

The intelligence in the initial training of school counsellors. Learners' perspectives¹

La inteligencia en la formación inicial de los orientadores. Perspectivas discentes

<https://doi.org/10.4438/1988-592X-RE-2022-398-553>

Jesús Javier Moreno Parra

<https://orcid.org/0000-0001-6667-7565>

Pablo Fernández Torres

<https://orcid.org/0000-0001-8298-1997>

Pablo Cortés González

<https://orcid.org/0000-0002-9604-044X>

Universidad de Málaga

Abstract

This article provides an approach to how the concept of intelligence is understood by school counselling students and its implications. Understanding what intelligence means to future school counsellors and how it influences the way they see human beings and educational processes is essential to interpreting and transforming counselling practices within schools. The sample consisted of 195 undergraduate and postgraduate students. The data collection strategies were group interviews and focus groups. The results suggest that most of the participating students related intelligence to genetics, endorsed

¹ This study is part of a pre-doctoral contract funded by the Spanish Ministry of Education, Culture and Sport (FPU17/00385) and (FPU18/02107), included in the Project entitled 'Emerging Narratives on Inclusive Schools within the Social Model of Disability. Resistance, resilience and social change' (RTI2018-099218-A-I00).

a strongly deterministic view, and were aligned with a clinical model of disability, as opposed to a minority of participants who positioned themselves within the competency model. There was also a direct relationship between how they understood intelligence and the type of intervention they considered most appropriate. In contrast, participants had unanimous perceptions of the hierarchical, discipline-based curriculum and how some intelligences or abilities are rated more highly than others in schools. Among other conclusions, there is a clear need to strengthen initial training for school counselling, as it was found to be poorly addressed in university curricula.

Keywords: Intelligence; Educational Guidance; Attention to Diversity; Inclusive Education; Initial Training; Inclusive Education.

Resumen

Este artículo supone un acercamiento a cómo se entiende el concepto de inteligencia desde el alumnado en formación para el ejercicio de la Orientación Educativa, así como algunas implicaciones que se derivan de éste. Comprender qué supone para los futuros orientadores la inteligencia y cómo influye en la forma en la que entienden al ser humano y los procesos educativos, se hace fundamental para comprender y transformar las prácticas orientadoras dentro de la institución escolar. Para ello, se ha contado con la participación de 195 estudiantes de grado y postgrado, utilizando como estrategias de recogida de información las entrevistas grupales y los grupos focales. Los resultados obtenidos apuntan a que la mayor parte del alumnado participante relaciona inteligencia y genética, con un fuerte componente determinista, situándose dentro del modelo clínico de la discapacidad, frente a una minoría que se posiciona en el modelo competencial. Del mismo modo, hay una relación directa entre cómo entienden la inteligencia y el tipo de intervención que consideran más oportuna. En cambio, hay unanimidad respecto a la jerarquización del currículum mediante disciplinas y cómo se valoran unas inteligencias o capacidades sobre otras dentro de la escuela. Entre otras conclusiones, destacamos la necesidad de fortalecer la formación inicial con relación a la orientación educativa, hallando poca incidencia en los currículos universitarios.

Palabras clave: Inteligencia; Orientación Educativa; Atención a la Diversidad; Educación Inclusiva; Formación Inicial

Introduction

Today's society is characterised by its capacity for change, its dynamism and the complexity of existing technological, social and cultural developments. There are many social challenges to be addressed by schools, which notably include educational inclusion, one of the most complex (Arnáiz, Escarbajal, Alcaraz and de Haro, 2021). However, from a socio-cultural point of view, schools have not seen many changes in their two centuries of existence. As a result of modernity, they are devised from the perspective of technical rationality; schools are indeed in alignment with an organisational model and epistemological approaches that are still based on a highly bureaucratised and standardised model (Rivas, Cortés y Márquez, 2018).

In addition to operating on a division into disciplines, the differentiation between theory and practice, and the conception and management of intelligence and normality, *neoliberal morality* imposes mechanisms and concepts such as effectiveness, efficiency and educational quality, which maintain the homogeneous and reproductive character schools (Díez, 2018; Gárate, 2020; Rivas, 2018).

The concept of intelligence is one of the classic elements that still plays a very strong role in schools as institutions, as it works across didactic, organisational, and curricular aspects. The historical conception of intelligence is ideologically laden and has an enormous impact on how the subject is perceived in relation to the school. Likewise, according to Gould (1997) and Ovejero (2003), it can be a tool at the service of segregation, since students are grouped according to certain quotients and characteristics which straitjacket them into a specific standard based on a logic of what is considered to be normal.

A brief historical overview is given here to understand the concept of intelligence. The strand that came from the work of Francis Galton (1821-1911) considered intelligence to be fundamentally genetic, inherited; he even attempted to establish a correlation between excellence and genetic inheritance. A forerunner of the idea of eugenics, Galton had a purpose but no method to achieve it, as he had no instruments available to measure this intelligence with reasonable accuracy. At this point, Alfred Binet and Théodore Simon in 1905 developed the Binet-Simon scale to measure intelligence by means of a construct they called IQ (Intelligence Quotient), with subsequent revisions in 1908 and 1911. This continues to

have a strong influence on how intelligence is understood today; the main instruments currently used to assess intelligence and cognitive abilities in school include the *Wechsler Intelligence Scale for Children* (WISC) and the *Standard Progressive Matrices Raven Scale* (Raven test), of which the concept of IQ is a cornerstone. The concept of IQ and the instruments used to measure it have therefore been taken from Binet. However, while Binet believed that intelligence is fluid, individual, shaped and malleable, Galton's ideas about the genetic factor of intelligence are still partly alive today (Angulo, 2020; Vílchez, 2002).

