

Moral development in students with high abilities: State of knowledge from 2002 to 2022

Desenvolvimento moral em estudantes com altas capacidades: Estado de conhecimento de 2002 a 2022

Desarrollo moral en estudiantes con altas capacidades: Estado del conocimiento de 2002 a 2022

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Abstract

From an early age, children with high abilities show signs of high moral sensitivity. These children, as well as showing an advanced ability to think about abstract ideas such as justice and fairness, can also show superior performance in one or more areas, in isolation or in combination, when compared to students of the same age group, grade and environmental experiences. The general objective was to describe and characterize the state of knowledge on the moral development of students with high abilities. To this end, an integrative literature review was carried out in five electronic databases from 2002 to 2022 (Periódico CAPES, Sage Journal, Eric, Psycinfo and LILACS). The following results were found: i. In total, 14 articles were selected, which indicates a shortage of scientific publications on this subject; ii. quantitative tests for assessing moral development were the most commonly used instruments for assessing moral development in students with high abilities; iii. two theories of moral development were used in studies to explain the moral development of people with high abilities: Piaget's theory and Kohlberg's theory, the latter being cited in international studies and the former in national studies; and iv. the need for educational interventions for the moral development of students with high abilities. The conclusion is that it is necessary to promote scientific research on this subject, as meeting the emotional and educational needs of children with high abilities and the inclusion of this special education group in school depends on the knowledge accumulated by scientific studies.

Keywords: High abilities; Moral development; Special education; Teaching.

Resumo

Desde tenra idade, crianças com altas capacidades mostram sinais de elevada sensibilidade moral. Essas crianças, além de manifestarem capacidade avançada de pensar em ideias abstratas como justiça e equidade, também podem apresentar desempenho superior em uma ou mais áreas, de forma isolada ou combinada, quando comparados aos estudantes com a mesma faixa etária, série e experiências ambientais. O objetivo geral foi descrever e caracterizar o estado de conhecimento sobre o desenvolvimento moral de escolares com altas capacidades. Para tanto, realizou-se uma revisão integrativa da literatura em cinco bases de dados eletrônicas no recorte temporal de 2002 a 2022 (Periódico CAPES, Sage Journal, Eric, Psycinfo e LILACS). Foram encontrados os seguintes resultados: i. No total, 14 artigos foram selecionados, o que indica escassez de publicações científicas sobre essa temática; ii. os testes quantitativos de avaliação do desenvolvimento moral foram os instrumentos mais utilizados para avaliar o desenvolvimento moral em escolares com altas capacidades; iii. duas teorias do desenvolvimento moral foram utilizadas nos estudos para explicar o desenvolvimento moral de pessoas com altas capacidades: a teoria de Piaget e a de Kohlberg, sendo que esta foi citada em estudos internacionais e aquela em estudos nacionais; e iv. necessidade de intervenções educacionais para o desenvolvimento moral de escolares com altas capacidades. Conclui-se que é necessária a promoção de pesquisas científicas sobre este tema, pois o atendimento às necessidades emocionais e educacionais de crianças com altas capacidades e a inclusão escolar desse público da Educação Especial dependem do conhecimento acumulado pelos estudos científicos.

Palavras-chave: Altas capacidades; Desenvolvimento moral; Educação especial; Ensino.

Resumen

Desde temprana edad, los niños con altas capacidades exhiben signos de notable sensibilidad moral. Además de demostrar habilidades avanzadas para reflexionar sobre conceptos abstractos como justicia y equidad, estos niños pueden destacarse en una o más áreas, ya sea de manera individual o combinada, en comparación con estudiantes de la misma edad, grado y entorno. El objetivo general fue describir y caracterizar el conocimiento sobre el desarrollo moral en estudiantes con altas capacidades. Se llevó a cabo una revisión integrativa de la literatura en cinco bases de datos electrónicas entre 2002 y 2022 (Periódico CAPES, Sage Journal, Eric, Psycinfo y LILACS). Los resultados incluyen: i. en total, se seleccionaron 14 artículos, lo que indica escasez de publicaciones científicas sobre esta temática; ii. las pruebas cuantitativas fueron identificadas como el principal instrumento para evaluar el desarrollo moral en estudiantes con altas capacidades; iii. se utilizaron dos teorías del desarrollo moral en los estudios: la teoría de Piaget y la de Kohlberg, siendo esta última citada en estudios internacionales y la primera en estudios nacionales; y iv. se destacó la necesidad de intervenciones educativas para apoyar el desarrollo moral de estudiantes con altas capacidades. En conclusión, urge promover la investigación científica sobre este tema, ya que la atención a las necesidades emocionales y educativas de los niños con altas capacidades, así como la inclusión escolar de este grupo en la Educación Especial, dependen del conocimiento acumulado mediante estudios científicos.

Palabras clave: Altas capacidades; Desarrollo moral; Educación especial; Enseñanza.

1. Introduction

Overall, the researchers argue that morality is a set of basic guidelines for determining how decisions about actions and the resolution of conflicts between different interests and points of view should be determined (Andreani & Pagnin, 1993). According to these authors, the study of moral development should base on three considerations:

- I. Moral behavior is based on specific cognitive capacities for rational analysis and discussion of behavior, with regard to rights, duties and consequences (on life, effects, the well-being of oneself and others);
- II. Moral behavior is rooted in affect/emotion, in the control and integration of behaviors and needs (empathy, caring for others, commitment to the task);
- III. Moral behavior needs develop through specific educational practices that should focus on both cognitive and emotional aspects.

Several scholars (Andreani & Pagnin, 1993; Lovecky, 1997; Lee & Olszewski-Kubilius, 2006; Silverman, 1994) point out that the cognitive complexity and certain personality traits of people with high abilities create unique experiences that differentiate them from others, especially in relation to moral sensitivity. Since, from an early age, children identified in this way tend to be overly concerned about others, in the sense of trying to find ways to alleviate pain and suffering, or even show an advanced ability to think about abstract ideas such as justice and fairness.

