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THE SELF-CONCEPT IN THE PRIMARY EDUCATION STAGE: INCIDENTS IN THE MOST CAPABLE STUDENTS

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Abstract. The new approaches in the field of high capacities, compared to the topic of considering only intelligence as a fundamental element in their identification, opt for a wide range of qualities and dimensions to be taken into account in detection. Among them, self-concept appears as the mental self-image of the subject. This construct and its relationship with other variables, such as the academic performance or the sex of schoolchildren, could be influential factors in the strikingly low figures for the diagnosis of students with high abilities and negative results in international performance evaluations. To verify the relationship between these variables, we conducted a quantitative research to evaluate the general and academic self-concept in a sample of 118 subjects of 4th, 5th and 6th grade of Primary Education, including school children with high diagnostic abilities. The Piers Harris Self-concept Scale has been used. The results show a positive correlation between general and academic self-concept and academic performance, not finding a relationship between self-concept and gender, high ability, age and course. In this way, specific actions should be favored, from the teaching and learning processes themselves, in favor of improving the students' self-concept, keeping in mind their academic performance. The welfare of schoolchildren should be a fundamental premise of the teaching practice.

Keywords: Self-concept, high capacities, gender, academic performance, school.

EL AUTOCONCEPTO EN LA ETAPA DE EDUCACIÓN PRIMARIA: INCIDENCIA EN LOS ALUMNOS MÁS CAPACES

Resumen. Los nuevos planteamientos en el campo de las altas capacidades, frente al tópico de considerar únicamente la inteligencia como elemento fundamental en su identificación, optan por un amplio abanico de cualidades y dimensiones a tener en cuenta en la detección. Entre ellas, aparece el autoconcepto

entendido como la autoimagen mental del sujeto. Este constructo y su relación con otras variables, caso del rendimiento académico o el sexo de los escolares, podrían ser factores influyentes en las cifras llamativamente bajas de diagnóstico de alumnado con altas capacidades y en los resultados negativos en evaluaciones internacionales de rendimiento. Para comprobar la relación entre estas variables, hemos realizado una investigación cuantitativa para evaluar el autoconcepto general y académico en una muestra de 118 sujetos de 4º, 5º y 6º de Educación Primaria, incluidos escolares con altas capacidades diagnosticadas . Se ha utilizado la Escala de Autoconcepto de Piers Harris. Los resultados arrojan una correlación positiva entre el autoconcepto general y académico y el rendimiento académico, no encontrándose relación entre autoconcepto y género, alta capacidad, edad y curso. De esta forma, se deberán favorecer, desde los propios procesos de enseñanza y aprendizaje, actuaciones específicas en pro de la mejora del autoconcepto del alumnado teniendo presente su rendimiento académico. El bienestar de los escolares deberá de ser una premisa fundamental de la praxis docente.

Palabras clave: Autoconcepto, altas capacidades, género, rendimiento académico, escuela.

Introduction

The scores obtained by students from Spain in various international evaluations that seek to measure their educational performance are low compared with the average for countries of the Organization for Economic Co-operation and Development (OECD). As a reference, we use the reports from PISA (Program for International Student Assessment) developed by the OECD, given the importance and impact of their findings in educational policies and the high rate of participation from different countries (García, 2014). The six editions created to date (2000, 2003, 2006, 2009, 2012 and 2015) have all evaluated reading proficiency, math, and science. Spain has scored below the OECD average in all editions and in all competences, although the gap has been narrowing along successive reports (OECD, 2005a, 2005b, 2007, 2010, 2014, 2016). Another noteworthy finding is the fact that there are hardly any strong performing and top performing students in Spain, that is to say, students with excellent performance in PISA (García, Silva, and Viseu, 2017).

On the other hand, figures for high capacity diagnostics are significantly lower in Spain. According to Jiménez and García (2013), more capable students between 5 and 10% of the school population should at least be considered. However, recent data published by the Ministry of Education, Culture and Sport for the 2016/2017 academic year -the last for which non-university education data are available- indicate that the number of students from Spain diagnosed with high intellectual capacity account for only 0.33% of the total number of students as can be seen in Table 1.