The concept of intelligence continued to evolve. According to Sternberg (1981), the way in which intelligence was defined changed over three, clearly-defined, different time periods. The initial period was characterised by the clash between the one-dimensional perspective, supported by theories such as Spearman's (1923), and the multidimensional perspective, which included theories such as Thomson's (1939). The second period comprised the hierarchical current, of which Sternberg himself was an advocate (1979), and the overlapping current, in which Sternberg cited studies such as that by Thurstone (1938). Thurstone argued that intelligence is made up of seven core, interrelated, primary skills (verbal comprehension, verbal fluency, reasoning, numeracy, spatial visualisation, memory and speed of perception). This was followed by the third period, in which the hierarchical perspective was combined with the overlapping perspective. Ultimately some other theories emerged, notably including Gardner's theory of multiple intelligences (2012).

The fact that the WISC is a constant in psychological and pedagogical assessment is a symptom, and perhaps a cause, of the conception of the IQ or of mental age in schools. It entails an archaic and outdated interpretation of the school's role in relation to the conception of intelligence, human beings, and their development; it can generate and even legitimise segregation within and outside educational institutions.

School counselling, therefore, when used as a technical apparatus that conducts a psychometric psychological and pedagogical assessment centred on the individual, can be a classification tool. By relying on the status of the scientific-technical expert, it measures, qualifies, classifies learners and promotes segregation, as international organisations have stated UNESCO (2020). Likewise, these practices that exclude and violate the rights of part of the pupils have been denounced and evidenced by numerous studies (Calderón and Habegger, 2017; Cologon, 2020;

Martínez-Usarrable, 2020), as well as by social organisations and citizen movements such as *SOLCOM* and *Quererla es Crearla*. Not only do these practices contravene international regulations and the *Convention on the Rights of Persons with Disabilities* (UN), ratified by Spain in 2008; it also ignores the scientific evidence that has shown that all human beings are able to learn, and that in fact we learn from differences. The study by Hehir et al. (2016) looked at 280 pieces of research from 25 countries that researched the benefits and disadvantages of ideas for segregation, integration or inclusion. It showed that pupils who were considered to have educational needs learnt more and better with pupils classified as mainstream, and vice versa. It may therefore even be necessary to create other categories or ways of speaking that move away from the dichotomy of learners with and without needs.

In view of the organisation and curriculum of the syllabuses of the degrees of the Faculty of Education Sciences in the University of Malaga (Pedagogy, Primary Education and Early Childhood Education), as well as in the Master's Degree in Compulsory Secondary Education and Baccalaureate Teaching, Vocational Training Teaching and Language Teaching (hereinafter 'MAES'), the concept of intelligence and its implications for schools are rarely mentioned and is only addressed superficially.

For these reasons, this paper focuses on understanding what the concept of intelligence means to trainee school counsellors at the University of Malaga. Additionally, it also seeks to assess the impact that it has on initial teacher training, given the paucity of research evidence of this object of study.

Methodology

This article is a result of the doctoral thesis entitled 'School Counselling and Inclusion at school. A Narrative-based Study of Initial Teacher Education'. This in turn forms part of the R&D&I project funded by the Spanish Ministry of Science, Innovation and Universities entitled: 'Emerging narratives on inclusive schools within the Social Model of Disability. Resistance, resilience and social change' (RTI2018-099218-A-I00).

Objective

The objective was to discover what role the concept of intelligence plays in the initial training of school counselling professionals at the University of Malaga, and to identify what the dominant perspectives and conceptions were among them. The concept of intelligence was approached broadly, without taking a stance about it, thus allowing the students' conceptions to emerge, from one-dimensional approaches through to multiple intelligences. Given the nature of the study, an interpretative qualitative methodology was chosen, as it makes it possible to understand complex realities by relying on their individual characteristics (Simon, 2011).

Data collection strategies

A total of six group interviews were carried out. Four interviews were conducted with all MAES students specialising in *School Counselling (a subject that was part of Educational Processes and Contexts)* in both academic years 2019-20 and 2020-21. The remaining two interviews were held with students in the second year of the Degree in Pedagogy (Educational Organisation of Schools and Institutions) in the 2020-21 academic year, who had enrolled for the morning shift (half of those enrolled in the second year). This resulted in 195 participants (130 from the MAES and 65 from the Degree in Pedagogy). The interviews were conducted by the first author of this paper, who is also a lecturer in subjects related to these Bachelor's and Master's degrees.

Two main strategies were employed: group interviews and focus groups (Gutiérrez-Brito, 2009; Benavides-Lara et al, 2021). The group interviews yielded a wealth of information that deserved to be discussed in detail through focus groups. In this way, any core questions that had emerged and had been addressed in the group interviews were reviewed and reflected upon in depth by some of the participants.

