills. If, for a long time, understanding giftedness was restricted to a high level school performance or the results of intelligence tests, today this concept is comprehended as multidimensional. The broad definition gives a large scope for researchers in terms of diagnostic procures aiming to identify the types of giftedness and areas of their manifestation.

A number of recent efforts, made by educational public and private organizations, social institutions and foundations, have been directed toward the identification, flow and development of gifted children, who are viewed as having an important potential for the country. Giftedness is an emerging research area in the field of psychology, whose studies present, as one of its main objectives, identify psychological patterns presented by these students (Salakhova et al., 2020).

According to Cao et al. (2017), assessment in gifted education is essential for several reasons. "It also allows for the monitoring of the progress and growth of these students, and the evaluation of the educational interventions that are provided to these students" (p.189). A multiple criteria assessment is recommended within this investigation area, combining results from different instruments and methods. Usually, the assessment includes measures of psychological constructs like intelligence, creativity, motivation, persistence, self-concept, personality traits, leadership, behavioral scales (Pfeiffer, 2015).

Ample evidence exists to support the idea that these professionals can also provide counseling for teachers and families and assist in the development of an individualized educational program, which must consider the developmental

characteristics of these children and their different psychological needs in relation to peers. However, for psychologists to be able to offer this wide range of services to gifted students, they must be prepared during the undergraduate course (Nakano, 2019).

Suppose the identification of giftedness depends on the results of a psychological assessment process, even though the performance of this professional should not be limited to the assessment. They should focus on students assessing eligibility for, after identifying, providing resources and appropriate education, aiming for the students' growth (Dai, 2020). Psychologists must ensure that gifted children benefit from the means and opportunities to improve their skills and achieve self-realization (Ersoy & Uysal, 2018). Especially in educational psychology, psychologists can use this knowledge to help these different audiences fully understand the differentiated needs of gifted students (Alodat et al., 2020). However, for psychologists to offer this wide range of services to gifted students, they must be prepared during the undergraduate course.

The problem started when of 94% school psychologists said in a survey that they received little or no training about giftedness assessment during their graduation (Robertson et al., 2011). Consequently, many beliefs are note related to evidence-based practices, resulting in preconceived notions addressed in the educational and psychological literature (Kain, Bliss, Choate, & Brown, 2007). Considering the South American context, some aspects of the education of gifted, commonly found in these nations, contribute to hampering identification. These aspects usually involve the scarcity of training programs for teachers and psychologists in the giftedness area, lack of financial support for implementing specific programs for gifted, and predominance of misconceptions related to the concept of giftedness (Alencar et al., 2009; Wechsler et al., 2017).

Regarding professionals' formation, Carneiro's research (2015) also showed that in the special programs investigated, most professionals reported that even though they had qualifications and some attended post-graduate school, it's common to find a lack of investments and resources that promote continuous training and provide information about giftedness in the latest studies. As a result, many beliefs are note related to evidence-based practices, resulting in preconceived notions addressed in the educational and psychological literature (Kain et al., 2007).

As a result, many invisible students are found in schools, especially girls, black students, rural children, second language learners, underachievers, and twice-exceptional individuals (Silverman, 2013). Underrepresentation of students in gifted programs of different racial, socioeconomic, and linguistic backgrounds is reality, and psychologists can be agents of change (Silverman & Gilman, 2020). However, few attempts have been made to investigate the role of training psychologists to work with this population. The scenario shows that there are rarely undergraduate courses that, at some point, address this phenomenon in their disciplines, as well as a minimal number of professors and researchers dedicated to the subject. In this sense, even with recognizing the complexity and relevance of this subject, what is noticeable is the gap in the education of future psychologists, who may challenge working with these individuals someday in their careers in the most different contexts and are not prepared.

Within this scenario, the central claims of this study is to investigate the understanding of special education, and the presence of disciplines focused on the theme of special education and giftedness during the graduate course, and the myths according to psychology students' and psychologists' opinions.