Table 1
Prevalence of high capacity cases in Spain for the 2016/2017 academic year

CC. AA. 2016/2017 Academic Year	Total num. of high capacity students	%
Andalucía	11,582	0.72
Aragón	182	0.08
Principality of Asturias	804	0.59
Illes Balears	831	0.46
Canary	2,122	0.61
Cantabria	128	0.14
Castile and León	638	0.18
Castile-La Mancha	411	0.11
Catalonia	417	0.03
Comunitat Valenciana	1,063	0.12
Extremadura	266	0.15
Galicia	1,590	0.40
Madrid Community	2,190	0.19
Murcia Region	3,698	1.27
Foral de Navarra Community	399	0.36
Basque Country	536	0.14
Rioja	274	0.50
Ceuta	2	0.01
Melilla	0	0.00
Spain	27,133	0.33

Note: Author's own creation based on data from the Ministry of Ministry of Education, Culture and Sport -MECD- (2018)

At this point, it's important to mention the new trends in the field of the high capacities that, before the topic of simply considering intelligence as a key element for its identification, they opt to take into account a wide range of qualities and dimensions (Pfeiffer, 2015; Stoeger, Balestrini, and Ziegler, 2018). In this way, such variables as personal expectations, personal aspirations or self-concept, among others, acquire relevance, as should the differences between the sexes.

The term self-concept is complex and difficult to recognize and isolated from other mental perceptions of the human being, with self-esteem being such a case. But it is important to distinguish one from the other since, although they are sometimes used interchangeably, there are differences that must be taken into account. Self-concept corresponds to the cognitive dimension of our own mental picture, being the information that we create about ourselves but which leaves out any valuable judgment and lacks, therefore, a moral component (Zeidner, and Shani-Zinovich, 2015). Though self-esteem is also linked to self-concept, the former is weighted with a strong

emotional component and a subjective assessment. That is, self-concept is a series of mental frameworks about ourselves to which we give a positive assessment (positive self-esteem) or negative (negative self-esteem). Likewise, in the conceptual deepening developed by several researchers (Harter and Byrne, cited in Ancillo et al., 2001), self-concept can become broken into different components, such as behavioral, academic, social, physical self-concepts, among others.

As mentioned earlier, self-concept, along with personal expectations and without losing sight of gender, may help explain low academic performance and rates of high capacity diagnosis in Spain. In this sense, many authors are of the opinion that adolescence is a crucial stage (Jiménez, 2014; Kerr, 1999; Trillo, 2012). Highly capable girls during childhood show similar expectations to their male counterparts, seeking academic success and are competitive to the same extent as them. However, a series of changes occur during this stage motivated by acculturation, mainly, that they lessen their level of ambition and achievement of success during adolescence and adulthood (Kerr, 1999). Confidence in themselves and their abilities begins to decrease during their youth, with increasing levels of insecurity. This is because higher capacity girls have a different perception of their ability and their academic success with respect to boys (Al-Srour Al-Oweidi, 2016), with a tendency of relating them to luck (Jiménez, 2014).

This self-concept of the more high capacity female students inevitably impacts their academic performance. The OECD report certifies it as: *What lies at the heart of gender inequality in education?*, which indicates that "on average in OECD countries, the difference in test scores in mathematics among boys and girls of better performance is 19 points. However, if we compare girls and boys who said they have a similar level of confidence in themselves with respect to mathematics, the gender gap disappears" (OECD, 2015, p. 2).

This is because, according to this report, girls in general have less self-confidence in solving mathematical problems. But when they show confidence, the results are equal to those of boys, in addition to displaying higher expectations. As such, they continue to claim that "this gender difference could be related with the confidence that students have in themselves. By having more confidence, they give themselves more freedom to make mistakes, to practice trial-and-error processes that are fundamental in acquiring greater knowledge and understanding of mathematics or the sciences" (OECD, 2015, p. 3).

The results and conclusions of different research point in the same direction which conclude that the self is one of the variables of greater incidence in the Academic Performance Index (Naranjo, 2007; Navarro, Tomás and Oliver, 2006; Rodriguez, 1982). In addition, it has been shown that it is necessary to consider gender as an important variable in studies researching this construct (Ancillo et al., 2001), since the differences in this regard are endorsed by several researches (Amezcua, and Pichardo, 2000; Padilla, Garcia and Suarez, 2010; Pastor, Balaguer and García-Merita, 2003).