Participants

The participants were selected for two main reasons. One was accessibility, as they were students we taught, and the other reason was that they were in two stages of the training pathway for school counselling professionals (2nd year of the Degree in Pedagogy and specialising in the Master's degree in school counselling, aimed at obtaining a professional qualification to work in schools).

Analysis procedure

After holding these meetings with the students and carrying out an initial analysis, two focus groups were formed. They were intended to deal with emerging issues and to go further into some questions of special interest. One group was made up of MAES students and the other was comprised of undergraduate students. In both cases, the number of participants was eight subjects, accompanied by two researchers: a moderator-facilitator and an observer. The selection of participants from each group was aimed to represent all the sensitivities perceived in the interview phase in the best way possible. Given to their characteristics, these meetings were renamed as *Dialogical meetings with students*.

An inductive approach was used for the analysis, which relied on the software programme *NVIVO*, version 11, in the following two stages (Strauss and Corbin, 2002): (1) open coding, for the counting of words and the analytical process of categorising data, and (2) axial coding, abstracting the subcategories and forming the interpretative categories. The following interpretative thematic blocks were identified: *Perspectives on intelligence*, *Organisational and curricular implications*, *Intervention* and *Role of counselling*, and *Ideological dimension*. The first two are used in this paper.

The coding used for informants and methodological strategies throughout this paper can be found in the following table:

TABLE I. Resource identifiers

Resource	Identifier
Dialogical meetings with students (group interviews)	DMS
Focus groups	FG
Master's student	M
Undergraduate Student	U
Combined abbreviations	DMS-M, DMS-U, FG-M, FG-U

Ethical issues

Negotiations were entered into in order to address the ethical issues of the research, including a commitment to return the transcripts of all empirical material for modification or approval, and to guarantee anonymity through the use of pseudonyms. All of this was recorded in informed consent form signed by all participants.

Results and analysis

Perspectives on intelligence

Intelligence and its implications for the didactic and organisational regulation of teaching continue to play a central role in school organisation because, regardless of how it is conceived, it evolves throughout history and strongly determines practically all educational processes. The most widespread discourse at present, at least in the educational community, may be that of intelligence as the product of the interaction between biological support and context, regardless of the epistemological positions held (Alcívar and Moya, 2020; Caldera, Llamas and López, 2018, González 2014, Alcívar and Moya, 2020, López-Melero, 2018), based on an understanding of intelligence as a dynamic and flexible entity. In addition, theories such as Gardner's (2012) break with the one-dimensional view of intelligence, as they see it as a multifaceted,

multifactorial, and multidimensional construct. However, when we talked to students about intelligence, we found that they had generally three ways of conceiving it. There was one large group of students who were prone to deterministic, biology-based views; there was a second group that tended towards eclecticism, that is, who positioned themselves between the clinical and competence-based paradigms; and a third group that was in the minority had a tendency towards a critical socio-constructivist perspective.

Deterministic, biology-based perspectives

A change in the use of language was observed in this group. There was an apparently new discourse in which the classic terminology surrounding intelligence seems to have been superseded, as can be seen in the following extract:

Intelligence has reached a point where it has become obsolete [...] I think that the word intelligence is no longer used in schools, or it is no longer being used to classify high-ability people and the words talent, competences and being 'top' is starting to be used. To have a gift, as we mentioned before. [...] The WISC had a quadrant where I put the IQ of each test and that is what tells me if the child is talented or not in something (DMS-M, Ariadna).

The continued presence of the concept of IQ and its practical applications, from an individualistic, subject-centred perspective, led us to question of whether the conceptions underlying the idea of intelligence in the different groups have really been transformed with the emergence of new theories on intelligence. This is evidenced by the fact that most of the participants maintained the idea of IQ within a classification logic: 'according to this classification of intelligence, their IQ based on a number, pupils are already considered to be more intelligent, gifted' (DMS-M, Claudia).

The concept of talent, for most of the participants, replaced that of intelligence. This is due to the use of the conception of *multiple talents in counselling practice*, to refer to children who excel in several dimensions of intelligence. But what does the term 'talent' contribute when it replaces intelligence? What is the underlying notion behind this

idea? The genetic, biology-based character seems to be present in the idea of talent in the students' discourse: 'It depends on the predisposition to talent, because you can work on it, but there are people who have it... It's as if it was intrinsic to them' (DMS-M, Sandra). Despite the changes in language and even the use of socio-constructivist or multiple intelligences theories in the participants' discourse, a widespread idea was found whereby the concept of *intelligence*, now renamed *talent*, was close to Francis Galton's ideas, even though they seemed to have been overcome. For an important part of the participating students, *having talent* was synonymous with *being intelligent* 'I think that talent, like ability or whatever, is about predisposition, as my colleague said, as something innate' (DMS-M, Desirée); similarly, ability seems to be related to what we have had from birth: 'There are people who are born with certain cognitive abilities' (DMS-U, Andrea).

In the same vein, the idea of mental age has been replaced in the discourse of some students by the concept of 'levels'. However, different signifiers carry the same meaning here:

It goes by levels. there are some who will be able to aspire to a little more, but there are others who will not. For example, I have an uncle with Down's syndrome, and I really hate to think this, but it is impossible, because he is really like an 8-year-old child, not even 10 or 12, he is like an 8-year-old child (DMS-M, Jane).