Children with high abilities¹ may show or perform at higher levels in one or more areas (intellectual, academic, creativity, artistic, psychomotor and leadership), in isolation or in combination, when compared to students of the same age group, grade and environmental experiences. Such students need curricular adaptations and modifications to learn and develop their high potentials (National Association for Gifted Children [NAGC], 2019).

In addition, it is worth noting that these people can:

[...] Come from all racial, ethnic, and cultural populations, as well as all economic strata; Require sufficient access to appropriate learning opportunities to realize their potential; Can have learning and processing disorders that require specialized intervention and accommodation; Need support and guidance to develop socially and emotionally as well as in their areas of talent; Require varied services based on their changing needs. (National Association for Gifted Children [NAGC], 2019, p.1.).

In the review of empirical studies carried out by Andreani and Pagnin (1993), the results revealed that there is little research on the moral development of children with high abilities. The authors state that although there is not necessarily a

¹ In this study, the term high ability is an equivalent to the terms high ability/gifted. The choice to use this term is due to the translation of the expression *High Ability*, as used in international studies.

relationship between intelligence and morality, as shown in research on delinquent behavior and crimes among people with high abilities, two perspectives can explain the relation to moral development and high abilities:

- I. High moral performance depends on high intellectual capacity;
- II. High moral performance does not depend on high intellectual capacity.

Andreani and Pagnin (1993), based on the findings of the review, came to the conclusion that children with high abilities have the potential for high levels of morality development that provide them with the opportunity to become true leaders, to make positive contributions to society and other people. However, the authors warn that this potential won't develop without educational intervention.

In general, two theories explain moral development (Lima, 2004; Rego, 2003; Bataglia, Morais & Lepre, 2010): Jean Piaget's theory and Lawrence Kohlberg's theory.

Morality, according to Piaget (1994, p. 23), "consists of a system of rules, and the essence of all morality must be sought in the respect that the individual acquires for these rules". For this reason, he uses the game of rules and moral questions in the form of dilemmas to explain how the conscience acquires respect for rules. Based on the game of marbles and hopscotch, Piaget (1994) concluded that there are two phenomena to observe in the study of morality. The practice of the rules (the way in which children apply the rules) and the awareness of the rules (the way in which the rules present themselves to children of different ages - obligatory, sacred, decisive).

In this way, Piaget (1994) establishes that the psychological nature of moral realities consists of determining the relationship between the practice and awareness of rules. Based on this assumption, he lists three rules/stages in relation to moral development:

- a) Motor rule, present in the pre-verbal stage, in which the child only ritualizes their actions on objects and elaborates on them;
- b) Coercive rule consists of a phase in which the child understands the rules as if they were immutable, because they consider the adult to be superior and unattainable;
- c) Rational rule, when almost an adolescent, rules are not accepted as given, except when they meet the needs and/or desires of others. At this stage, rules can change as long as a group decision accepted by everyone.

Moral development moves from "moral realism", which consists of respect for adults and their authority, to "autonomous morality", which is based on cooperation and mutual consent (Andreani & Pagnin, 1993; Piaget, 1994). For Piaget (1994), there are two periods/states of the individual's experience with morality: heteronomous morality, when the adult exercises total external control over the child's moral judgment. The other one, autonomous morality, when, based on a series of psychological conditions, such as the capacity for logical and reversible reasoning, the individual's structures make it possible to become aware of how rules are constructed and how is possible to change them. In moral realism, which translates into heteronomy, there are three characterizing aspects:

- i. Every good act reveals obedience to the rules and to the adults who dictated them;
- ii. The rules are interpreted literally; and
- iii. Acts judge by the consequences and not by the intention of the individual's action.

Moral autonomy, therefore, is a phase following this stage and consists of overcoming all these characteristics (Piaget, 1994). Thus, children can act in a heteronomous way when they imitate the rules, considering them sacred, immutable; in the autonomous way, they use the rules in a rational and social way, considering them as a product of and for the group.

Based on his observations, Piaget (1994) mainly postulated that, in the second and third stages, when the child verbalizes a judgment but behaves differently, there is an opposition between a theoretical moral judgment and the moral judgment of experience. These contradictory aspects between moral judgment and the moral actions of each individual lead Piaget (1994) to state that the youngest child applies objective responsibility (the result of adult oral coercion), and the oldest child applies subjective responsibility (the result of cooperation between peers). In this way, Piaget's theory of development means that awareness and the establishment of norms depends on the coexistence between individuals, in other words, the collective and the development of intelligence, which will shape moral action, through awareness and freedom. It is also worth noting that moral conscience consists of the ability to judge the rightness of moral judgments or actions (Freitas, 2003; Lima, 2004).

Another relevant concept in Piaget's theory is the notion of justice, which, for Piaget, is the most rational of all moral notions, because it results directly from cooperation, whose feeling of justice is largely independent of the influences of precepts and practical experiences, requiring only mutual respect and solidarity between children in order to develop (Piaget, 1994). According to Piaget (1994, p. 156-157), the rule of justice "is a kind of immanent condition or law of equilibrium of social relations", and it is necessary to relate the study of the notion of justice to the analysis of the judgment that children make about sanctions. In his study of justice, Piaget also concluded there is a heteronomous phase that precedes the autonomous phase.

For Piaget (1994), a pioneer in the study of the psychology of moral development, there is Lawrence Kohlberg, considered the most important psychologist in this area, since his studies not only led to the identification of the stages of moral development, but also expanded on Piaget's findings (Duska & Whelan, 1975). Kohlberg (1992) studied moral judgment and its development for several decades through moral dilemmas, which is a method that seeks to investigate reasoning about values whatever the person's opinion, regardless of the individual's adherence to specific values (Adreani & Pagnin, 1993). According to Lima (2004) and Bataglia et al., (2010), Lawrence Kohlberg's theory seeks a scientific and philosophical definition of morality and has considerably expanded studies into moral development.