In short, according to the literature provided, academic performance, high capacity diagnostic rates and existing gender inequalities should occur in large measure due to the self-concept and the perspectives and perception of one's own capacities. This is why this research seeks to clarify the incidence of self-concept based on different variables in research.

Methodology

Our research is based on the considerations mentioned in the previous paragraph, such as the OECD results which are below the international assessment performance average, including the limited number of strong and top performing students or the low of diagnosis high capacity intellectual rates within the school population. Because of this, we raise the question of the extent to which the self-concept affects the student body. In this way, according to the reviewed literature, we begin from the assumption that the self-concept is a variable that correlates positively with academic performance and that low levels of this construct may have an impact on detecting and intervening on the education of high capacity students.

To prove or discard the hypothesis, a quantitative research was carried out that analyzed descriptive and differential results, depending on different variables in research. The most important conclusions were then extracted based on the implications that might arise for educational policies and the teaching practice, always looking for the improvement of the student's self-concept.

To this end, the objective for this research has been to assess the general and academic self-concept in a sample of students from 4th, 5th and 6th Primary Education grades by comparing the results according to different variables, for example, the existence of diagnosed high intellectual capacities.

Sample

The research involved 118 students from different schools in Early Childhood and Primary Education selected through a probabilistic sampling of random types. The levels used during the Primary Education stage have been 40 students from 4th grade, 5th grade with 30 students and 6th grade with 48 students. Between this student body, 21 high intellectual capacity students were identified by the educational guidance services that serve their schools.

Variables

The main variable of the research has been that of self-concept, in general and academic terms. The first of them is understood as the set of powers, ideas and beliefs that each person has about them self. The second is a sub-dimension of the previous and is defined as the student's perception about their own capacity to carry out certain academic and intellectual tasks.

Other variables have been used, such as:

- *Detected high intellectual capacity*, as noted above, we have identified 21 school children as such. Along with self-concept, other fundamental variables of the research.
- *Sex*, distinguishing between a Male or Female. In this study, 67 have been male and 51 are female.
- *Academic performance*, defined on June 2018 through the average rating in all curricular areas and quantified as High performance (mean scores of Outstanding, 40 students), Average performance (mean scores of Notable and Good, 50 school students) and Low performance (mean scores of Sufficient and Insufficient, 28 students).

- *Age*, using the chronological age of the student body at the time of the research, which ranges from 9 to 12 years (25, 36, 34 and 23 school children respectively).
- *Grades*, the sample being divided between 4th, 5th and 6th level grades of Primary Education (40, 30 and 48 students, respectively).

Instrument

The main instrument administered for the evaluation of self-concept has been the Piers Harris Self-Concept Scale. The version used is the English translation used in the study *La evaluación de la adaptación socioemocional a través del autoinforme. El autoconcepto y la empatía* (Evaluating Socio-Emotional Adaptation through the Self-Evaluation Report. The Self-Concept and Empathy) (Díaz-Aguado, and Martínez-Arias, 1995).

This scale is designed for children aged between 7 and 12 years approximately and consists of 80 statements with the dichotomous response "Yes or No". Of these, 36 items are positive and 44 negatives. Positive affirmations answer "Yes" with a score of 1 and 0 for the answer "No"; the negative items proceed with the contrary. The sum of the scores enables calculating both the general self-concept (from 0 to 80 points) from each of the six following areas: intellectual status, academic self-concept (from 0 to 17 points, used in this research), behavior, anxiety, popularity, physical appearance and physical qualities, happiness and satisfaction.

According to a study by Díaz-Aguado and Martínez-Arias (1995), Cronbach's Alpha index of reliability for general self-concept is .90, with .79 for the academic self-concept, where the latter reaches .90 in other research (the case of Guillen and Ramírez, 2011). In addition, more authors guarantee the reliability of the scale at the global level, with the Cronbach Alpha coefficients ranging from .83 and .98 (Epstein, 1985; Puigcerver, 2003).

