

Revista **CENTRA** de Ciencias Sociales

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Information on CENTRA's scientific publications in social sciences

The **Andalusian Studies Center Public Foundation** -CENTRA-, attached to the Consejería de la Presidencia, Interior, Diálogo Social y Simplificación Administrativa of the Junta de Andalucía, is a scientific and cultural institution that already has a history of more than twenty years, and which has as its foundational objectives the promotion of scientific research and the generation of knowledge about the social, economic and cultural reality of Andalusia.

In accordance with these purposes and its nature, **CENTRA** has created ex novo in 2021 a line of scientific publications in the field of social sciences, in accordance with the universalist canons of scientific communication, made up of three book collections (Actualidad, Biblioteca de Investigación y Enfoques) and the CENTRA Journal of Social Sciences.

The **ACTUALIDAD** collection addresses issues of relevance and interest in the contemporary Andalusian social and political reality linked to the broader context of Spanish society, the European Union and, in short, global dynamics. It is characterized by a determined orientation to present empirical evidence of the phenomena considered, linking the data provided to its theoretical and explanatory analysis.

Even though it is a collection linked to the scientific community and research in the social sciences, it is also conceived under the broadest idea of dissemination for an audience that is not an expert in the topics covered. The collection, which has been published without interruption since 2005, is now structured according to a selection process for original manuscripts in accordance with universalist criteria of scientific quality and anonymous evaluation by academic peers external to CENTRA. It is available in digital format and is accessible by free download from the website of the Center for Andalusian Studies.

The newly created **BIBLIOTECA DE INVESTIGACIÓN** collection is made up of monographic research papers from different areas of knowledge in the social sciences. It therefore has the objective of publishing the results of exhaustive investigations in accordance with the standardized criteria of communication. In this way, this collection also allows those doctoral theses in the field of social sciences that meet these criteria to be published in it and that they are presented in a format compatible with editorial standards and the established length.

The **ENFOQUES** collection, also created ex novo, is aimed at bringing together under the same volume the academic results of seminars, scientific conferences, etc., that are the consequence of some academic initiative for research or debate whose result implies a collective work directed by an editor. or editors. This group nature does not imply any reduction in the commitment to the quality and scientific nature of the collection, since the generation and validation of scientific knowledge is a joint and community process that, as the frontiers of the social sciences have advanced, is becoming more and more necessary. However, this collective nature of the works published here does require scrupulous work by the editor or editors who coordinate the initiative, supervise the work of the different contributions, evaluate their substantive results, and integrate them into the unitary whole that the publication implies. final published manuscript.

Finally, and likewise newly created, the CENTRA Journal of Social Sciences is a semi-annual scientific publication for all areas of this field of scientific knowledge that is published in Spanish and English in electronic format, freely accessible and downloadable, and in Spanish in paper support. The journal has a miscellaneous nature for the social sciences as a whole that does not exclude the possibility of publishing debate sections and specific numbers of a monographic nature that, in any case, will be governed by the same canons of universalism and anonymous evaluation of scientific communication. than the rest of the texts presented. The journal is open to unpublished texts, written with the utmost scientific rigor, coming from the broad scientific community, both nationally and internationally.

In order to provide content to all this new initiative of scientific publications, and scrupulously guarantee the principles of scientific communication, there is an interdisciplinary Editorial Board made up of prestigious professors from universities and national and international research organizations.

ARTICLES
ARTÍCULOS

ARTICLE/ARTÍCULO

Prevalence and Academic Decisions of Students with Reading Learning Disorders (Developmental Dyslexia) in Andalusia, Spain

Prevalencia y decisiones académicas del alumnado con trastorno del aprendizaje de la lectura (dislexia del desarrollo) en Andalucía (España)

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ABSTRACT

Limited information exists regarding the prevalence of developmental dyslexia in Spain and the academic decisions made by students with developmental dyslexia (DD) following compulsory education. These aspects are investigated in Andalusia, using a reference population of 944,118 students aged 6–16 years. Among them, 11,705 are classified as having DD, with an observed prevalence of 1.24% (criterion of -2 standard deviations [SDs] below the mean) and an estimated prevalence of 3.6% (criterion of -1.5 SDs below the mean). Approximately 31,700 students may experience difficulties associated with DD without being identified. The prevalence ratio of DD in Andalusia by gender is 1.3 boys/girl. Higher-than-expected values are noted in Granada (2.04%), while lower values are observed in Cádiz (0.83%). The municipalities with the lowest prevalence are Seville, Alcalá de Guadaira, Algeciras, Chiclana, Jerez, La Línea de la Concepción, El Puerto de Santa María, Sanlúcar, Jaén, Benalmádena, Marbella and Torremolinos. The typical age of diagnosis is approximately 10 years, and efforts should be made to lower this age to 6–7. In total, Andalusia has 16,600 students with DD in non-university education, with 4,415 pursuing post-compulsory studies. Vocational training emerges as the predominant choice for students with DD, and this decision is not contingent on gender.