## **2. Methodology**

### **2.1 Participants**

The sample was composed of two groups: professionals and students. The first group was formed of 64 psychologists aged between 23 and 59 years old ( $M=37.23$ ,  $SD=9.01$ ). They finished their college degree between 1984 and 2019. They live

in 23 different cities located in the five regions of Brazil. A total of 85.89% were female, and a total of 79.75% of professionals are currently working in the area.

The second group was composed of 70 psychology graduate students aged between 19 and 63 years old ( $M=25.92$ ;  $SD=9.45$ ). The students are from 12 different cities located in two Brazilian regions: Southeast and Midwest. A total of 88.5% were female. The students were doing different semesters in the psychology course from 3<sup>rd</sup> to 10<sup>th</sup>. It is important to say that the psychology college lasts ten semesters to obtain the bachelor's degree in Brazil.

## 2.2 Instrument

We developed a questionnaire containing six open questions that deal with the formation of the student or professional. Such questions involve aspects related to the presence of disciplines that focused special education or giftedness (even if indirectly), the concept of special education that underlies the course, and their preparation to work with this specific population, among other aspects. A second part, consisting of 14 myths associated with the phenomenon, was presented, and the participant should mark the phrases whose content he believed to be true.

## 2.3 Procedures

Due to the pandemic caused by COVID-19, data collection, which was initially expected to happen in person, was changed and carried out by making the questionnaire available on an online platform (Survey Monkey). The research received the Ethics Committee's approval.

Researchers disseminated the invitation to participate on social networks and among the researchers' contacts. Initially, by clicking on the link provided, the participant had access to the Free and Informed Consent Form. Those who agreed to participate in the survey had to click on this option and those who did not accept it were instructed to close the browser. The average response time in both groups was seven minutes.

## 2.4 Data analysis

The answers obtained through the answered questionnaires were organized in a database separated by groups of participants. Subsequently, the answers to the open questions were analyzed according to the content analysis, grouping those of similar content and, later, estimating their prevalence in terms of frequency and percentage. The responses to myths had their agreement percentage estimated.

## 3. Results

The answers to the first question, "During your Psychology degree course, did you have any special education subject?" showed that 67.81% of professionals and 64.28% of students answered positively. A great variability of answers can be noted when asked "In which discipline was special education addressed?".

The most mentioned subject by professionals (23.4%) and by students (40.0%) was "People with disabilities." Professionals' second subject most cited was school/educational psychology (17.1%). It is essential to see that this subject was not cited in the student group. The same situation happens about Psychological Assessment, cited by 15.7% of the students but not presented in the professionals' answers. Other responses cited by professionals involved other subjects. Examples include "Autism and Global Developmental Disorders", "Special Education", "Learning problems", and "Child Development". For students, "Neurosciences", "Psychology in Educational Environments", "Educational Psychology", and "Psychopathology" were cited.

The second question investigated “Was there a discipline approached the topic regarding giftedness?”. We found an important difference between the groups. While 58.62% of professionals answered negatively, 68.57% of students responded positively. According to both groups, they addressed giftedness in the disciplines of “People with disabilities” (18.7% in professional group and 27.1% in students group). The difference occurs in “Psychological Assessment” (cited by 10.9% of professionals and 22.8% students) in relation to giftedness. The discipline “Psychological phenomena and process” appears in the response of professionals and students (4.7% and 7.1%, respectively). Again, the “School/Educational Psychology” only appeared in the professional response, as in the previous question. Other answers involved other subjects. Examples include “Psychology of the Exceptional”, “Developmental Psychology”, “Clinical Psychology” and “Psychology of Learning”. In addition, it is essential to mention that no participant cited a discipline directly involving giftedness.

When the participants were asked “Do you believe that, in the way the curricular structure of the psychology course you attended/attend was/is organized, the students were/are being prepared to work/deal with gifted individuals?”, 92.4% of professionals and 90.1% of students answered negatively. In both cases, the most frequent justifications were the same, being “I approached it superficially”; “There was no contact with the topic” and “Need for extracurricular improvement”.