Procedure

The first step was getting into contact with the principals and directors of several educational centers to request their participation in this research. Subsequently, a written authorization was required of the families of the school groups whose centers and teachers showed a willingness to take part in this study. Selection of the centers was done by seeking schools that showed having students with high intellectual capacities.

After selecting the sample, the instrument mentioned above was administered in group form. In a parallel way, the teachers were required to indicate the average academic performance in all curricular areas their students had as of June 2018. Lastly, the 22.0 version of the IBM SPSS Statistics program was used for managing the data. The tests used and the relations established between the variables are shown in the following section.

Results

The development of this section consists of the following sub-sections:

- Results achieved for the self-concept variable: general and academic.
- Results as a function of the detected high capacities.
- Results as a function of the rest of the variables included in the research.

Results achieved for the self-concept variable: general and academic.

For each type of self-concept and with a view to the development of subsequent analyzes, the scores have been coalesced into three levels (level 1 Low, level 2 Average and level 3 High) for both the general and academic self-concept. Their frequencies and percentages are identified in Table 2.

Table 2
Frequencies and percentiles for each level for the general and academic self-concepts

Levels	General Self-Concept			Academic Self-Concept		
	Interval	**f**	**%**	**Interval**	**f**	**%**
Low	30-45	13	11.0	4-8	17	14.4
Average	46-61	38	32.2	9-12	41	34.7
High	62-77	67	56.8	13-17	60	50.9

According to the results reflected in these two tables, the participants' levels of general and academic self-concepts have been mainly located in the high level, 56.8% and 50.8%, respectively, compared to 11.0% of one and 14.4% for the other within the low level. The average of the results for the three levels has been 2.46 for the general self-concept, with a standard deviation of .69 and 2.36 for the academic self-concept, with a standard deviation of .72.

Results based on the detected high capacities

The study of the results for each of the self-concept types based on the existence or non-existence of the detected high capacities is the basis for the development of this research. Its importance has been manifested in the theoretical foundation of this article.

First, we have analyzed the results from the general self-concept depending on the high capacity seen, with Table 3 showing the frequencies and percentages. In it, students with high capacities show a high frequency in level 1 and 2, while those students not detected as such appear mostly in level 3 or high. The average number of students that were diagnosed has been 2.05, with a standard deviation of .74, and 2.55 for those that were not, with a standard deviation of .65. Despite the discrepancy of the sample between both groups for this variable, with 21 students Yes and 97 students No, the differences in averages make it imperative to continue with the statistical analysis. Thus, in the Chi-square test, value of 9.26 significance of .01, statistically significant differences have been observed in the relationship among the variables of the detected high capacity and self-concept. The Pearson correlation between both variables has been -.28, with a significance of .00. It demonstrates that there is significance between the variables, i.e. there is a relationship between low general self-concept and the existence of high intellectual capacities. On the other hand, after relating general self-concept, detected high capacity and sex, a Pearson correlation index of -.13 appears, with no significance existing by being the value of the same .17.

Table 3
Frequencies and percentiles for the detected high capacity variable based on each defined level for the general self-concept variable

Levels	Yes		No	
	f	%	f	%
Low	5	4.24	8	6.78
Average	10	8.47	28	23.73
High	6	5.08	61	51.70

We then proceed to analyze the academic self-concept with the detected high capacity variable, noting the frequencies and percentages in Table 4. These students with high capacities show, based on the proportion of the sample of one and another group, similar results for each of the defined levels. The largest number of students is located in 3 or High in both groups. The average number of students that were diagnosed has been 2.38, with a standard deviation of .67, and 2.36 for those that were not, with a standard deviation of .74. As can be seen, the averages of both groups are very similar. This trend is observed in the Chi-square tests, with a value of .96 significance .62, and a value of .01 and a significance of .91 in the Pearson correlation index calculation, in which non-significant indexes are obtained between variables. There is significance if we include the gender variable in this relationship. As such, we can conclude that there is no significance between academic self-concept and detected high capacity.

Table 4
Frequencies and percentiles for the detected high capacity variable based on each defined level for the academic self-concept

Levels	Yes		No	
	f	%	f	%
Low	2	1.70	15	12.71
Average	9	7.63	32	27.12
High	10	8.47	50	42.37

Results based on the rest of the variables included in the research

In this section, the results are displayed for the following variables: gender, academic performance, age and school year.