Like Piaget, Kohlberg does not focus on moral behavior because, for him, what the individual does, i.e. their behavior, does not express their moral maturity (Duska & Whelan, 1975). For Kohlberg (1992), moral development organizes in stages and are ideal typological constructs that delimit qualitative differences in the psychological structure of the individual's evolution. For this author, socio-moral development divides into three levels:

Pre-Conventional Level: at this level, most children under the age of nine, some adolescents and many adolescents and adult delinquents. At this stage, the individual does not understand the rules and norms of their social group, and therefore does not collaborate in maintaining them (Kohlberg, 1992). It divides into two stages:

Stage 1: Orientation towards punishment and obedience: the morality of an act is defined by its physical consequences for the agent, i.e. if the action is punished it is morally wrong (Kohlberg, 1992; Biaggio, 2002).

Stage 2: Relativistic instrumental hedonism: the right moral action is proportional to the pleasure and satisfaction of the individual's needs. At this stage, a child may think it is right to steal a sweet from the bakery because it tastes good. It is a selfish stage, "in which morality is relative, and the moral act is seen as an instrument for the satisfaction of personal pleasure" (Biaggio, 2002, p. 25).

Conventional Level: this stage is where the majority of adolescents and adults in North American society are located. Here there is conformity and maintenance of social rules and it bases on authority. The individual identifies with the rules and expectations of other people, especially the authorities. It subdivides into two stages (Kohlberg, 1992):

Stage 3: Good boy morality, social approval and interpersonal relationships: here there is already an understanding of

the rule. Morality at this stage is still egocentric because it considers what approves by others to be correct. At this stage, the concept of fairness emerges and individuals are already able to defend the non-existence of absolute equality (Kohlberg, 1992; Biaggio, 2002).

Stage 4: Orientation towards law and order: respect for authority, rules and the maintenance of social order. "Duty must be fulfilled. Justice is no longer a question of relations between individuals, but between the individual and the system" (Biaggio, 2002, p. 26). This stage is the most common among adults.

Post-Conventional Level: this stage there is a minority of adults, after the age of 20. Based on their own elaboration of moral principles, rules and norms, the individual accepts them and does not distinguish between the self and the norms or expectations of others, precisely because they define their values based on principles chosen by themselves (Kohlberg, 1992). This level subdivides into two stages:

Stage 5: Social contract orientation: at this stage, laws are not valid because they are laws. The person takes the position that laws or customs change and must happen through legal means and democratic contracts (Kohlberg, 1992; Biaggio, 2002).

Stage 6: Universal principles of conscience: post-conventional thinking reaches its highest level, as the individual is able to access the universal moral principles of their conscience and act in accordance with them. This morality attests by martyrs and pacifist revolutionaries such as Jesus Christ, Gandhi and Martin Luther King (Kohlberg, 1992; Biaggio, 2002).

As Lima (2004) points out, Lawrence Kohlberg's theory is based on the Piagetian foundation of psychogenetic development and moral reasoning, which has its basis in Kantian influence and its link between intellectual development and moral reasoning. However, Kohlberg himself (1992) recognized that the development of the intellect is a necessary condition for moral development, but not a sufficient condition.

Kohlberg (1992) sought to establish a succession of stages in more detail. In this theoretical approach, the sequence of stages is structured in the same sequence of the individual's development as the operations of intelligence. Each new stage employs more differentiated, reversible and balanced operations and has a high degree of abstraction and generalization (Andreani & Pagnin, 1993).

Thus, the general objective of this research was to describe the state of knowledge on the moral development of children with high abilities. To this end, some research questions were proposed: a) What theories explain moral development in publications on high abilities? b) What instruments to assess moral development in students with high abilities? c) What types of interventions are effective for moral development in students with high abilities?

The state of knowledge available on the moral development of children with high abilities is not only scientifically relevant, but also socially relevant. Mapping the state of the art on this topic can not only promote investment in new scientific research, but also provide, through the knowledge acquired, assistance to the emotional and educational needs of children with high abilities in Brazilian schools. In addition, it is worth noting that without this mapping, it becomes impossible to design socio-emotional development programs for students with high abilities. In this way, this research can reverberate in the social context, through new intervention studies, especially in the quality of life of children.

2. Methodology

The method adopted was the integrative literature review, which allows for a synthesis of knowledge on a given topic

in order to apply the results of significant studies in practice. In this method, the researcher must comply with the following stages: i. elaboration of the guiding question; ii. literature search or sampling; iii. data collection; iv. critical analysis of the content included; iv. discussion of the results and vi. presentation of the integrative review (Souza & Carvalho, 2010).

Articles published between 2002 and 2022 were selected based on the following inclusion criteria: a) peer-reviewed journal; b) English, Spanish and Portuguese language; c) full text available; d) empirical research. In order to refine the selection, we adopted exclusion criteria: a) articles that do not address the topic; b) articles that are not available in full; c) duplicate publications and d) theoretical articles.

We conducted data analysis in stages:

- i) reading the abstracts and applying the inclusion and exclusion criteria for the articles;
- ii) reading the articles in full to submit them to textual analysis, based on the following categories (authorship, institutional affiliation of the authors, year of publication, country of origin, place of publication, methodological classification of the study, research participants, instruments used in data collection, theory adopted on high abilities, theory of moral development, main results);
- iii) descriptive statistics and thematic content analysis (Bardin, 2016) were used to analyze the data.

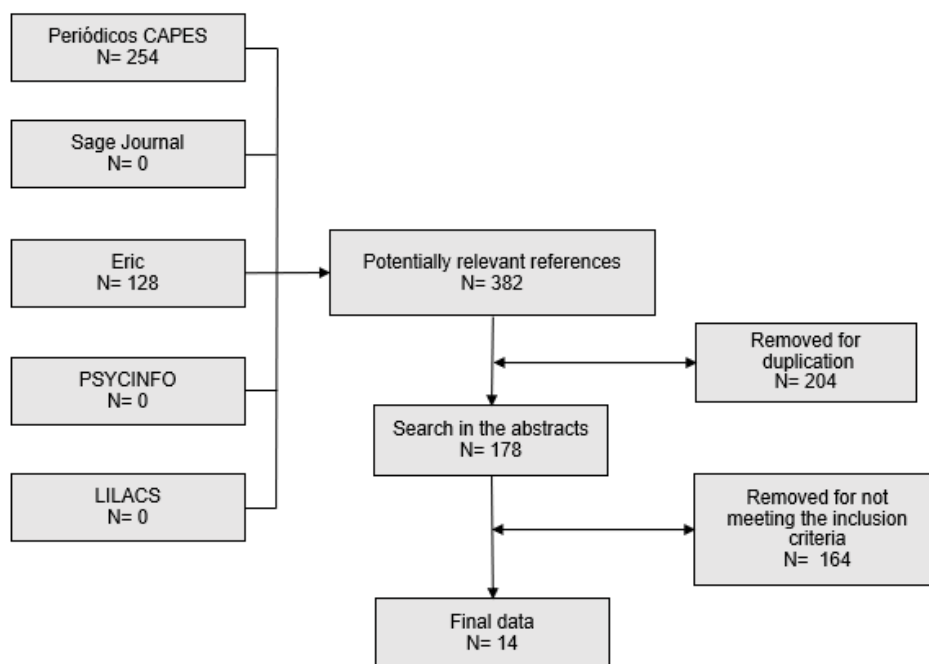
Table 1 - Database search strategy.