KEYWORDS: developmental dyslexia, prevalence, academic decisions, geostatistics.

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RESUMEN

Apenas hay información sobre la prevalencia de la dislexia del desarrollo en España y sobre las decisiones académicas del alumnado con dislexia del desarrollo (DD) tras la enseñanza obligatoria. Se estudian estos dos aspectos en Andalucía, con una población de referencia de 944.118 estudiantes de 6-16 años, 11.705 están calificados con DD, con prevalencia observada del 1,24% (criterio -2 desviaciones típicas (DT) debajo de la media) y prevalencia estimada del 3,6% (criterio $-1,5$ DT debajo de la media). Unos 31.700 alumnos podrían presentar dificultades asociadas a DD y no estar identificados. La proporción de prevalencia de DD en Andalucía por sexo es de 1,3 niños/niña. Se encuentran valores más altos de lo esperado en Granada (2,04%) y más bajos en Cádiz (0,83%). Los resultados más bajos se encuentran en los municipios de Sevilla, Alcalá de Guadaíra, Algeciras, Chiclana, Jerez, La Línea de la Concepción, El Puerto de Santa María, Sanlúcar, Jaén, Benalmádena, Marbella y Torremolinos. La edad de diagnóstico está sobre los 10 años, siendo necesario bajar esta edad hasta los 6-7. En total, en Andalucía se cuentan 16.600 alumnos con DD en enseñanzas no universitarias, 4.415 realizan estudios posobligatorios, encontrando que la Formación Profesional es la opción más frecuente en el alumnado con DD sin que esta decisión dependa del sexo.

PALABRAS CLAVE: dislexia del desarrollo; prevalencia; decisiones académicas; geoestadística.

1. Introduction

1.1. Concept of Developmental Dyslexia

Developmental dyslexia (DD) refers to persistent challenges in acquiring skills related to written language and reading in individuals with normal or higher intelligence, conventional schooling and a socio-cultural situation that is not disadvantageous (Angerri, 2005).

Developmental dyslexia (DD), or difficulty in acquiring written language, is distinct from dyslexia or alexia, which is the loss of the ability to read as a consequence of a cerebrovascular accident (World Health Organization [WHO], 2019).

It differs from reading and writing delay due to the persistence of reading difficulties, despite appropriate individual psychopedagogical intervention (Moojen et al., 2020) lasting more than six months for DD (American Psychiatric Association [APA], 2013).

Reading and writing delay and DD share risk indicators. Between the ages of 4-5, speech difficulties are common (Dale et al., 2014), including challenges in learning nursery rhymes, automatic naming of objects, numbers, colours or shapes, and in narrating stories.

In the first year of Primary Education, when classmates read short texts, it is often challenging for them to recognise words. Lexical confusions, substitutions of words for others that are similar or more familiar and morphosyntactic errors (lexical representation) are common, making it challenging for them to comprehend what is written (semantic representation). Reading can be slow and imprecise, especially with long words and those with a low frequency of use (Suárez-Coalla et al., 2022). Their initial lack of interest in reading evolves into a fear of reading, especially in

public. They employ strategies such as counting paragraphs to anticipate what they will have to read in order to practice (Cheyne-Collante et al., 2021), because “the pain of getting it wrong is like torture” (Deacon et al., 2020, p. 9).

As their peers improve their reading, the challenges of students with DD extend to other areas of school learning (Lithari, 2019), and the fear of reading expands to all academic subjects. They adopt beliefs of incompetence that align with comments from parents and teachers about laziness or lack of ability (Undheim, 2003), which diminish self-esteem, increase anxiety and lead to behavioural issues (Zupparado et al., 2020). They often describe their relationship with school as a struggle (Wilmot et al., 2023), which has implications for their vocational preferences and academic decisions (Berkeley et al., 2011).