Eclectic perspectives

The second group of students, those who could be considered as tending towards eclecticism, were more cautious in terms of positioning themselves within one paradigm or another, due to what they see as the nature-nurture dichotomy. However, in their comments show how they attach greater importance to the biological, to what is inherited: 'The genetic factor is very important, but if it is not accompanied by a good context that helps you to continue to develop it, then someone's intelligence may not be used to its full potential' (DMS-U, Sonia). They argued that intelligence is related to a genetic substratum, which they see as a major conditioning factor, but not a guarantee of good development, as the context must make this development possible. For this group, 'you

may know a lot about something, and that's one thing, but another thing is how you assimilate it and if you know how to apply it afterwards [...] partly you come with some of that' (DMS-U, Julio).

Another idea emerged: it is possible to promote intelligence. They argued that it is what we are interested in, what motivates us and what we practice that *makes us intelligent*. However, for this group of students, interests are largely conditioned by innate abilities. So, unlike the first group, who attributed intelligence directly to genetic inheritance, this time it was argued that intelligence, although constructed, is the product of inherited factors that predispose the individual to develop in one direction or another:

I think there is an innate part of intelligence when it comes to seeing what is of interest to that person. Because when you start your educational stage, you start to develop concerns, to develop interests in things that you don't know where they come from. When I was seven years old, I was already very interested in music, in art, and it's something that I hadn't been taught at school, I hadn't been taught at home either. Where does that come from? Well, it can come from spatial intelligence, different areas that develop more in you than being innate. Which also develop, of course they develop (FG-U, Andrea).

The members of this group also pointed to the need to discard the concept of intelligence as an abstract entity and to adopt the term competence, understood as skill, instead: 'I think we need to talk about competence. I worked in the Down's Syndrome Association for many years, for example, and the kids were actually very competent, more than me for some things, and not for others' (DMS-M, Lidia).

The term competence, which is currently being strongly introduced in schools, ended up becoming part of the hegemonic discourse and current conceptions of intelligence. We must not forget that this term has its origins in the market, and that on many occasions it is related to the concepts of effectiveness, efficiency, quality and, in particular, to standardisation, as mentioned above. 'To say that an individual is competent means to affirm that his actions are coming up to a certain standard' (Barnett, 2001, p. 108). The standard is still related to concepts of intelligence, as it has not yet escaped the concept of normality; in this way, the link to the idea of competence is reaffirmed. Moreover, 'competency-based education is not aimed at developing a student's intelligence, but rather and more directly,

towards certain exercises and performances, uses and functions of that intelligence' (del Rey and Sanchez, 2011, p. 236)

The student profile in this second group held the use of psychometric instruments to determine intelligence in high regard. In their discourses they included some elements of the competency model (López-Melero, 2020), in which the relevance of psychometrics and the classical conception of intelligence is firmly questioned. However, they recognised that intelligence tests can be a useful tool, and accepted that they may attempt to measure something that they do not know:

What is intelligence? Many of us don't know how to give a clear answer about what intelligence is. [...] I believe that all these tests, more than measuring, give you information. We often use that information to categorise children; whereas this information gives us enough tools to be able to see where their weak point is in order to strengthen it (FG-U, Andrea).

A discourse was taking shape at this point with an intention and assumptions that seemed to lead to the classic definitions of intelligence being overcome. Intelligence was presented as a set of possibilities, the fruit of interaction. The objectivity and efficacy of intelligence tests was questioned, but in an attempt to reconcile paradigms that are difficult to reconcile, their use was accepted as a guideline.

Environmental-socio-constructivist perspectives

There was also a third group that was in the minority, which relied on environmentalist and socio-constructivist concerns. These students were critical of the hegemonic discourse; even though the group was made up of only a few people, they were particularly willing to encourage debate and shared reflection. For them, mostly girls, intelligence is a construct, without denying that there is a biological underpinning. We are not born intelligent, we become intelligent in interaction with culture (Vygotski, 1979) 'If intelligence is really the ability to reason or make decisions, I am not born with an innate ability to make decisions. Depending on the education I have received, I will be more or less determined' (FG-U, Alicia). This 'sector' of the participants not only moved away from

deterministic tendencies, but also called into question the very concept of intelligence and its measurability.

They were critical of and opposed to the idea of the IQ and, therefore, the meaning and relevance of psychometrics:

I wouldn't know how to describe exactly what intelligence is. What I do know is that it is not what these tests measure. Because if in education we talk about the existence of multiple intelligences, I doubt very much that a specific test could measure the emotional intelligence of a person (these tests probably exist). So, I wouldn't know how to describe what intelligence is, but I think it's not the idea we usually have of what it is (DSM, Joaquín).