Databases	Terms used in the search
CAPES journals	Giftedness/Talent AND moral development/moral sensibility
Sage Journal	Gifted and talented children AND moral development/moral sensibility
ERIC	Giftedness/high abilities/giftedness/talent AND moral development
PSYCINFO	Gifted/talented children AND moral development
LILAC	Giftedness/high abilities/talent AND moral development
	Gifted/talented children AND moral development

Source: Authors (2024).

Thus, based on the search process (Figure 1), we selected 14 articles, as shown in the Flowchart in Figure 1.

Figure 1 - Data selection flowchart.



Source: Authors (2024).

3. Results and Discussion

We selected articles to characterize the state of the art in research on the moral development of people with high abilities (Table 2).

Table 2 - Articles selected for analysis.

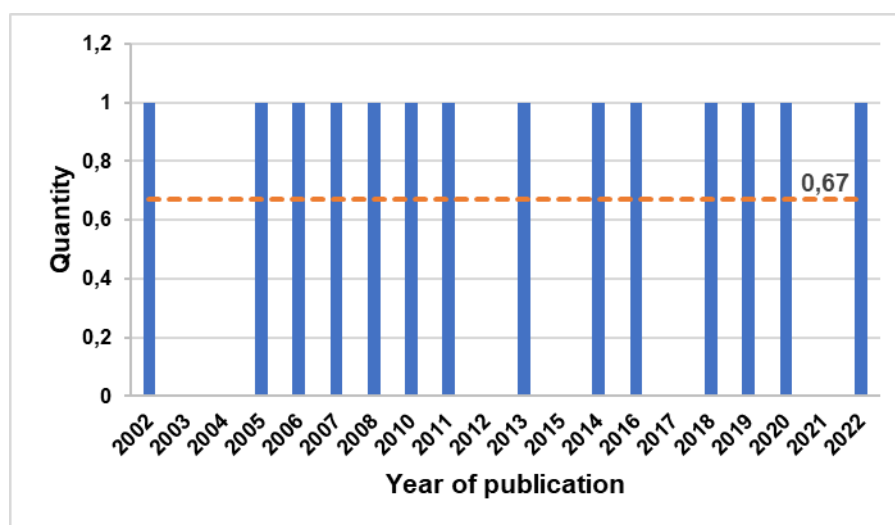
Nº	Title	Year	Journal of publication	Author(s)
1	The Moral Reasoning and Scientific Argumentation of Gifted Adolescents	2002	The Journal of Secondary Gifted Education	Kirsi Tirri e Leila Pehkonen
2	Moral Judgment Developmental Differences Between Gifted Youth and College Students	2005	The Journal of Secondary Gifted Education	W. Pitt Derryberry, Travis Wilson, Hannah Snyder, Tony Norman e Brian Barger
3	The Emotional Intelligence, Moral Judgment, and Leadership of Academically Gifted Adolescents	2006	Journal for the Education of the Gifted	Sean-Young Lee Paula e Olszewski-Kubilius
4	Comparison of Academically Average and Gifted Students' Self-Rated Ethical Sensitivity	2007	Educational Research and Evaluation: An International Journal on Theory and Practice	Kirsi Tirri e Petri Nokelainen
5	Do Contributors to Intellect Explain the Moral Judgment Abilities of Gifted Youth?	2008	Gifted Child Quarterly	W. Pitt Derryberry e Brian Barger
6	Role of motivation in the moral and religious judgment of mathematically gifted adolescents	2010	High Ability Studies	Petri Nokelainen e Kirsi Tirri
7	How does Moral Judgement Change with Age and Giftedness?	2011	Gifted and Talented International	Mousa Alnabhan
8	Confucian Values in Vietnamese Gifted Adolescents and Their Non-Gifted Peers	2013	Gifted and Talented International	Thi Minh Phuong Nguyen, Putai Jin e Miraca U. M. Gross
9	The relationship between ethical sensitivity, high ability and gender in higher education students	2014	Gifted and Talented International	Ingrid Schutte, Marca Wolfensberger e Kirsi Tirri

10	Individual Differences in Moral Development: Does Intelligence Really Affect Children’s Moral Reasoning and Moral Emotions?	2016	Frontiers in Psychology	Hanna M. Beißert e Marcus Hasselhorn
11	Projetos de vida e moralidade em adolescentes com indícios de altas habilidades/superdotação	2018	Revista de Psicologia	Andréia Mansk Boone Salles e Heloisa Moulin de Alencar
12	Análise da noção de justiça em estudantes com altas habilidades/superdotação: uma contribuição educacional	2019	Revista Educação Especial	Bernadete Fatima Bastos Valentim e Carla Luciane Blum Vestena
13	World Perception and High Intellectual Ability: A Comparative Study	2020	Psicología Educativa	Maria Luz Urraca-Martínez, Sylvia Sastre-Riba e Lourdes Viana-Sáenz
14	Ethical Regulation and High Intellectual Ability	2022	International Journal of Environmental Research and Public Health	Sylvia Sastre-Riba e Tomás Cámara-Pastor

Source: Authors (2024).