In terms of sex, Table 5 shows the results for each level of general self-concept, with level 3 or the high level where the majority of students are found for both sexes. 8 male students appear at level 1 or the low level, 6.78% of the total sample, and school 5 female, 4.24% of the total sample. The average for school males is 2.52 with a standard deviation of .70, while for female students the average has been 2.37, with a standard deviation of .66. There are no statistically significant differences, on the other hand, according to the Chi-square value of 35.82 with a significance of .43, and a Pearson

index value of -.10 with a significance of .31. In addition, as has been previously noted, there is no relationship between general self-concept, sex and detected high capacity.

Table 5
Frequencies and percentiles for the sex variable based on each defined level for the general self-concept variable

Levels	**Males**		**Females**	
	f	**%**	**f**	**%**
Low	8	6.78	5	4.24
Average	16	13.56	22	18.64
High	43	36.44	24	20.34

In the relationship between academic self-concept and sex, Table 6 reveals a balance in terms of the results achieved for both sexes, stressing equality in level 2 despite the difference in sample with 20 male students at 16.95% and 21 female students at 17.79%. The average for school males is 2.34 with a standard deviation of .77, while for female students the average has been 2.39, with a standard deviation of .67. There are no statistically significant differences, on the other hand, according to the Chi-square value of 14.71 with a significance of .40, and a Pearson index value of -.06 with a significance of .55.

Table 6
Frequencies and percentiles based on the sex variable based on each defined level for the academic self-concept variable

Levels	**Males**		**Females**	
	f	**%**	**f**	**%**
Low	12	10.17	5	4.24
Average	20	16.95	21	17.79
High	35	29.66	25	21.19

The next analysis variable is the academic performance. Table 7 shows the results based on the levels set for the general self-concept, observing an overall balance in the percentages with the exception of the low performance level and the high self-concept level. The average of low performance schoolchildren has been 2.18 with a standard deviation of .72, an average yield 2.56, a standard deviation of .64, and a high performance of 2.53, with a standard deviation of .68. The Chi-square test, with a value of 93.43 and a significance of .03, and a Pearson index correlation value of -.33 with a significance of .00, statistically reflect significant differences in the relationship between general self-concept and academic performance.

Table 7
Frequencies and percentiles for the performance variable based on each level defined for the general self-concept variable

Levels	Low		Average		High	
	f	%	f	%	f	%
Low	5	4.24	4	3.39	4	3.39
Average	13	11.02	14	11.86	11	9.32
High	10	8.47	32	27.12	25	21.19

On the other hand, the relationship between academic performance and academic self-concept in Table 8 reveals special eye-catching results with 11 low performance students located in the low academic self-concept, by which the frequencies and percentages reflect a close relationship between low academic performance and low academic self-concept. On the contrary, the results for all the other levels have some similarity. The average in low performance students is 1.79, with a standard deviation of .74, 2.60 for average performance, with a standard deviation of .61, and 2.48 for high performance, with a standard deviation of .64. Thus, in the Chi-square test with a value of 25.47 and a significance of .00, there has been no statistically significant differences. The Pearson correlation between both variables has been -.32, with a significance of .00. Significance between variables was revealed where there is a relationship between academic achievement and academic self-concept, and as has been pointed out, these differences happen in association between both variables for the lowest levels.

Table 8
Frequencies y percentiles for the performance variable based on the defined level for the academic self-concept

Levels	Low		Average		High	
	f	%	f	%	f	%
Low	11	9.32	3	2.54	3	2.54
Average	12	10.17	14	11.86	15	12.71
High	5	4.24	33	27.97	22	18.65

In the relationships between the age of schoolchildren and the general self-concept (Chi-square test with a value of 106.53, a significance of .44, a Pearson correlation index value of -.02, and a meaningfulness of .81) and between age and academic self-concept (Chi-square test with a value of 39.96, a significance of .56, a Pearson correlation index value of -.04, and a significance of .69), there are no statistically significant differences.