Similarly, students within this profile pointed to the fact that an apparently new language is emerging, which has been emptied of content and subsequently filled with the meanings that have traditionally operated. For these students, adopting a new language without changing the ways of understanding intelligence, leads to maintaining the practices that have traditionally accompanied school counselling, as this student pointed out: 'I think if we replace intelligence with talent and continue to measure it in the same way, in the end we are still in the same situation. Just like, as I said before, now they are called competences and before they were called objectives, but we still work in the same way'. (DMS-M, Victoria)

School counselling, through mechanisms such as educational assessments that are mainly based on psychometrics and somewhat centred on the concept of intelligence, plays a major role in the order, control, and reproduction of a school that can segregate and exclude part of its pupils, in this case, under the pretext of disability, of abnormality, thus promoting inequality (Barton, 2009; Calderón, 2018).

Implications of intelligence: school organisation, psychological and pedagogical assessment, intervention and initial training

Intelligence and knowledge: impact on the curriculum

In the previous category, conflicting opinions were found as to whether or not intelligence is inherited and to what extent there seemed to be consensus on the idea that some core school subjects (so-called 'instrumental subjects') are more important than others. This means that some dimensions of intelligence are more highly valued than others. In contrast, some views were expressed along these lines:

In the education system we have, more work is done on some intelligences than on others. There is a lot of work done on linguistics, logic, mathematics. And there are other areas on which not that less work is done; that's why a person is considered more intelligent or less intelligent. If you have developed your linguistic ability, you will be considered to be more intelligent, if you have developed another ability that is not used as much in our school system, you will not be considered to be intelligent (FG-U, Andrea).

So, if we talk about multiple intelligences, if we go to psychology, which is where I come from, there are different ways of understanding intelligences. But in real life in schools, the main focus is on language and mathematics. Are you good with numbers or are you good with words? And halfway in between, intermediate value is given to natural sciences, knowledge of the environment and so on, and lastly, to the arts (DMS-M, Victoria).

They pointed out that 'the concept of intelligence is too closely associated with school performance' (FG-U Barbara). This in turn is linked to specific knowledge and skills, since 'intelligence includes a number of things that school does not promote in students' (FG-U, Alicia). The concentration of the curriculum on individual subjects is not only governed by a strong hierarchy, but despite the concept of competence being more popular than ever, the value of rote learning and discipline are still commonplace: '*... intelligences (and now there are eight or ten or 25)... in the end, the same intelligence, rote learning, still prevails in schools; and knowing how to keep quiet and do what you*

are told and how you are told (FG-M, Sofia). Additionally, some of the participants voiced the need for a personalised approach to education that seeks to foster the potential and interests of the pupils: 'nowadays in schools, for example, you may have a talent for drawing, but this doesn't matter; the important thing is that you get good marks in maths, language...'. I believe that schools should promote the individual talents of each person' (DSM, Maria).

These participants agreed that only a small part the learning that takes place at school is meaningful and relevant. They argued that the denaturalisation of knowledge and the curriculum, which is often foreign to the pupils' interests and is imposed on them, could be detrimental and prevent the creation of educational meaning:

I believe that I have learnt a lot more from the things that I have experienced at home, that I have experienced on the street, with my friends, that are useful to me today. I've learnt a lot more there than at school, although it's true that they also put you in situations where you have to...It's not just about taking an exam, but most of the things you learn outside, I think (DMS-U, Pepe).

Shortcomings in initial training programmes: psychological and pedagogical assessment as psychometrics

This approach has an impact on the students' view of school counselling. The group agreed that, in the same way that schools do not provide an appropriate educational response, the university continues in the same direction, and therefore there are some shortfalls in the initial training of school counselling professionals:

It is very sad that we have finished our degree, we have already finished a Master's degree and we are still saying that we are not given enough tools and resources to deal with certain situations that we are afraid of. Or that we believe that we're not good enough because we hesitate in some situations (FG-M, Alicia).

In this initial training, clinically-based psychological and pedagogical assessment, supported by psychometrics, plays a very important role, as the logic of classification remains. It keeps what is conceived of as

intelligence and normality in the purview of the school; in this way, it prepares students for what is regarded as the main task of primary school counsellors (Calderón and Echeita, 2014). This psychometrics-based approach in which education for counsellors is often perceived as training for technical experts collides with inclusion. It also generates epistemological conflicts among students, and an inability to profoundly understand these paradigms and the repercussions they entail for educational practice.

As human beings, we need to measure everything. To have everything under control and to find an answer to everything. I don't know whether to be in favour or against intelligence tests, for example, the WISC. I don't know whether to be in favour or against, but I think they can help us, I think they can in fact help us. But I think we are very obsessed with wanting to measure, with wanting to know why, so that we can classify. In order to have control (FG-U, Denis).

Therefore, there is a need to focus on a wider range of approaches to school counselling, which goes beyond mainly intelligence-based methodologies and other approaches based on school placements as sources of knowledge to open up new professional and educational opportunities.

School counselling trainees' perspectives on intervention

We found that those students who defended the use of psychometric instruments as part of the psychological and pedagogical assessment process to provide an individualised response to pupils with SEN considered it essential to carry out interventions specific to special education: significant curricular adaptations, different forms of schooling, etc.

It would be interesting to intervene and take this child out of the classroom and occasionally work with them individually. And perhaps the counsellor here can act as a major filter; teacher and guide, to say what, at which point, with whom and how we can have an intervention so as not to harm so much the pupil's development and... the pace of the class (DMS-M, Mariana).