DD has a neurogenetic basis (Shaywitz and Shaywitz, 2005). It typically affects the temporoparietal brain regions (phonological processing) (Parrilla et al., 2020) and the temporal-occipital region (orthographic processing) of the left hemisphere (Bosch-Bayard et al., 2020). It is hereditary (Soriano-Ferrer and Piedra-Martínez, 2017), with up to a fivefold higher likelihood of presenting DD when there are direct family history precedents (Andreola et al., 2021).

1.2. Diagnostic Criteria for Developmental Dyslexia

The diagnosis is based on three criteria (González-Valenzuela and Martín-Ruiz, 2020; Soriano-Ferrer and Miranda-Casas, 2003):

a) Specificity criterion: it affects the learning of reading and “is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities” (Lyon et al., 2003, p. 5). Differences in criteria justify diagnostic variations, such as a reading delay below -2 standard deviations (SDs) (Regional Government of Andalusia, 2017), a percentile below 50 in standardised reading comprehension tests (Government of the Canary Islands, 2010) or generally, -1.5 SDs below reading age (Hulme and Snowling, 2016).

Ramos and Cuetos (2009) propose that 2 SDs below the mean implies difficulties requiring specific intervention, and between 1 and 2 SDs below the mean, a detailed assessment is recommended to confirm or reject the existence of DD.

Deficits in phonological awareness and rapid automatic naming are the variables that best predict reading difficulties (Outón and Ferraces, 2021). However, this does not imply that all individuals with DD exhibit deficits in phonological awareness and rapid naming (Moll and Landerl, 2009), nor that all individuals with phonological and rapid-naming difficulties experience reading and writing difficulties (Moll et al., 2016). Students with high intellectual abilities, in particular, often compensate for low levels of phonological awareness and rapid naming with a good working memory, vocabulary and grammatical level, which mask the learning difficulties in reading until increased demands result in unexpected challenges in their academic performance (Reynolds and Shaywitz, 2009; Van-Viersen et al., 2016).

The degree is specified as mild, moderate or severe (APA, 2013): mild, when it affects one or two academic areas, requiring minor adaptations or support services; moderate, with notable difficulties affecting one or more academic areas, necessitating intensive and specialised educational attention during the school years; and severe, with widespread academic difficulties requiring constant, intensive and individualised educational attention throughout their schooling.

The most commonly used language assessment tests in Spanish for the detection and diagnosis of DD (PROLEC R, PROLEC SE, DSTJ, PROLEXIA, LEE and BECOLE) provide references on the degree of impairment (Table 1).

Table 1

Tests for the Assessment of Written Language. Degree of Impairment and Cut-Off Points

	PROLEC R (Cuetos et al., 2007, p. 46)	PROLEC SE (Ramos and Cuetos, 2009, p. 31)	DST-J (Fawcett and Nicolson, p. 139)	PROLEXIA (Cuetos et al., 2020, p. 98)	LEE (Defior et al., 2006)	BECOLE-R (Galve- Manzano, 2020, p. 22)
No difficulty - Normal	Up to -1 SD (Normal)		RI values 0.00– 0.59. 23rd–77th percentile (No risk)	Performance <0.5 SD (No difficulty) Between 0.5–0.99 SD: Mild difficulty	>30th percentile	>40th percentile
Mild diffi- culty	Between 1 and 2 SDs (Mild)	Between 1 and 2 SDs below the mean: it is advis- able to evaluate in more detail to confirm or reject the existence of difficulty	Mild risk: -1.25 SDs RI values 0.60–0.89 12th–22nd percentile	Between 1.00–1.99 SDs: Severe difficulty	<30th percentile In all tests, <1 SD competency lev- el with difficulty	Between the 21st–40th percentile, signif- icant difficulties
Moderate - severe - very severe difficulty	More than 2 SDs (Severe)	≥2 SDs below average: interven- tion is required to recover an adequate level and improve per- formance	Moderate risk: -1.75 SDs RI values 0.9–1.19 5th–11th per- centile	≥2 SDs: Very severe difficulty		<20th percentile, very significant difficulties
			High risk: -2.25 SDs RI values 1.20–3.00 1st–4th per- centile			

b) Exclusion criterion: it cannot be attributed to mental retardation, sensory or emotional disorders or socio-educational disadvantage.