The most obvious finding is the small number of articles on moral development in people with high abilities found in the last 21 years (N=14) (Figure 2). The final *corpus* totals 3.7% of the productions found in the databases.

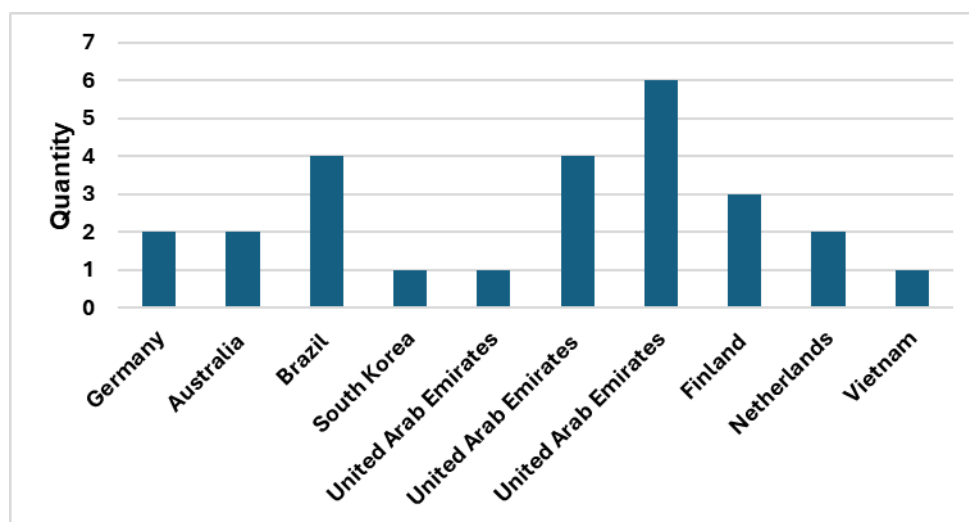
Figure 2 - Scientific production by year of publication.



Source: Authors (2024).

As can be seen in Figure 2, applying the arithmetic mean results in approximately 0.67, which is equivalent to less than one article published per year. This is in line with the findings of Andreani and Pagnin (1993), who state that although there are many studies on moral development, particularly in relation to cognitive development, there are practically a negligible number of studies on moral development in relation to people with high abilities. Another point to note is that of the total number of publications, the articles were written in English (85.7%) and Portuguese (14.3%). Even though we used Spanish descriptors and there were researchers from Spain, There weren’t articles in Spanish language, as can be seen in Figure 3.

Figure 3 - Researchers' countries.



Source: Authors (2024).

In addition, as Valentim and Vestena (2019) point out, the scarcity of studies in the area also reflects a direct correlation with how students with high abilities are marginalized by the lack of social and educational support policies capable of meeting their learning and social inclusion needs. Deprived of these policies, these children and young people have their potential neglected, since they have characteristic traits related to competence in grasping situations and people with empathy, high sensitivity and precision in perceiving details and information. These potentialities, in turn, put to great use, especially when considering the joint management of cognitive resources with moral self-regulation, which emphasizes common needs ahead of one's own. In this way, in addition to solving complex social problems, the aim is also the common good (Sastre-Riba & Cámara-Pastos, 2022; Valentim & Vestena, 2019).

This is also supported by the findings of Urraca-Martínez et al. (2020) and Sastre-Riba and Cámara-Pastor (2022), which show that children with high abilities have an early awareness of the world's problems, with a diversity of responses and high fluidity and flexibility when compared to their peers at all ages in the typical intelligence group.

Furthermore, it is important to highlight the possibility that children and young people with high abilities can deviate from the promise of the common good by being influenced by negative values, thus developing excessively grandiose and self-centered identities, and allocating their potential inappropriately (Ambrose & Cross, 2009). Added to this is the fact that the excessive attention given to their intellectual abilities often takes precedence over the focus on the social aspect, thus contributing to them becoming adults with affective lags and, consequently, distant from social causes (Valentim & Vestena, 2019).

Based on Table 3, it deduced that the largest number of researchers on the subject is concentrated in Europe and America, making up 42.3% and 38.5% respectively, followed by Asia (11.5%) and Oceania (7.7%). However, when comparing institutional affiliation and place of birth, there is a reduction in the number of countries involved, since researchers born in the United Arab Emirates, Vietnam and South Korea are affiliated to North American and Australian institutions, as can be seen in Table 3.

As a result, the United States (US) now leads the research ranking, as it has the largest number of institutions and researchers.

Table 3 - Comparison of institutional links, researchers and countries.

Institution	No. of researchers	Country
German Institute for International Education	2	Germany
Hanze University of Applied Sciences	2	Netherlands
Kentucky Christian College	1	USA
Longwood University	1	USA
Northwestern University	2	USA
Oberlin College	1	USA
The University of New South Wales	3	Australia
Universidade Estadual do Centro-Oeste	2	Brazil
Universidade Federal do Espírito Santo	2	Brazil
University of Helsinki	2	Finland
University of la Rioja	4	Spain
University of Pittsburgh	1	USA
University of Tampere	1	Finland
Western Kentucky University	2	USA

Source: Authors (2024).

In the Method section of the selected articles, it was possible to identify that not all the authors presented a characterization of the research participants. For this reason, it was not possible to establish comprehensive correlations, since the data available in the studies was not always clear about the gender and age of the participants, especially in relation to participants without high abilities. The information is in Table 4.

Table 4 - Characterization of research participants.