I understand that if someone needs to be accommodated, it is because they already have limits. Adaptation will help to ensure that these limits are not so exposed, but without adaptation their limitation may be greater (DMS-M, Serena).

As we can see, the idea of shortfall, of disability associated with children's bodies and minds, is still present (Ovejero, 2003). In the same way, keeping the 'normal' or 'joint' pace of the class is portrayed a requirement, giving rise to the need to segregate pupils who are not able to adapt, with the excuse of individualised learning and the concern for their correct development. However, if learning enables development, under-learning, subculture, will promote underdevelopment (López-Melero, 2018).

My brother-in-law, in kindergarten, had attention problems. They supposedly didn't diagnose him, they didn't do anything about his borderline intelligence. The only thing they did was to have him sitting by the teacher's table. That child, to this day, is not able to pick up a book. He simply cannot. The only thing they taught me in my degree was: 'well, the child is hyperactive and you get him to sit next to your table; whatever that child has... you put them next to your table' and that's what I think... And I think curricular adaptations are great, and I'll explain why. Ultimately, that person is going to finish up at the same place as you; the thing is that the needs are there, and that poor person is not to blame, but somehow that person has to be helped so that they can have the same skills that I have acquired at the end of the year. [...] But this doesn't mean that we are discriminating against this person, or anything like that. No way, it's the complete opposite (DMS-U, Lorena).

As noted, the lack of strategies and tools, as well as of epistemological foundations, may lead students to position themselves within the deficit model. However, a small part of the participants disagreed with these positions, They noted that the solution lies in methodology and organisation, rather than in individualised adaptation:

In the case of what our colleague here said, I do think that this curricular adaptation was detrimental. Because in the case of her friend, who had memory problems, instead of studying five units, she studied four, but maybe, I don't know, topic five was 'invertebrates'

and she didn't really learn them. So, why not, instead of adapting the curriculum, change the methodology (DMS-U, Sonia).

In this regard, they not only presented arguments related to culture and development, but also pointed to the importance of expectations, especially for children: 'If you are limiting the child from the very beginning, you are undervaluing them and you are making them feel that they are not capable of doing something, the child will feel useless for the rest of their life' (FG-U, Luna). Significant curricular adaptations, and especially the different forms of schooling, become ceilings for learning because, 'if you pigeonhole a person as having a lower level, that person only has the opportunity to reach the lowest level' (FG-M, Alicia).

However, the group of students who supported a more biology-based view, akin to the clinical model, referred to reality as if it were something unique, static and given. They called for the need to maintain special education, among other issues, even if it means the segregation of part of the pupils, and reported some experiences from their placement in a special education school as an example:

I am thinking about what I have seen in that school. Really, what about those people? They're not going to be anything in life then...I don't know, it's impossible to put one of them in an ordinary classroom. You can't. Nor in a dedicated classroom. No (DMS-U, Rocio).

It seems that the practical experiences they had during the degree had an enormous influence on them. These included their experience during their time in schools, which at best normally reflect integrative practices (Parrilla, 2002), situated in the deficit model.

It's just that some people have a certain level and they can't do more. They make an effort, they put as much effort into it, and everything. There are certain abilities, and their ability was not good enough. But...what now? What do you do with these children? (DMS-U, Nerea).
For me, the idea of putting, for example, a child like that with the problems they have, in a classroom, is crazy. You're knocking the child down, you think you're helping them, but you're basically knocking them down, really (DMS-U, Julio).

The response to diversity by having different forms of schooling was assumed to be the best option, almost as the only one, by a significant part of the participants. They argued that a suitable educational response

for certain children can only be provided in this way, as the limitations of these children force us to do so. Segregation is thus pedagogically justified. However, arguments were found from students with a more socio-constructivist profile that pointed out the importance of co-existence among all pupils for full socialisation, thus rejecting any organisational, didactic or curricular proposal that involves separating some from others: 'human beings imitate others, when we are with our group of friends, we imitate certain behaviours or certain attitudes that they have. So, to support what I said, we always need to be in partnership' (FG-U, Jasmine).

Discussion

The results obtained show that different ways of understanding intelligence coexisted among the participating students. Even within an apparently inclusive discourse, we found conceptions close to determinism. Others seemed more eclectic, but they more or less implicitly placed a psychometrically-based conception of intelligence at the centre of psychological and pedagogical assessment. This can result in counselling practices that translate into psychoeducational interventions and educational reports that are incompatible with educational inclusion (Calderón and Habegger, 2017; Cologon, 2020).

The views expressed by the participants show how the language used in the different discourses seems inclusive, but once we started talking and looking further, it was seen that behind this language, some of the participating students still held conceptions and engaged in practices based on psychometrics and the concept of IQ. While this change in language moderates discourses, at the same time it contributes to colonise these discourses, which together with deterministic conceptions of intelligence, may contribute to the reproduction of segregating practices (Rivas, 2018).

Almost 30 years after the Salamanca Statement (1994), the concept of inclusion is widely accepted at the discursive and normative level, but it has been gradually taken over, as this term hides segregating, or at best integrative, practices, which are legitimised by the psychological and pedagogical assessment. An assessment that is strongly influenced by psychometrics. Therefore, we believe that achieving an inclusive

school requires dismantling segregating organisational and didactic models, which use psychometrics, among other tools, to hold the subject responsible for something that is actually social and contextual (Ovejero, 2003; Calderón and Echeita, 2014). As Ovejero (2004) pointed out, the construction of the concept of IQ and the technical tools that measure it are not neutral. Inclusion requires a shift from deficit to opportunity; and from an individual's problem to the barriers to learning found in the context.