Professionals who answered “no” gave explanations such as “Unfortunately, the curriculum leaves a lot to be desired in this aspect. In some semesters, participants addressed the theme, however, it was not detailed”; “professors didn’t addressed this term”; “It should be inserted in the curriculum, with a bigger course load”. Those who answered “yes” (7.6%) argued that “I believe so. But there should be better research before initiating the work”; “A little because we had some classes about it, but I believe they weren’t addressed in the best possible way”.

Students who answered “no” (90.1%) gave explanations such as “We didn’t deeply study it, we just heard the terms”; “during undergraduate studies we didn’t study this stuff in an exclusive and detailed way, but rather broadly and superficially”; “classes mainly addressed people with disabilities”; “No, because there is only one elective subject and only a few people are interested in it”. The students who answered “yes” (8.4%) added “Yes, but it could be better. There could focus more specific disciplines on this topic”; “I believe that the course is managing to handle this topic well”; “It is possible to have an idea in case it shows up”. A total of 1.4% of students chose the alternative “I’m not sure”. The arguments involved “I have some doubts regarding the curriculum structure, there is a general comprehensiveness about this type of ability, which doesn’t methodologically help professional practice.

The answer to the fourth question, “Do you know if there is/was any program to support people with educational needs in the educational institution you attend/attended?”, showed that 51.72% of professionals and 44.28% of students said they were not sure. Although the percentage of students who responded positively (42.85%) was higher than the percentage of professionals (25.28%), the programs cited by students were less varied and more generic. Although the percentage of professionals who responded positively (25.28%) was not significantly high, the programs were specific and presented a variety of responses. In the “others” category, only one of the responses mentioned a specific service group for individuals with giftedness.

Among the resources cited by professionals, we can mention specific programs, psychological assistance, extracurricular or elective groups. The focus on disabilities was commonly cited including adaptation and accessibility (Examples: “In my class, there is a girl with a visual disability, and all teachers adapt the material for her”; “To my knowledge, the Interdisciplinary Center of Attention to People with Disabilities”; “(...) as far as I know, most actions are aimed at people with physical disabilities as well as blind people”).

When asked, “Do you know someone who is identified as a gifted individual?”, 58.62% of professionals and 77.14% of students answered negatively. These data may demonstrate the existing difficulty in identifying characteristics presented by these individuals or even gaps in the identification process.

In the last open question, professionals and students were asked, “How do you think the diagnosis process of individuals suspected of having giftedness should be conducted?”. A wide range of answers are presented in Table 1.

**Table 1.** Methods, Techniques and Instruments for the Diagnosis of Giftedness According to Psychology Professionals and Students.

Category	Frequency	
	Professionals	Students
Psychological Assessment	26	21
Testing application	10	24
Interview with teachers/school	8	9
Neuropsychological assessment	8	2
Multidisciplinary diagnosis	8	2
Professional support	7	10
Interview with parents, guardians or other relevant persons	7	9
Consider the context or environment	7	-

Source: Author's elaboration.

For most students, the diagnostic process must be conducted through the application of tests (34.3%), followed by psychological assessment (30.0%). For professionals, a similar result was obtained, noting the inversion of order in that the two procedures were cited (15.6% and 40.6%, respectively). Interestingly, in both groups, the predominance of responses related to psychological assessment was present, so that the participants seem to be aware of the importance of their performance in the subject, considering, even that the application of psychological tests during this process is an exclusive method of this professional in Brazil.

Other procedures were cited involving other professionals, whether in conducting the diagnostic process (for example, a multidisciplinary team or neuropsychological assessment) or as an essential piece in providing information about students (interview with teachers, school, parents, and other relevant people), were also cited. The professionals only mentioned the context. Approximately 25.0% of the professionals and 31.4% of the students mentioned other different procedures, but they were mentioned by a small number of participants. As examples, they mentioned statutory assessment and psycho-pedagogical assessment.

The last question presented 15 myths associated with giftedness, asking participants to mark those they believed to be true. The percentage of agreement is shown in Table 2, separated by group.