Title	Total	High abilities	Male	Female	Age group	Typical intelligence	Male	Female	Age group
The Moral Reasoning and Scientific Argumentation of Gifted Adolescents	31 (100%)	31 (100%)	16 (51,6%)	15 (48,4%)	14 - 15	x	x	x	x
Moral Judgment Developmental Differences Between Gifted Youth and College Students	237 (100%)	97 (40,9%)	45 (19,0%)	52 (21,9%)	12 - 16	140 (59,1%)	31 (13,1%)	109 (46,0%)	17 - 52
The Emotional Intelligence, Moral Judgment, and Leadership of Academically Gifted Adolescents	234 (100%)	234 (100%)	119 (50,9%)	115 (49,1%)	16,2 (média)	x	x	x	16 - 18
Comparison of Academically Average and Gifted Students' Self-Rated Ethical Sensitivity	249 (100%)	130 (52,2%)	x	x	14 (média)	114 (45,8%)	x	x	14 (média)
Do Contributors to Intellect Explain the Moral Judgment Abilities of Gifted Youth?	60 (100%)	30 (50%)	10 (16,7%)	19 (31,7%)	12 - 16	30 (50%)	11 (18,3%)	19 (31,7%)	18 - 27
Role of motivation in the moral and religious judgment of mathematically gifted adolescents	20 (100%)	20 (100%)	9 (45%)	11 (55%)	16 - 17	x	x	x	x
How does Moral Judgement Change with Age and Giftedness?	232 (100%)	73 (31,5%)	0	73 (31,5%)	x	159 (68,5%)	x	159 (68,5%)	x
Confucian Values in Vietnamese Gifted Adolescents and Their Non-Gifted Peers	354 (100%)	180 (50,8%)	x	x	x	174 (49,2%)	x	x	x
The relationship between ethical sensitivity, high ability and gender in higher education students	731 (100%)	343 (46,6%)	x	x	20,7 (média)	353 (48,3%)	x	x	20,7 (média)
Individual Differences in Moral Development: Does Intelligence Really Affect Children's Moral Reasoning and Moral Emotions?	129 (100%)	67 (51,9%)	x	x	6 - 8	62 (48,1%)	x	x	6 - 8
Projetos de vida e moralidade em adolescentes com indícios de altas habilidades/superdotação	40 (100%)	40 (100%)	20 (50%)	20 (50%)	14 - 18	x	x	x	x
Análise da noção de justiça em estudantes com altas habilidades/superdotação: uma contribuição educacional	10 (100%)	10 (100%)	5 (50%)	5 (50%)	11 - 16	x	x	x	x
World Perception and High Intellectual Ability: A Comparative Study	80 (100%)	40 (50%)	x	x	7, 9 e 11	40 (50%)	x	x	6 - 11
Ethical Regulation and High Intellectual Ability	44 (100%)	21 (47,7%)	x	x	8,9 e 10	23 (52,3%)	x	x	8,9, 10
Total	2451 (100%)	1316 (53,7%)	224 (9,1%)	310 (12,6%)	6 - 20	1095 (44,7%)	42 (1,7%)	287 (11,7%)	6 - 52

Source: Authors (2024).

It can be seen that, in terms of the number of participants, a total of 2451 was identified in all the studies analyzed, with 53.7% (1,316) belonging to the group with high abilities and 44.7% (1,095) to the group without high abilities. It noted that the share of the high-ability group was higher, considering that 10 of the 14 articles made comparative assessments between the two groups. It should also be noted that the 1.6% of participants missing to complete the total of 100% refer to the articles by Tirri and Nokelainen (2007) and Schutte et al. (2014), which do not specify the classification of the participants corresponding to the remaining percentage.

As for the age range of participants with high abilities, there was a variation between 6 and 20 years. The studies that provided age information for the group without high abilities also showed a similar range to the group with high potential, from 6 to 27 years, with the exception of the article by Derryberry et al. (2005), whose age range extended from 17 to 52 years.

Regarding gender, most of the studies showed an equal distribution. It is possible to correlate that the high-ability group is made up of 9.1% male and 12.6% female participants. We can explain the higher number of female participants by the publication of Alnabhan (2011), which involved 232 female children. The remaining 32% of participants, needed to complete the 53.7% of the high ability group, is the result of the lack of information available in the publications regarding the identification of the participants' gender. As such, this data gap is an impediment to a more comprehensive analysis of both groups.

Female children and young people with high abilities, as well as those belonging to the group without high abilities, show higher levels related to the ethic of care, demonstrating feelings of empathy, compassion, as well as greater consideration for the perspectives of others. While areas related to cognition, such as the ability to solve problems associated with emotional intelligence, and orientation towards the ethic of justice, are preponderant characteristics of men. A total of five out of the fourteen articles presented significant results regarding gender, corroborating the authors' thinking in other studies (Lee & Olszewski-Kubilius, 2006; Salles & Alencar, 2018; Schutte et al., 2014; Tirri & Nokelainen, 2007; Tirri & Pehkonen, 2002).

In relation to theories of moral development, it was found that the main theories addressed by the authors of the studies refer to Piaget's and Lawrence Kohlberg's theories of moral development, with the latter being more cited in the international studies, while the Brazilian studies adopted Piaget's theory. Based on this finding, it can be inferred that, in Brazil, the choice of Piaget's theory may be indicating a less advanced stage in research into moral development in people with high abilities compared to the international studies that opted for Lawrence Kohlberg's theory, which is considered to be detailed than that of its precursor (Duska & Whelan, 1975).

In reference to the instruments used in data collection (Table 5), in relation to one of the questions guiding the development of this research, we found that tests and interviews are the most important criteria in assessing the moral development of children and adolescents with high abilities. Tests are even more important, especially when it comes to quantitative assessment methods (80.8%). Among the 28 applications accounted for in all the articles, 21 different types of tests were categorized. We categorized these tests according to their assessment parameters, such as those that assess intellectual abilities and those that assess morality. These two parameters stand out, each accounting for around 33.3% of all the tests used.

Table 5 - Classification of tests according to evaluation parameters.

Parameters evaluated	Tests
Intellectual capacity	Raven's Progressive Matrices Teste (SPM- Abdelraouf, 1999)
	Culture Fair Intelligence Tests-Scale-1 (CFT 1)
	Wechsler Adult Intelligence Scale III (WAIS-III)
	Raven's Standard Progressive Matrices (SPM - Raven, 1983)
	Attributional Complexity Scale (ACS)
	Batería de Aptitudes Diferenciales y Generales (BADyG)
	ACT/SAT
Moral development	Defining Issues Test (DIT)
	Defining Issues Test (DIT - 2)
	The Moral Maturity Test
	The Religious Judgment Test (RJT)
	Chinese Values Survey (CVS)
	Ethical Sensitive Scale Questionnaire (ESSQ)
	Attitudes Toward Human Rights Inventory (ATHRI)
Emotional intelligence	BarOn Emotional Quotient Inventory: Youth Version, Short Form (BarOnEQ-i: YV(S))
Leadership	Roets Rating Scale for Leadship
Personality	Personality Descriptors
	Cuestionario de Autobiografía - Forma U (Autobiographical Questionnaire - Form U)
Motivation	The Abilities for Professional Learning Questionnaire (APLQ)
Verbal creativity	Test of Creative Thinking (Torrance, 1974)
	Torrance Creative Verbal Test (Form B)

Source: Authors (2024).