Lastly, the results are specified according to the grades of the students and participants for the general self-concept variables (Chi-square test with a value of 66.84, a significance of .58, a Pearson correlation index value of -.13, and a significance of

.78) and academic self-concept (Chi-square test with a value of 31.00, a significance of .32, a Pearson correlation index value of -.24, and a significance of .81). There is a lack of statistically significant differences.

Discussion and conclusions

After analyzing the results, the participants were generally found as having high levels of general and academics self-concepts. It was also confirmed that there is a positive correlation between general and academic self-concepts and academic performance, being the lowest-performing students that scored lowest in self-concept, especially within its academic dimension. This confirms both the starting hypothesis and the results from previous researches already cited in the sense that the self-concept is an influential variable on academic performance. Thus, this construct could be one of the causes for the poor performance of students in the PISA reports and could also be hindering the detection and diagnosis of high intellectual capacities.

With regard to the question of those with higher capacities, there is a relationship between low self-concept and the existence of high intellectual capacities. However, there is no significance between academic self-concept and detected high capacity. On the other hand, neither is there significance if we relate both types of self-concept with the detected high capacity and sex simultaneously.

With regard to the issue of gender, there are more boys than girls at the highest levels of general self-concept and academic self-concept, while the statistical analysis of the data has concluded that these results are not statistically significant. In spite of this, it is important not to lose sight of the gender perspective as it is an influential variable in self-concept according to different authors (Amezcua and Pichardo, 2000; Padilla, García and Suárez 2010; Pastor, Balaguer and García-Merita, 2003). Statistically significant differences did not appear in the rest of the research variables, such as the participants' age and grade.

With all of this, it is clear that there is a need to work on the students' self-concept in the classroom, since it has been proven that specific intervention improves this construct (Cerrillo, 2002), which, as has been demonstrated, will end up positively influencing other variables, such as academic performance. And so that the proposals for intervention in these areas do not simply stagnate as theories, initiatives or volunteer work on the part of the teaching staff, it would be interesting to include not only curricular proposals for the students' development in cognitive processes but for affective and emotional processes as well, all carried out within the legal frameworks of the education field. It has been shown that the cognitive and the emotional planes should not be separated, since they are complex processes that occur interconnected (Blanco, De Caso and Navas, 2013). In addition, because of this complexity, it is necessary to demand new research on the topic to enable the foundation and lay its educational foundation. Emotional education, which sometimes is relegated to obscurity, should also play a more important role in the curricula and academic content. In this way we will be moving one more step closer toward the achievement of a comprehensive education.

References

Al-Srour, N.H., & Al-Oweidi, A.M. (2016). Self-concept among Gifted and Non-gifted Students and its Relationship with Gender Variable in a Jordanian Sample. *International Journal of Educational Sciences, 12*(1), 50–56. doi: 10.1080/09751122.2016.11890412

Amezcua, J.A., & Pichardo, M.C. (2000). Diferencias de género en autoconcepto en sujetos adolescentes. *Anales de Psicología, 16*(2), 207-214. Retrieved from https://www.um.es/analesps/v16/v16_2/10-16_2.pdf

Ancillo, I., Artola, T., Barraca, J., Pina, J., & Mosteior, P. (2001). Diferencias de género y autoconcepto en alumnos de altas capacidades. En La educación de mujeres y varones en el tercer milenio: entre el código genético y social. In *III Symposium Internacional sobre la Educación Femenina y Masculina en el Tercer Milenio*, Centro Universitario Villanueva, Universidad Complutense de Madrid. Retrieved from https://www.researchgate.net/publication/275273138_Diferencias_de_genero_y_autoconcepto_en_Alumnos_de_Altas_Capacidades

Blanco, J., De Caso, A.M., & Navas, G. (2013). Variables personales implicadas en el aprendizaje: ¿motivación y/o emoción? *International Journal of Developmental and Educational Psychology, 1*(1), 505-512. Retrieved from http://infad.eu/RevistaINFAD/2013/n1/volumen1/INFAD_010125_505-512.pdf

Cerrillo, M.R. (2002). Mejorar el autoconcepto en alumnos de un entorno desfavorecido. *Revista de Psicodidáctica, 14*, 71-85. Retrieved from http://www.ehu.eus/ojs/index.php/psicodidactica/article/view/145/141

Díaz-Aguado, M.J., & Martínez-Arias, R. (1995). La evaluación de la adaptación socioemocional a través del autoinforme. El autoconcepto y la empatía. In M.J. *Díaz-Aguado, y R. Martínez-Arias* (Ed.), Niños con dificultades socioemocionales. Instrumentos de evaluación (pp. 3-48). Madrid: Ministerio de Asuntos Sociales, Sistema de Atención Social a la Infancia (SASI).