The clinical and medical model based on the notion of deficit aims to compensate for the shortfalls that present in pupils, according to the concept of *normality*. It is based on the idea that disability, like intelligence, is something objective and measurable, which lives within subjects, in their bodies and minds. These conceptions could in some cases be an obstacle to pupils' academic and life development (Calderón, 2014).

Regarding the curriculum and its organisation into disciplines, there seemed to be agreement among participants, irrespective of the profiles and how they positioned themselves vis-à-vis the concept of intelligence. They recognised a strong disciplinary hierarchy, in which some core subjects are imposed on the rest, which means that 'some intelligences' or human characteristics have a higher value than others within the school setting. In addition, the concept of competence was linked to ableism and so-called competence-based education (Barnett, 2001; Del Rey and Sánchez, 2011).

Conclusion

Training inclusive school counsellors compels us to question clinical and medical deficit-based models, which largely rely on conceptions that are close to genetic determinism. Questioning intelligence and normality is essential to stop talking about what pupils lack and make a shift towards understand that diversity is a value and that we learn from differences (Melero, 2020; Hehir et al, 2016; Vygotsky, 1979). As Calderón (2014) noted, accepting the new conceptions of intelligence, where its social and multifarious character is recognised, has 'a democratising effect on the social construction that derives from them' (p.466). This is crucial because, as pointed out by various nationally and internationally

recognised scholars, democracy, equity and social justice are inherent in inclusive schools (Ainscow et al. 2013; Sapon-Shevin, 2013; Parrilla, 2002).

In short, we are faced with a challenge that is as urgent as it is necessary. International regulations such as the 2008 *Convention on the Rights of Persons with Disabilities* (UN, 2006), ratified by Spain in 2008, and the LOMLOE (Spanish Education Act) have declared that there is a need to transform schools to achieve an Inclusive Education. A school for all students, without exception. This involves that the different forms of schooling, if any, should be as unrestrictive as possible; that the focus should not be on subjects, but on systems; and that methodology should aim to be accessible and universal, rather than individualised. A project that is not possible without transcending the deficit-based culture, and for this we must rethink initial training.

One of the most important limitations detected in this study was the lack of previous research on how intelligence is studied in the initial training of school counsellors and what consequences this may have for their future professional practice and development. This is both a constraint and an inspiration for this and future research. Another limitation in carrying out the analysis was not hearing from teachers, as their ontological and epistemological position may be related to the students' construction of their concept of intelligence. It is therefore necessary to explore new avenues of research in order to understand the position of those who train future school counsellors with regard to intelligence.

Finally, looking prospectively into the future, we intend to bring the results of this study into dialogue with others that we have already begun, which are linked to which practices, organisational structures and didactic strategies are seen by trainees as being inclusive. It will therefore be interesting to see what role the concept of intelligence plays, and whether there is a relationship between the concept of intelligence and counselling practices.

References

- Ainscow, M., Dyson, A., Goldrick, S. y West, M. (2013). Promoviendo la equidad en educación. *Revista de Investigación en Educación*, 11(3), pp. 44-56.
- Alcívar, D. F. y Moya, M. E (2020). La neurociencia y los procesos que intervienen en el aprendizaje y la generación de nuevos conocimientos. *Polo del Conocimiento: Revista científico - profesional*, 5, (8), 510-529.
- Angulo, J. F. (2020). Inteligencia. En R. Espinoza y J. F. Angulo (Coords.) *Conceptos para disolver la educación capitalista* (213-228). Barcelona: Terra Ignota Ediciones.
- Arnáiz, P., Escarbajal, A. Alcaraz, S. y de Haro, R. (2021). Formación del profesorado para la construcción de aulas abiertas a la inclusión. *Revista de Educación*, 393, 37-67.
- Barnett, R. (2001). *Los límites de la competencia. El conocimiento, la educación superior y la sociedad*. Gedisa.
- Barton, L. (2009). Estudios sobre discapacidad y la búsqueda de la inclusividad. Observaciones. *Revista de Educación*, 349, 37-52.
- Benavides-Lara, M. A., Pompa Mansilla, M., de Agüero Servín, M., Sánchez-Mendiola, M., & Rendón Cazales, V. J. (2022). Los grupos focales como estrategia de investigación en educación: algunas lecciones desde su diseño, puesta en marcha, transcripción y moderación. *CPU-e, Revista de Investigación Educativa*, 34, 163-197. <https://doi.org/10.25009/cpue.v0i34.2793>
- Caldera, J. J., Llamas F. y López, V. (2018). Neuropsicología y Educación: Creatividad, Inteligencias Múltiples y Rendimiento Académico en Educación Primaria. *Enseñanza & teaching* 36 (2), 123-143.
- Calderón-Almendros, I. (2018). Deprived of human rights. *Disability & Society*, 33(10), 1666-1671.
- Calderón-Almendros, I. y Habegger, S. (2017). *Education, Disability and Inclusion. A Family Struggle against an Excluding School*. Sense Publishers.
- Calderón, I. y Echeita, G. (2014). El derecho a una educación inclusiva y las actuales prácticas de evaluación psicopedagógica. *Prolepsis*, 18, 82-882.
- Cologon, K. (2020). Is inclusive education really for everyone? Family stories of children and young people labelled with 'severe and multiple' or 'profound' 'disabilities'. *Research Papers in Education*.