Pertaining to the tests on moral development most commonly applied in studies, the Dilemma Definition Test (DIT) stands out. The DIT assesses moral reasoning through a set of moral dilemmas, in which participants had to classify each dilemma and list their concerns on the subject (Tirri & Pehkonen, 2002). In this respect, participants were exposed to six individual dilemmas involving a moral situation and are then asked what the main character in each dilemma should do. They then rank the 12 most important actions that will guide the character's decisions and then rank the 4 most important items among the 12. It is worth noting that each of these actions is related to content that covers personal interests, norm maintenance and post-conventional moral judgment schemes (Kohlberg, 1992). This analysis highlights the importance of linking intellectual abilities and morality in order to differentiate high-ability students from their peers and assess their level of moral development.

Consequently, qualitative assessment methods, consisting of interviews and textual productions, make up 19.2% of the assessment methods used. Of the four (15.4%) interviews, two were semi-structured interviews using Piaget's clinical method. This method involves the presentation of moral dilemmas that address issues related to the categories of imminent justice, retributive justice and distributive justice, contextualized in situations close to the students, while following the rules proposed by Piaget (Piaget, 1994; Valentim & Vestena, 2019).

Finally, we found the textual productions in only one of the articles, representing 3.8% of the total number of instruments used. In the study by Tirri and Pehkonen (2002), students had to write down possible moral dilemmas related to scientific issues studied in an extracurricular program for the development of high abilities. They also had to find solutions to these dilemmas based on their own principles and arguments.

In relation to the third research question, it noted that the intervention proposals (Table 6) include proposals for students in kindergarten, elementary school, secondary school and higher education.

Table 6 - Intervention proposals for children and young people with high abilities.

Article	Interventions
Kirsi Tirri and Leila Pehkonen (2002)	- Teachers should promote the moral development of future scientists by exploring and discussing the ethical aspects of scientific study.
W. Pitt Derryberry et al. (2005)	-Special attention needs to be paid to emotional skills and capacities by teachers and parents in relation to children with high abilities. In addition, extracurricular programs should be created to develop specific interventions to optimize moral development and leadership.
Kirsi Tirri and Petri Nokelainen (2007)	-Real-life moral conflicts and interpersonal relationships should be addressed in education for students with high abilities, in a way that guides them in finding a fair solution when faced with a moral problem. The school curriculum should address moral dilemmas and integrate moral education and citizenship. These issues should be part of the school's concerns when educating students with high abilities.
Mousa Alnabhan (2011)	- The early childhood curriculum should provide opportunities for children to deal with moral issues and thus think about right and wrong for moral development. In Kuwait, pre-school teachers must receive initial training to promote children's moral development, dealing with issues of equity, justice, human rights and the ethics of care.
Thi Minh Phuong Nguyen, Putai Jin and Miraca U. M. Gross (2013)	-To meet the needs of students with high abilities, the Parallel Curriculum Model is an integrated structure, which includes a core curriculum that connects practice and identity. The latter focuses on the notion of self-actualization based on reflections of personal experiences. Students with high abilities need assistance from adults, especially their parents and teachers, to guide them in setting priorities and reflecting on past experiences and resolving conflicts. In addition, extracurricular activities that promote these aspects should be offered to boost students' self-confidence and increase social engagement in society.
Ingrid Schutte, Marca Wolfensberger and Kirsi Tirri (2014)	- Developing special programs for the group of students with high abilities offers an opportunity to include ethical and social issues from the outset. Furthermore, all students would benefit from incorporating ethics and reflection on values into higher education.
Andréia Mansk Boone Salles and Heloisa Moulin de Alencar (2018)	- Psycho-pedagogical actions must be taken to take into account the particularities of adolescents' moral development. Creation of ethical life projects that consider moral virtues for an education based on morals and ethics.
Bernadete Fatima Bastos Valentim and Carla Luciane Blum Vestena (2019)	-At school, attitudes and feelings that make students with high abilities feel accepted and part of the environment should be valued. The school should promote a flexible pedagogical program that helps them to develop rules, encouraging mutual respect and cooperation, so that in adulthood they become responsible, allowing them to develop their moral and intellectual autonomy.
Maria Luz Urraca-Martínez, Sylvia Sastre-Riba and Lourdes Viana-Sáenz (2020)	- Proposals to guide the broad moral sensitivity of children with high abilities towards ethics, combined with excellence and progress, through programs that strengthen and encourage moral development.
Sylvia Sastre-Riba and Tomás Cámara-Pastor (2022)	- It is important that there is an educational intervention with positive ethical values and attitudes on the part of teachers towards children with high abilities. The school should propose strategies for children with high abilities so that ethical sensitivity is properly developed, forms part of their education and contributes to the regulation of high potential in decision-making and resolution directed positively towards progress and the common good, as well as the regulation of their own behavior and relationships with others.

Source: Authors (2024).

The analysis of Table 6 shows that of the fourteen (n=14) studies selected, only four (n=4) did not deal with educational intervention proposals for the moral development of students with high abilities. Among the ten (n=10) that did address strategies, two main categories of intervention practices focused on the moral development of students with high

abilities were identified: curricular programming in the regular classroom and out-of-class programs aimed at developing skills in four key areas of morality (moral sensitivity, judgment, motivation and action) (Tirri & Nokelainen, 2007).