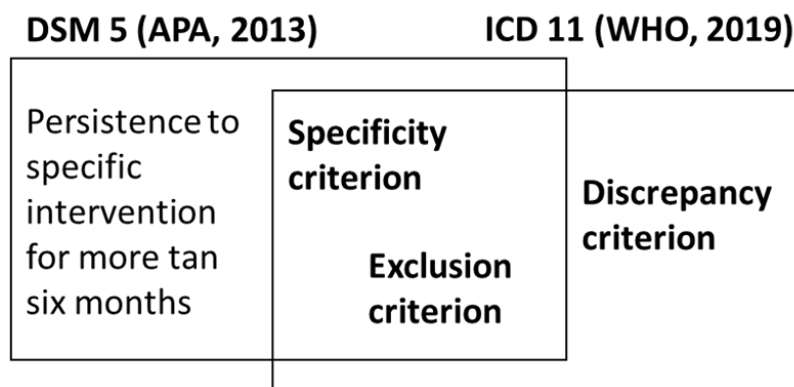
c) Discrepancy criterion between their cognitive potential and reading performance (WHO, 2019).

If a criterion for determining DD is used based on an SD of <1.5 in a bivariate distribution between intelligence quotient (IQ) and reading performance, subjects with an IQ close to 70 and similar reading difficulties to other children with a higher IQ may

not be classified with DD (Stuebing et al., 2002). This criterion is challenging to apply in practice, and therefore the specificity and exclusion criteria serve as the reference points for the diagnosis of DD (Jiménez et al., 2003), with the discrepancy criterion not included in DSM-5 (APA, 2013) as a diagnostic criterion (Figure 1).

Figure 1

Diagnostic Criteria for Developmental Dyslexia (DSM-5 and ICD-11)



1.3. Educational Implications

Students with DD require significant effort from both themselves and their families to achieve mediocre academic results (Soriano-Ferrer, 2017). The consequence is often task avoidance behaviours, making it necessary for them to have the opportunity for success in their reading experiences (Syal and Torppa, 2019).

Specific intervention should be initiated as soon as possible (Ehri et al., 2001), and it is relevant that the teaching of reading and writing in children at risk for DD be conducted by experienced teachers in the instruction of written language (Galuschka et al., 2014; McArthur et al., 2018).

In general, supportive technologies such as audiobooks, text trackers, specific type-faces (Krivec et al., 2020), having exams read to them or presented orally, not penalising spelling mistakes or providing extra time (Lewandowski et al., 2008) are useful. Objective tests with error penalties, time adjustments with timed tasks or the impossibility of reviewing answered questions are variables that ensure the failure of students with DD (Linstrom, 2007).

1.4. Academic Decisions of Students with Developmental Dyslexia

Regarding their academic decisions, in Messina (Italy), 44.7% of students with DD attend vocational schools instead of traditional secondary schools (8.6%), and 68.1%

express disinterest in pursuing university studies (Donato et al., 2022). In Sweden, Ingesson (2007) notes that the majority of students with DD choose vocational-style studies within secondary school, with fewer opting for university studies. In Trapas (Greece), Diakogiorgi and Tsiligirian (2016) find that school counsellors recommend vocational training over university studies for students with dyslexia. In Jyväskylä (Finland), after completing compulsory studies, 62.5% of students with DD prefer to study vocational training, while 66.7% of students without DD aim for the baccalaureate (Rimkute et al., 2014).

1.5. Gender Differences in Developmental Dyslexia

Concerning gender, Reilly et al. (2019, p. 454), based on reading assessments from the National Assessment of Educational Progress (NAEP) in the United States from 1988 to 2015, observe that “the likelihood of being average or higher in reading ability for a student at the end of high school increases from 42.1% for boys to 57.8% for girls”. This is associated with lower processing speed and reading fluency in boys (Cammarata and Woodcock, 2006). Differences in rapid-naming tasks (Outón and Ferraces, 2021) partially account for the higher prevalence of DD in boys compared to girls.

Brimo et al. (2021) and Reilly et al. (2019) suggest that it affects 1.5 boys per every girl in the English language. Quinn (2018) finds that males are 1.83 times more likely to have DD than females, a pattern similar to the ratio of 1.8 identified by Cheruiyot and Muthoni-Mathai (2011) for English-speaking boys in Nairobi, Kenya.

In China, Zhao et al. (2016) report a ratio of 2 boys to 1 girl, Liu et al. (2016) of 3 and Lin et al. (2020) of 3.7 boys to 1 girl.