**Table 2.** Frequency of Agreement with Giftedness Myths Considering Professionals' and Students' Opinions.

Myth	Frequency in percentage	
	Professional	Student
All individuals identified with giftedness have a high IO	25.28	24.28
Gifted people stand out in all school subjects	3.44	5.71
Giftedness is genetic	17.24	10.00
Children or young people should not be informed of their superior ability	1.14	1.42
The gifted child will perform well at school	5.74	11.42
Every gifted individual is well adjusted, with no emotional and relationship problems	2.29	1.42
Giftedness is a rare phenomenon	22.98	47.14
The identification of gifted people should not be performed, as it only creates a "label" on that individual	4.59	4.28
Gifted children self-educate. not needing special care	1.14	-
Gifted children should be isolated and attend only special schools	1.14	-
Gifted people come from privileged economic classes	1.14	1.42
The gifted will certainly have professional success	4.59	1.42
Most of the gifted are male	9.19	8.57
If a child is identified as gifted in childhood, he/she will always be gifted, until the end of his/her life	16.09	12.85
All phrases are false	50.57	47.14

Source: Author's elaboration.

Among the phrases pointed out as true by professionals and students, the most frequent in both groups was "All individuals identified with giftedness have a high IQ". Then, "Giftedness is a rare phenomenon" and "All phrases are false". In the group of professionals, another two phrases were frequently marked, "Giftedness is genetic" and "If a child is identified as gifted in childhood, he/she will always be gifted, until the end of his/her life". This last sentence was also marked by 12% of the students.

#### 4. Discussion

The paper aimed to investigate the understanding of special education and the presence of disciplines focused on the theme of special education and giftedness during the graduate course, according to psychology students' and psychologists' opinions. The data provided preliminary evidence to suggest that the theme of special education has been addressed in undergraduate courses in psychology, as assessed by students and professionals, especially in the discipline entitled "People with disabilities". It is important to highlight that, probably, the theme of giftedness is a key component of the same discipline, since most of the participants in both groups pointed out these data. The responses indicate a broad understanding of special education, which includes both deficits and disorders as well as giftedness.

According to psychology students' and psychologists' opinion, the data provided preliminary evidence to suggest that the theme of special education has been addressed as a little-explored content, offered superficially, or taking up little time in

the discipline during the psychology undergraduate course. Most participants (students and professionals) affirmed that they do not consider that they are prepared to work with gifted individuals.

The responses also indicate a broad understanding of special education, which includes both deficits and disorders and giftedness. In most cases, psychologists complete the professional training without knowing the specifics of the different students profile that are included in this education modality. As a result, the professionals feel that they are not prepared to deal with this challenge in the professional practice that they can perform (Nakano, 2019).

Other essential research findings refer to the fact that, for most students, the diagnostic process must be conducted through the application of tests. This type of answer illustrates difficulties related to the mistaken understanding of psychological assessment as a data collection process, limiting it to applying tests.

Despite the recommendations of the scientific literature, identification should not be based only on the application of tests, making use of different methods and techniques (Kerr & Sodano, 2003). The literature has recommended the realization of a process that considers information from different psychometric measures and the incorporation of a variety of resources, including general observations, evaluation of portfolios, and works produced, making use of different methods and techniques (Dai, 2020). A variety of resources, which include general observations, evaluation of portfolios and works produced, in addition to the nomination made by teachers, parents and peers can assist in the decision about the presence of criteria indicative of giftedness (Davis et al., 2011; Milligan, 2010; Pfeiffer & Blei, 2008).

Overall, the results presented here prove that many myths are still present in giftedness (Fiedler et al., 2010). Such concerns are historically evident and continue throughout the decades. For example, the myth that “All individuals identified with giftedness have a high IQ”. Although intellectual ability has traditionally been historically emphasized (McIntosh et al., 2018), the literature also point out the need to expand the diagnosis to include other processes besides intelligence, conceiving over-dedication in its multidimensional nature (Pfeiffer & Blei, 2008).