- ONU (2006). *Convención sobre los Derechos de las personas con discapacidad*. Organización de Naciones Unidas, Nueva York.
- Del Rey, A. y Sánchez, J. (2011). Crítica a la educación por competencias. *Universitas: Revista de ciencias sociales y humanas*, 15, 233-246.
- Díez, E. J. (2018). *Neoliberalismo educativo*. Octaedro.
- Gárate, F. J. (2020). Desde la Injusticia Social a la Justicia Educativa o desde la Injusticia Social a la Escuela como Protagonista de la Transformación Educativa y social. *Revista Internacional de Educación para la Justicia Social*, 9 (3),1-13.
- Gardner, H. (2012). *Inteligencias múltiples: la teoría en la práctica*. Paidós.
- González, J. R. (2014) Nuevas inteligencias, nuevos aprendizajes. *Revista Complutense de Educación*, 25 (2), 559-570.
- Gould, S. J. (1997). *La falsa medida del hombre*. Crítica.
- Gutiérrez-Brito, J. (2009). Técnicas Grupales. En J. Callejo-Gallego (coord.). *Introducción a las técnicas de investigación social* (95-118). Editorial Universitaria Ramón Areces.
- Hammersley, M. y Atkinson, P. (1994). *Etnografía. Métodos de investigación*. Paidós.
- Hehir, T. et al. (2016). *A summary of the evidence on Inclusive Education*. Alana Institute.
- España. Ley Orgánica 3/2020, de 29 de diciembre, por la que se modifica la Ley Orgánica 2/2006, de 3 de mayo, de Educación. Boletín Oficial del Estado, 30 de diciembre de 2020, núm 340, pp. 122868-122953.
- López-Melero, M. (2020). Inclusión. En Ricardo Espinoza y J. Félix Angulo (Coords.) *Conceptos para disolver la educación capitalista* (185-202). Terra Ignota Ediciones.
- López-Melero, M. (2018). *Fundamentos y Prácticas Inclusivas en el Proyecto Roma*. Morata.
- Martínez-Usarralde, M. J. (2020). Inclusión educativa comparada en UNESCO y OCDE desde la cartografía social. *Educación XXI*, 24 (1), 93-116.
- Ovejero, A. (2003). *La cara oculta de los test de inteligencia*. Biblioteca Nueva.
- Ovejero, A. (2004). Los test de inteligencia: Algunas consecuencias de su aplicación. *Tabanque*, 18, 153-168.
- Parrilla, A. (2002). [Acerca del origen y sentido de la educación inclusiva](#). *Revista de Educación*, 327, 11-30.

- Rivas, J. I. (2018). Descolonizando la formación del profesorado: buscando sentido a la transformación social. *Espacios en blanco. Revista de educación*, 28(1), 13-32.
- Rivas, J.I., Cortés, P. y Márquez, M.J. (2018). Experiencia y contexto: formar para transformar. En C. Monge y P. Gómez (ed.). *Innovando la docencia desde la formación del profesorado*, 1ª Ed., 109-124. Síntesis.
- Sapon-Shevin, M. (2013). La inclusión real: Una perspectiva de justicia social. *Revista de Investigación en Educación*, 11 (3), 71-85.
- Simons, H. (2011). *El estudio de caso: Teoría y práctica*. Morata.
- Spearman, C. (1923). *The nature of intelligence and the principles of cognition*. Macmillan.
- Sternberg, R.J. (1979). The nature of mental abilities. *American Psychologist*, 34, 214-230.
- Sternberg, R.J. (1981). The evolution of theories of intelligence. *Intelligence*, 5, 209-230.
- Strauss, A. y Corbin, J. (2002) *Bases de la investigación cualitativa. Técnicas y procedimientos para desarrollar la teoría fundamentada*. Universidad de Antioquía: Edición Contus.
- Thomson, G.H. (1939). *The factorial analysis of human ability*. University of London Press.
- Thurstone, L.L. (1938). *Primary mental abilities*. University Chicago Press.
- UNESCO (2020). Resumen del Informe de Seguimiento de la Educación en el Mundo 2020: Inclusión y educación: todos sin excepción. París, UNESCO.
- Vilchéz, P. S. (2002). Evolución de los conceptos sobre inteligencia. Planteamientos actuales de la inteligencia emocional para la orientación educativa. *Educatio s. XXI*, 5, 97-121.
- Vygotski, L. S. (1979). *El desarrollo de los procesos psicológicos superiores*. Crítica.

Contact address: Jesús Javier Moreno Parra, Universidad de Málaga, Facultad de Ciencias de la Educación, Departamento de Didáctica y Organización Escolar. Campus de Teatinos, S/N. C.P., 29010, Málaga. E-mail: jesusjamopa@uma.es