In Uruguay, Costa-Ball (2021) finds no significant differences between girls and boys, while Jiménez et al. (2011) indicate a ratio of 1.5 for Spain and 1.3 for Guatemala.

1.6. Prevalence of Developmental Dyslexia

The acquisition of written language is influenced by the alphabetic and logographic character, syllabic complexity and orthographic depth of each language (Morfidi et al., 2007), with implications for the prevalence of DD across different languages (Ziegler et al., 2003).

The American Psychiatric Association (2013) suggests a DD prevalence between 5–15%, a range specified by Wagner et al. (2020) as 3–7% in English, with a criterion of -1.5 SDs below the reading mean.

In Greece, in 2007, Anastasiou and Polychronopoulou (2009) recorded a prevalence of 1.7%. In France, in 2006, Fluss et al. (2018), for a sample of 1,020 7-year-old students, reported a prevalence of 3.30%. In Italy, Barbiero et al. (2019), for a sample of 9,964 students, found a prevalence of 3.5%. In Portugal (Braga and Vila Real), Vale et al. (2011), for a sample of 1,460 students in years two to four, found a prevalence of 5.4%.

In Uruguay (Montevideo), in 2011, Cuadro et al. (2017), for 1,408 students from years two to six of primary education, indicated a prevalence of 2.2–5.3%. In 2018, also in Montevideo, Costa-Ball (2021), for a sample of 1,820 students from years two to six, found a prevalence of 4.88%.

In Colombia (Barranquilla), in 2007, De los Reyes-Aragón et al. (2008), for 112 7-year-old students, indicated a prevalence of 3.32%; in Bogotá, Pardo-Cardozo (2015), in 2013, for a sample of 220 students, reported a prevalence of 3.63%.

In Spain, three notable studies include two in the Canary Islands with prevalences of 3.2% (González-Martín et al., 2013; Jiménez, Guzmán et al., 2009), and one in the Region of Murcia, with a prevalence of 11.8% (Carrillo et al., 2011) (Table 2).

Table 2

Prevalence Studies of Reading Learning Disorders (Developmental Dyslexia) in Spain

Author	Year	Location	Sample	Prevalence (-1.5 SDs)
González Martín et al., 2013	(n.d.)	Tenerife (Spain)	78 participants enrolled in Secondary Education	3.2%
Carrillo et al., 2011	2009–2010	Molina de Segura (Murcia) (Spain)	1,894 participants. Primary Education. Years 2, 4 and 6. Specificity criterion: below 1.5 standard deviations from reader level	11.8%
Jiménez, Guzmán et al., 2009	Academic year 2005/2006	Canary Islands	1,050 participants, 293 with specific written language difficulties, and 34 meeting dyslexia criteria	3.2%

1.7. Justification of the Need and Research Objectives

The scarcity of information regarding the prevalence of DD in Spain is exemplified in the Report of the Legal Representative of Castile and León (Government of Castile and León, 2019, p. 487), which states, with regards to statistical aspects, that the Regional Ministry of Education indicates in the report accompanying the document dated 19 April 2018 that there are no specific statistical data on students with a specific diagnosis of dyslexia.

On the other hand, in Spain, there are no known studies regarding the academic decisions of students with dyslexia after the compulsory education period (ESO, according to its initials in Spanish). It is essential to understand how many students with DD there are and what they pursue in their studies after completing ESO.

Two study objectives are proposed: (1) to calculate the prevalence of students with DD in Andalusia, including their distribution, gender differences and age of diagnosis; and (2) to determine whether DD influences the academic choices of students when they finish compulsory education, considering variables such as educational stage, gender and province.

2. Method

2.1. Population

As a reference population for comparison, students aged between 6–11 years (Primary Education [Pr. Ed.]) and 12–16 years (Compulsory Secondary Education [ESO]) are used (Regional Government of Andalusia, 2021a, 2021b), amounting to 944,118 students in 2020–2021 in Andalusia (Spain) (Table 3).