About the myth “Giftedness is a rare phenomenon” we know that, depending on the theoretical model adopted, the prevalence of giftedness varies. The Maryland Report established in 1972 presents a statement that a minimum of 3% to 5% of the school population would be gifted, which is vital to highlight the word minimum (Borland, 2008). In this sense, we can say that this is not a rare phenomenon. In this sense, considering that from 5% of the general population in school-age children can be gifted, but this prevalence depends on the definition of gifted and the diagnostic criteria applied (Pfeiffer & Stocking, 2000), we can say that this is not a rare phenomenon.

The next myth, “If a child is identified as gifted in childhood, he/she will always be gifted, until the end of his/her life”, affirms that once an individual is born gifted, the person remains in this condition all life (Sak, 2011). Some people believe that early giftedness is a sign of future eminence (Bain et al., 2006); however, longitudinal studies or retrospective studies have not supported this idea. Many children identified as gifted have no shown signs of eminence in adulthood and do not present notable life achievements.

It is important to know that giftedness is not a state of being, is developmental and can be present in some people at certain times, under certain circumstances and with appropriate levels of support. However, time, effort, choices and personal investment are essential (Reis & Renzulli, 2009). Additionally, Cross (2002) affirmed that gifted adults spent a considerable amount of time in their passion areas as children, showing that giftedness is developed with hard work. The myth that gifted children should be able to be successful without help has been refuted by the literature (Bain et al., 2007).

It is essential to know that giftedness is not a state of being. It is developmental, and can be present in some people at certain times, under certain circumstances, and with appropriate levels of support. However, time, effort, choices, and personal investment are essential (Reis & Renzulli, 2009). Environmental is crucial to the development of potential (Sak, 2011).

## 5. Conclusion

This exploratory study indicated the presence of many difficulties related to the theme of special education, despite the relevance of this professional's performance in the aforementioned area. This professional has been working into care programs aimed at special education: elaboration, evaluation, and development of a pedagogical project, psychoeducational guidance to teachers, psychological assistance for students, interventions with technical staff, psychological assessment, and family guidance (Mattos & Nuernberg, 2010).

The psychologist will also be able to act directly in the planning of continuing education programs involving clarifications about the diagnosis of these students and aspects related to their specific social, educational, affective and emotional characteristics or even evaluate the effectiveness of educational practices present in these students education programs (Maia-Pinto & Fleith, 2004). However, regardless of the range of possibilities of action in the academic context, in practice, what is seen is that it is restricted, in most cases, to psychological assessment (Maturana et al., 2017). In this sense it's important to investigate the knowledge that this professional and future professionals have about the special education and, especially, giftedness. The data obtained in this study can be used as a base for the elaboration of training programs during the college degree or continuing education due the lack observed in literature review and participant's report.

One limitation of this study is related to the sample size. A convenient sample was used to select participants. As a result, the sample is not representative of the population. Because of this, the results can be generalized with caution, limiting the conclusion to that specific sample.

It would be interesting that future studies could analyze the content of some subjects in psychology courses with good evaluation in the Ministry of Education, with the aim of identifying the understanding of special education presented. Thus, differences and similarities could be identified, especially in relation to the presence of an understanding more limited to deficits and disorders or expanded, involving giftedness.

Future research will be able to investigate whether the understanding of giftedness presented by the participants encompasses the different types of giftedness or if it is restricted to intelligence and if there is knowledge of the main characteristics of these students, as well as about other associated conditions, such as twice exceptionality.