Epstein, J.H. (1985). Review of Pier-Harris Children´s Self-concept Scale (The way I feel about myself). In J.V. Mitchell (Ed.), *The Ninth Mental Measurements Yearbook* (pp. 1167-1169). Lincoln, United States: The University of Nebraska Press.

García, R. (2014). *Diseño y validación de un instrumento de evaluación de la competencia matemática. Rendimiento matemático de los alumnos más capaces*. Tesis de Doctorado para la obtención del título de Doctor en Educación. Facultad de Educación. UNED. Retrieved from http://e-spacio.uned.es/fez/view/tesisuned:Educacion-Rgarcia

García, R., Almeida, L.S., & Viseu, F. (2017). El rendimiento matemático excelente en las evaluaciones PISA: Resultados para España y Portugal. *Revista de Estudios e Investigación en Psicología y Educación, Extr.* (1), 303-308. doi: 10.17979/reipe.2017.0.01.2998

Guillén, F., & Ramírez, M. (2011). Relación entre el autoconcepto y la condición física en alumnos del Tercer Ciclo de Primaria. *Revista de Psicología del Deporte, 20*(1), 45-59. Retrieved from http://www.psicologiadeporte.ulpgc.es/docs/Relacion-entre-autoconcepto-y-condicion-fisica-en-alumnos-del-tercer-ciclo-de-primaria-de-un-centro-escolar.pdf

Jiménez, C. (2014). *El desarrollo del talento: educación y alta capacidad*. Madrid: Universidad Nacional de Educación a Distancia. Retrieved from https://canal.uned.es/mmobj/index/id/21559 .

Jiménez, C., & García, R. (2013). Los alumnos más capaces en España. Normativa e incidencia en el diagnóstico y la educación. *Revista Española de Orientación y Psicopedagogía, 24*(1) 7-24. Retrieved from https://www2.uned.es/reop/pdfs/2013/24-1%20-%20Jimenez.pdf

Kerr, B. (1999). Orientación profesional de las mujeres superdotadas. En J. Ellis, y J. Willinsky, (1999). *Niñas, Mujeres y Superdotación. Un desafío a la discriminación educativa de las mujeres* (pp. 155-163). Madrid: Narcea.

Ministerio de Educación, Cultura y Deporte (2018). *Estadísticas no universitarias*. Retrieved from http://www.mecd.gob.es/servicios-al-ciudadano-mecd/estadisticas/educacion/no-universitaria.html

Naranjo, M.L. (2007). Autoestima: un factor relevante en la vida de la persona y tema esencial del proceso educativo. *Revista electrónica actualidades investigativas en educación, 7*(3), 1-27. Retrieved from https://www.redalyc.org/pdf/447/Resumenes/Resumen_44770311_1.pdf

Navarro, E., Tomás, J.M., & Oliver, A. (2006). Factores personales, familiares y académicos en niños y adolescentes con baja autoestima. *Boletín de Psicología, 88*, 7-25. Retrieved from https://www.uv.es/seoane/boletin/previos/N88-1.pdf

Organización para la Cooperación y el Desarrollo Económicos (2005a). *PISA 2000. Resultados en España del estudio PISA 2000. Conocimientos y destrezas de los alumnos de 15 años*. Retrieved from https://www.mecd.gob.es/inee/dam/jcr:eb6fde04-a7c1-465a-88b4-e51465383807/pisa2000infnacional.pdf.

Organización para la Cooperación y el Desarrollo Económicos (2005b). *PISA 2003. Matemáticas. Informe español*. Retrieved from https://www.mecd.gob.es/inee/dam/jcr:60f4210c-d96d-43a2-8bc9-05fd881e82f7/informe-espanol-pisa-era-2009-3.pdf.