Table 3
Enrolled Students

Province	6-11 years old (Pr. Ed.)			12-16 years old (ESO)			Total		
	M	F	M+F	M	F	M+F	M	F	M+F
Almería	25,882	24,376	50,258	17,867	17,200	35,067	43,749	41,576	85,325
Cádiz	40,855	38,420	79,275	32,485	30,632	63,117	73,340	69,052	142,392
Córdoba	23,829	22,381	46,210	17,846	16,798	34,644	41,675	39,179	80,854
Granada	29,068	26,963	56,031	21,879	20,973	42,852	50,947	47,936	98,883
Huelva	17,755	16,535	34,290	13,052	12,328	25,380	30,807	28,863	59,670
Jaén	18,520	17,433	35,953	14,186	13,613	27,799	32,706	31,046	63,752
Málaga	53,681	50,780	104,461	39,913	37,764	77,677	93,594	88,544	182,138
Seville	67,506	63,830	131,336	51,290	48,478	99,768	118,796	112,308	231,104
Andalusia	277,096	260,718	537,814	208,518	197,786	406,304	485,614	458,504	944,118

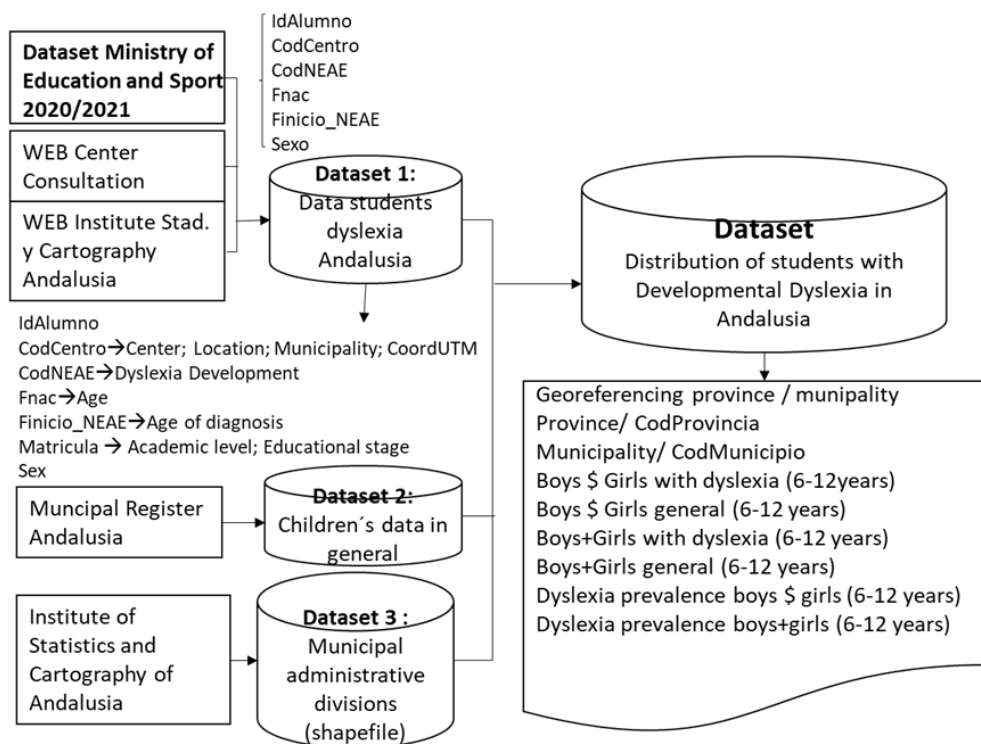
Source: compiled from data provided by the Regional Government of Andalusia (2021a, 2021b).

2.2. Data Sources

The information used has been provided by the Regional Ministry of Education of the Regional Government of Andalusia and pertains to the census of students with DD across the eight provinces of Andalusia (Figure 2).

Figure 2

Construction of the Dataset for Students with Developmental Dyslexia in Andalusia



To estimate the percentage of type I errors (false positives), the minimum representative sample is calculated in 118 cases, for an estimated population of 11,700 subjects [prevalence, 1.24%; accuracy, 98%] (Escalante-Angulo, 2004). The review of psycho-pedagogical evaluation reports, suitably anonymised, was conducted for 250 cases identified with developmental dyslexia (159 boys and 91 girls), randomly selected in the province of Almería. It was observed that, on average, 1.5 specific tests per student were used in the assessment: PROLEC-R or PROLEC-SE (94.4%; 236 cases), DST-J (81 cases), PROLEXIA (35 cases) and BECOLE (29 cases).

Notably, it was explicitly mentioned that the subjects' scores deviated two or more standard deviations below the expected levels for their age group (95.6% of cases).