There is a difference in the approach to ethical and moral issues with regard to age and school grade. For pre-school children, practices should be included in the curriculum, aimed at acquiring notions of right and wrong from topics that promote opportunities for them to deal with moral issues and think about moral action. For elementary school students, research has shown the need for teacher training in relation to moral development in students with high abilities, because this knowledge can lead them to help students regulate moral action and sensitivity (Sastre-Riba & Cámara-Pastos, 2022; Valentim & Vestena, 2019).

In relation to higher education students, an inclusive practice has been identified as the implementation of an extracurricular program aimed at developing skills in the four areas of morality (moral sensitivity, judgment, motivation and action) to contribute to solving global problems and using them in scientific practices (Schutte et al., 2014).

In short, there is common agreement that, among the authors who have presented intervention proposals to contribute to the moral development of children and young people with high abilities, the vast majority emphasize the role of the school as a cooperative environment for students to develop morality. The school need use debates that involve everything from the development of their own school rules and conduct (Valentim & Vestena, 2019) to issues involving interpersonal relationships and topics that cover social experience beyond the school environment (Tirri & Nokelainen, 2007).

In addition, the authors also defend the educational role of parents and teachers in the moral development of children and young people with high abilities. In this way, they point out that teachers must be skillfully prepared to deal with and guide students through their difficulties and challenges, such as issues of equity, justice, human rights and care (Alnabhan, 2011; Nguyen, Jin & Gross, 2013).

Another point of attention refers to the insertion of a suitable curriculum that can promote student acceleration for those with high abilities and that is able to stimulate moral issues that foster moral development, as pointed out by Alnabhan (2011). Extracurricular activities and programs are also of great importance, since, according to Nguyen et al. (2013), they will help increase students' confidence and social engagement in society.

Thus, researchers have emphasized the need to implement inclusive practices as a way of boosting moral development in children and young people with high potential. They have higher cognitive abilities that tend to lead them to have faster moral development, reaching advanced stages in relation to other children and young people of the same age group (Kohlberg, 1992; Adreani & Pagnin, 1993).

As Adreani and Pagnin (1993) point out, it can therefore be concluded that students with high abilities have the potential for a high level of moral development, reaching higher stages (Kohlberg stage 6), which could give them the opportunity to become true leaders, making contributions to society. However, it is known that this potential will not become a reality simply and automatically. Hence the need for educational support and educational interventions that enable the moral development of these students.

Studies such as those by Lee and Olszewski-Kubilius (2006) endorse this thinking because, as well as showing similar results, they also reveal that high-ability students are more morally sensitive and have greater leadership potential. Nguyen *et al.* (2013) also support this idea by reporting that these students can be extremely sensitive to other people's feelings and, due to this capacity for empathy, they can express ethical concerns much earlier than their age peers.

Pertaining to intervention proposals, the researchers proposed various strategies to be applied essentially to the school environment, teacher training and extracurricular activities. The school environment is considered a relevant environment, not only in terms of adopting an appropriate curriculum to adapt to the needs of children and young people with high abilities, but also as a space that provides debate on the school rules themselves. Issues also related to living together in society, in order to stimulate ethics and moral judgment (Tirri & Nokelainen, 2007; Valentim & Vestena, 2019).

In summary, in the analysis of this corpus it is possible to affirm that high abilities, despite being a necessary condition, do not qualify as primary reason, that is, they do not predict mature moral judgment and action (Derryberry *et al.*, 2005; Nguyen *et al.*, 2013; Tirri & Pehkonen 2002). Thus, in agreement with Rest et al. (1986, as cited in Derryberry *et al.*, 2005, p.16), "those who are prepared to practice moral judgment are those who are prepared to do so, and this preparation is the result of specific educational and academic interventions".

4. Conclusion

The aim of this study was to describe and map the current state of knowledge about moral development in people with high abilities. The final corpus still constituted a tiny percentage of only 14 selected articles (3.7%) among all the productions found. This data indicates the lack of research focused on children and young people with high abilities, especially when associated with the theme of moral development. It was also possible to correlate how these studies, in addition to being scarce, are unevenly distributed, both in terms of the languages of publication and the authors' countries of affiliation. The majority of the articles are in English (85.7%), with a predominance of researchers with links established mainly in Europe (42.3%) and America (38.5%), with the United States leading the research.

With regard to the instruments used to assess moral development, it was possible to list tests as the predominant quantitative methods for measuring moral judgment and other characteristics in students with high abilities, representing approximately 80.8% of the instruments (tests, interviews and textual productions). Analysis of the articles also revealed a correlation between moral development in children and young people with high abilities. The results showed that children and young people with high abilities show significant advances in moral judgment, especially when compared to their age peers.

Therefore, there is a need to establish a bridge between ethics and high abilities, integrating them in order to direct the high potential that children and young people with high abilities present towards effective solutions and the resolution of complex problems. This study will stimulate the production of new research in the area, given the lack of studies on the subject. Especially considering the context in which meeting the emotional and educational needs of children with high abilities and the school inclusion of this Special Education public depend on the knowledge accumulated by scientific studies.

At the same time, the aim is for inclusion measures to be more widespread and effectively implemented, ensuring that children and young people with high abilities have access to an educational environment that promotes their full development, contributing to a more inclusive and just society.

We need to present the limitations of this study. Given that this was a integrative rather than a systematic review or meta-analysis, the study did not assess for bias or report on studies' effect measures. The study also allowed for the inclusion of small sample sizes and was limited to the publications sourced using databases (Periódico CAPES, Sage Journal, Eric, Psycinfo and LILACS). The fact that the majority of the studies hailed from the United States is an additional limitation. A broader and more expansive use of search terms may also have resulted in the identification of more approaches than those identified in this article. The broad focus of this review forestalled us from exploring why the researchers selected these methods and instruments. It may be that they had a limited repertoire of approaches to draw from, that certain approaches were easier to implement, or they had support to adopt certain approaches but not others. This too would be a valuable area of future research.

Some researchers have suggested that the unique ethical sensitivity of the gifted indicates a special potential for high moral development (Silverman, 1994). For future research, it is equally relevant to consider moral development as a potential to be developed. Therefore, the promotion of programs with this purpose can not only clarify the unique ethical sensitive in students with high abilities but also promote the moral development of these people.

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