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## References

- Alencar, E. M. L. S., Fleith, D. S., & Arancibia, V. (2009). Gifted education and research on giftedness in south america. In I. V. Shavinina (ed.), *International Handbook on Giftedness* (pp. 1491-1506). Springer.
- Alodat, A. M., Abu Ghazal, M. M., & Al-Hamouri, F. A. (2020). Perfectionism and Academic Self-Handicapping among Gifted Students: An Explanatory Model. *International Journal of Educational Psychology*, 9(2),195-222.<http://doi.org/10.17583/ijep.2020.4426>
- Armstrong, L. L. Desson, S., John, E. S., & Watt, E. (2019). The D.R.E.A.M. program: developing resilience through emotions, attitudes, & meaning (gifted edition) – a second wave positive psychology approach. *Counselling Psychology Quarterly*, 32(3-4), 307-332. <http://doi.org/10.1080/09515070.2018.1559798>
- Bain, S. K., Choate, S. M., & Bliss, S. L. (2006). Perceptions of developmental, social, and emotional issues in giftedness: Are they realistic? *Roeper Review*, 29(1), 41-48. <http://doi.org/10.1080/02783190609554383>.
- Bain, S. K., Bliss, S. L., Choate, S. M., & Brown, K. S. (2007). Serving children who are gifted: perceptions of undergraduate planning to become teachers. *Journal for the Education of the Gifted*, 30(4), 450-478. <https://doi.org/10.4219/jeg-2007-506>
- Borland, J. H. (2008). Identification. In J. A. Plucker & C. M. Callahan (Orgs.), *Critical issues and practices in gifted education* (pp.261-280). Prufrock Press.
- Cao, T. H., Jung, J. Y., & Lee, J. (2017). Assessment in gifted education: a review of the literature from 2005 to 2016. *Journal of Advanced Academics*, 28(3), 163-203. <https://doi.org/10.1177/1932202X17714572>