The cartographic data for the municipalities of Andalusia and the municipal register data were sourced from the Institute of Statistics and Cartography of Andalusia (<https://www.juntadeandalucia.es/institutodeestadisticaycartografia/>).

2.3. Variables and Units of Measurement

Five variables are considered: educational stage, province, gender, age group and age of diagnosis (Table 4).

The units of measurement employed include the frequency or number of students identified with DD and the prevalence or number of subjects per population unit, expressed as a percentage (%).

Table 4
Variables

Educational Stage	Primary Education (Pr. Ed.) Compulsory Secondary Education (ESO) Baccalaureate (Bacc.) Intermediate Vocational Training Diploma (IVTD) Advanced Vocational Training Diploma (AVTD) Basic Vocational Training (BVT) Adult Secondary Education (ASE) Adult Baccalaureate (Adult Bacc.)
Province	Almería (AL) Cádiz (CA) Córdoba (CO) Granada (GR) Huelva (HU) Jaén (JA) Málaga (MA) Seville (SE)
Gender	Male (M) Female (F)
Age Group	6–8 years (5 years 6 months to 8 years 5 months) 8–12 years (8 years 6 months to 12 years 5 months) 12–16 years (12 years 6 months to 16 years 5 months) >16 years
Age of Diagnosis	6–8 years (5 years 6 months to 8 years 5 months) 8–12 years (8 years 6 months to 12 years 5 months) 12–16 years (12 years 6 months to 16 years 5 months) >16 years

2.4. Statistical Analysis

2.4.1. Prevalence and Gender

The prevalence calculation was based on students aged 6–16 years, distinguished by provinces, municipalities, gender and educational stages (Pr.Ed.–ESO). In the numerator, the number of students with DD in Andalusia aged 6–16 years was specified while in the denominator, the total number of students enrolled in Andalusia aged 6–16 years was multiplied by 100 (Merletti et al., 2011) [1*], calculating their estimated variance [2*] and the 95% confidence interval [3*] (Botella-Ausina and Sánchez-Meca, 2015). As the effect size of prevalence variations between provinces, the prevalence difference for each province and that observed for Andalusia was calculated [4*], along with the 95% confidence interval [6*, 7*] based on its estimated variance [5*]. To comprehend the relationship between the observed prevalence for

each gender, the prevalence ratio [8*, 9*] and confidence interval [11*, 12*] were determined. For the 95% CI, the value was set at

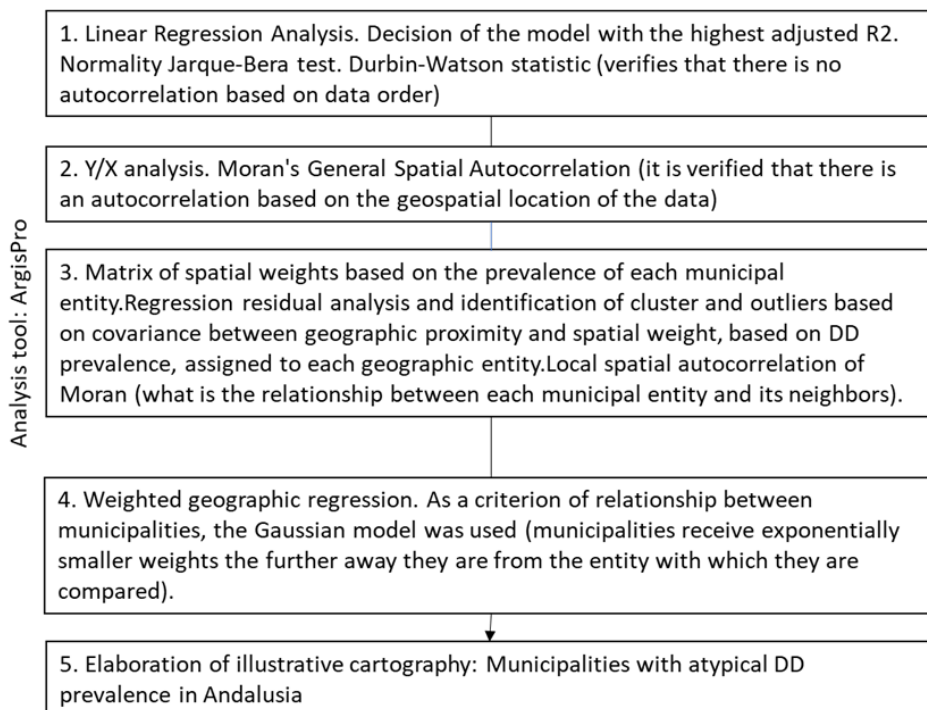
$$\left| Z_{1-\frac{\alpha}{2}} \right| = 1.96.$$