Organización para la Cooperación y el Desarrollo Económicos (2007). *PISA 2006. Programa para la evaluación internacional de los alumnos. Informe Español. Resultados y contexto*. Retrieved from https://www.mecd.gob.es/inee/dam/jcr:699d43f6-ddcc-4c7e-b7bf-c0e0c288e949/pisainforme2006.pdf.

Organización para la Cooperación y el Desarrollo Económicos (2010). *PISA 2009. Programa para la evaluación internacional de los alumnos. Informe Español. Resultados y contexto*. Retrieved from https://www.mecd.gob.es/inee/dam/jcr:bc05a3ce-effe-425b-a79b-c92f0d43f8d1/pisa-2009-con-escudo.pdf.

Organización para la Cooperación y el Desarrollo Económicos (2014). *PISA 2012. Programa para la evaluación internacional de los alumnos. Informe Español. Resultados y contexto*. Retrieved from https://www.mecd.gob.es/inee/evaluaciones-internacionales/pisa/pisa-2012.html.

Organización para la Cooperación y el Desarrollo Económicos (2015). *PISA in Focus ¿Qué subyace bajo la desigualdad de género en educación?* Retrieved from http://www.mecd.gob.es/dctm/inee/pisa-infocus/pif49espfinal.pdf?documentId=0901e72b81c7fb18.

Organización para la Cooperación y el Desarrollo Económicos (2016). *PISA 2015. Programa para la evaluación internacional de los alumnos. Informe Español*.

Retrieved from https://www.mecd.gob.es/inee/evaluaciones-internacionales/pisa/pisa-2015.html.

Padilla, M.T., García, M.S., & Suárez, M. (2010). Diferencias de género en el autoconcepto general y académico de estudiantes de 4º de ESO. *Revista de Educación, 352*, 495-515. Retrieved from http://www.revistaeducacion.educacion.es/re352/re352_22.pdf

Pastor, Y., Balaguer, I., & García-Merita, M.L. (2003). El autoconcepto y la autoestima en la adolescencia media: análisis diferencial por curso y género. *Revista de Psicología social, 18*(2), 141-159. Retrieved from https://dialnet.unirioja.es/servlet/articulo?codigo=440864

Pfeiffer, S. I. (2015). El Modelo Tripartito sobre la alta capacidad y las mejores prácticas en la evaluación de los más capaces. *Revista de Educación*, *368*, 66–95. Retrieved from http://redined.mecd.gob.es/xmlui/bitstream/handle/11162/111093/2015_%20RevistaEducacion368_66_Pfeiffer.pdf?sequence=1&isAllowed=y

Puigcerver, M.J. (2003*). Evaluación del Autoconcepto, Actitudes y Competencia Social en Sujetos Sordos*. Tesis de doctorado para la obtención del título de Doctora en Psicología, Universidad de Murcia. Retrieved from http://www.cultura-sorda.org/wp-content/uploads/2015/04/Tesis-PuigcerverHurtado-2003.pdf

Rodríguez, S. (1982). *Factores de rendimiento escolar*. Barcelona: Oikos-Tau.

Stoeger, H., Balestrini, D.P., & Ziegler, A. (2018). International perspectives and trends in research on giftedness and talent development. In S. I. Pfeiffer, E. Shaunessy-Dedrick, & M. Foley-Nicpon (Eds.), *APA handbook of giftedness and talent* (pp. 25–37). Washington: American Psychological Association.

Trillo, M.C. (2012). Alta capacidad y género. Factores diferenciadores cognitivos y de personalidad en niños y niñas de alta capacidad. (Tesis doctoral). Universidad de Córdoba. Retrieved from https://helvia.uco.es/xmlui/bitstream/handle/10396/7975/2012000000566.pdf?sequence=3&isAllowed=y

Zeidner, M., & Shani-Zinovich, I. (2015). A comparison of multiple facets of self-concept in gifted vs. non-identified Israeli students. *High Ability Studies*, *26*(2), 211–226. Retrieved from https://www.tandfonline.com/doi/full/10.1080/13598139.2015.1095076

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