- Carneiro, L. B. (2015). *Características e avaliação de programas brasileiros de atendimento educacional ao superdotado* (Doctoral dissertation, Universidade de Brasília-UnB). Retrieved from <http://repositorio.se.df.gov.br/handle/123456789/1170>
- Cross, T. L. (2002). Social/emotional needs: Competing with myths about the social and emotional development of gifted students. *Gifted Child Today*, 25(3), 44-65. <https://doi.org/10.4219/gct-2002-76>
- Dai, D. Y. (2020). Assessing and accessing high human potential: A brief history of giftedness and what it means to school psychologists. *Psychology in the Schools*, 57(10), 1-14. <https://doi.org/10.1002/pits.22346>
- Davis, G. A., Rimm, S. B., & Siegle, D. (2011). *Education of the gifted and talented*. New Jersey: Pearson.
- Duque, E., Gairal, R., Molina, S., & Roca, E. (2020). How the Psychology of Education Contributes to Research With a Social Impact on the Education of Students With Special Needs: The Case of Successful Educational Actions. *Frontiers in Psychology*. <https://doi.org/10.3389/fpsyg.2020.00439>
- Ersoy, E. & Uysal, R. (2018). Opinions of school psychological counselors on giftedness and gifted student's education. *American Journal of Qualitative Research*, 2(2), 120-142. Retrieved from <http://www.ejecs.org/index.php/AJQR/article/viewFile/168/111>
- Fiedler, E. D., Lange, R. E., & Winebrenner, S. (2010). In search of reality: Unraveling the myths about tracking, ability grouping, and the gifted. *Roeper Review*, 24(3), 108-111.
- Ivleva, M. (2017). Principal approaches of modern psychology to constructing giftedness. *Advances in Social Science, Education and Humanities Research*, 124, 1176-1180. Retrieved from <https://www.atlantispress.com/proceedings/iccassh-17/25878804>
- Kain, S. K., Bliss, S. L., Choate, S. M., & Brown, K. S. (2007). Serving children who are gifted: perceptions of undergraduates planning to become teachers. *Journal of the Education of the Gifted*, 30(4), 450-478. <https://doi.org/10.4219/jeg-2007-506>
- Kain, S. K., Bliss, S. L., Choate, S. M., & Brown, K. S. (2007). Serving children who are gifted: perceptions of undergraduates planning to become teachers. *Journal of the Education of the Gifted*, 30(4), 450-478. <https://doi.org/10.4219/jeg-2007-506>
- Kerr, B., & Sodano, S. (2003) Career assessment with intellectually gifted students. *Journal of Career Assessment*, 11(2), 168-186. <https://doi.org/10.1177/1069072703011002004>
- Maia-Pinto, R. R., & Fleith, D. S. (2004). Avaliação das práticas educacionais de um programa de atendimento a alunos superdotados e talentosos. *Psicologia Escolar e Educacional*, 8(1), 55-66.
- Mattos, L. K. & Nuernberg, A. H. (2010). A intervenção do psicólogo em contextos de educação especial na grande Florianópolis. *Revista Brasileira de Educação Especial*, 16(2), 197-214. Retrieved from <http://pepsic.bvsalud.org/pdf/pee/v8n1/v8n1a07.pdf>.
- Maturana, A. P. P. M., Pontalti, A. C., Lucatto, H. T., Campos, L. S. A., Martinho, G. J., & Souza, J. L. A. (2017). O trabalho da Psicologia no âmbito da inclusão, de acordo com alunos de graduação. *Revista de Ciências Sociais e Humanas*, 27(68), 101-116. <https://doi.org/10.15600/2236-9767/impulso.v27n68p101-116>
- McIntosh, D. E., Dixon, F. A., & Pierson, E. E. (2018). Use of intelligence tests in the identification of giftedness. In D. P. Flanagan & E. M. McDonough (Eds.), *Contemporary intellectual assessment: Theories, tests, and issues* (pp. 587-607). The Guilford Press.
- Milligan, J. L. (2010). *Assessment of giftedness: A concise and practical guide*. New York: YBK Publishers.
- Nakano, T. C. (2019). Diretrizes Curriculares em Psicologia: análise da formação para atuação em educação especial. *Revista Examen*, 3(3), 11-37. Retrieved from <https://examen.emnuvens.com.br/rev/article/view/47>.
- Papadopoulos, D. (2020). Psychological Framework for Gifted Children's Cognitive and Socio-Emotional Development: A Review of the Research Literature and Implications. *Journal for the Education of Gifted Young Scientists*, 8(1), 305-323. <https://doi.org/10.17478/jegys.666308>.
- Pfeiffer, S. I. (2015). *Essentials of gifted assessment*. John Wiley & Sons.
- Pfeiffer, S., & Blei, S. (2008). Gifted identification beyond the IQ test: rating scales and other assessment procedures. In S. Pfeiffer (Org.), *Handbook of giftedness in children: Psycho-educational theory, research and best practices* (pp. 177-198). New York: Springer.
- Pfeiffer, S. I. & Stocking, V. B. (2000) Vulnerabilities of Academically Gifted Students. *Special Services in the Schools*, 16(1-2), 83-93. [http://doi.org/10.1300/J008v16n01\\_06](http://doi.org/10.1300/J008v16n01_06)
- Reis, S. M., & Renzulli, J. S. (2009). Is there still a need for gifted education? An examination of current research. *Learning and Individual Differences*, 20(4), 308-317. <https://doi.org/10.1016/j.lindif.2009.10.012>
- Robertson, S. G., Pfeiffer, S. I., & Taylor, N. (2011). Serving the gifted: a national survey of school psychologists. *Psychology in the Schools*, 48(8), 786-799. <http://doi.org/10.1002/pits.20590>.
- Sak, U. (2011). Prevalence of misconceptions, dogmas, and popular views about giftedness and intelligence: a case from Turkey. *High Ability Studies*, 22(2), 179-197. <https://doi.org/10.1080/13598139.2011.622942>
- Salakhova, V.B., Pryazhnikova, E. Y., Litvinov, A.V., Vasyakin, B.S., & Zasiva, L.V. (2020). Talent and giftedness: the facets of development and research mechanisms. *Talent Development & Excellence*, 12(3S), 127-142. Retrieved from <http://iratde.com/index.php/jtde/article/view/258>.
- Silverman L.K. (2018). Assessment of Giftedness. In: Pfeiffer S. I (Ed.), *Handbook of Giftedness in Children*. Springer.

Silverman, L. K. , & Gilman, B. J. (2020). Best practices in gifted identification and assessment: Lessons from the WISC-V. *Psychology in the Schools*, 57(10), 1569–1581. <https://doi.org/10.1002/pits.22361>

Silverman, L. K. (2013). *Giftedness 101*. Springer.

Wechsler, S. M., Blumen, S., & Bendelman, K. (2018). Challenges on the identification and development of giftedness in South America. In S. I. Pfeiffer (Ed.), *APA Handbook of giftedness and talent* (pp. 97-112). Washington: American Psychological Association.