Prevalence of DD in Andalusia	$p = \frac{\text{Estudiantes DD 6 - 16y.}}{\text{Estudiantes 6 - 16 a.}} \times 100$	[1*]
Estimated prevalence variance	$v_p = \frac{p \cdot (1 - p)}{N_{\text{estudiantes 6-16 años}}}$	[2*]
Upper confidence interval	$p + \left Z_{1-\frac{\alpha}{2}} \right \cdot \sqrt{v_p}$	[3*]
Lower confidence interval	$p - \left Z_{1-\frac{\alpha}{2}} \right \cdot \sqrt{v_p}$	[3*]
Prevalence difference	$d_{p_1-p_0} = p_1 - p_0$	[4*]
Estimated variance of prevalence difference	$v_{pd1-p0} = \frac{p_1 \cdot (1-p_1)}{n_1} + \frac{p_0 \cdot (1-p_0)}{n_0}$	[5*]
Upp. Conf. Int. Preval. difference	$d_{p_1-p_0} + \left Z_{1-\frac{\alpha}{2}} \right \cdot \sqrt{v_{dp1-p_0}}$	[6*]
Low. Conf. Int. Preval. difference	$d_{p_1-p_0} - \left Z_{1-\frac{\alpha}{2}} \right \cdot \sqrt{v_{dp1-p_0}}$	[7*]
Prevalence ratio by gender (PR)	$PR = p_m / p_f$	[8*]
	$\text{LogPR} = \text{Log}_e(p_m / p_f)$	[9*]
Estimated variance of prevalence ratio	$v_{\text{LogPR}} = \frac{(1-p_h)}{p_h \cdot n_h} + \frac{(1-p_m)}{p_m \cdot n_m}$	[10*]
Confidence interval for PR	$\text{LogRP} + \left Z_{1-\frac{\alpha}{2}} \right \cdot \sqrt{v_{\text{LogRP}}}; \text{LogRP} - \left Z_{1-\frac{\alpha}{2}} \right \cdot \sqrt{v_{\text{LogRP}}};$	[11*]
	$+95\% \text{CI PR} = e^{+\text{CI}95\text{LogPR}}; -95\% \text{CI PR} = e^{-\text{CI}95\text{LogPR}}$	[12*]

To determine the relationship between the overall student distribution and students with DD, a regression analysis (Díaz-Quijano, 2016) and geographically weighted regression (GWR) were performed. Atypical cases corresponding to provinces or municipalities were identified through standardised residuals analysis with SDs >|2|, indicating the difference between each observed value and that predicted by the regression model, divided by the SD of all residuals except itself (Moore et al., 2014) (Figure 3).

Figure 3

Analysis Procedure for the Distribution of Students with DD in Andalusia



To determine the homogeneity in the gender-based distribution of prevalence across provinces, a hierarchical cluster analysis was performed (Vilà-Baños et al., 2014), employing the squared Euclidean distance as the mean and utilising the linkage between groups as the clustering method.

Three types of cartographic representations were provided: a frequency map (indicating the number of students with DD and their locations), a prevalence map of DD (Figure 4) and a regression residuals map (Figure 7). These maps aimed to identify municipalities with significant differences between observed prevalence and that predicted by the regression model.

2.4.2. Age Groups and Age of Diagnosis

Percentages were calculated for each age group and classified using k-means cluster analysis. Each category was treated as an independent variable (6–8 years, 8–12 years, 12–16 years, >16 years) (Table 4), labelled by provinces. ANOVA (Rubio-Hurtado and Berlanga-Silvestre, 2012) was conducted to determine significant differences among various age groups by provinces.

2.4.3. Academic Choices in Students with DD upon Completing ESO

Frequencies and percentages are indicated concerning the total number of students with DD at each educational stage, broken down by gender, age group and provinces. A hierarchical cluster analysis of percentages was conducted (Vilà-Baños et al., 2014) for the variables stage, gender and province.

2.5. Software Used

SPSS v.27 and ArcGIS Pro.

3. Results

3.1. Prevalence

Prevalence is balanced across provinces, stages and gender. Percentages by province and educational stage refer to students with DD by gender enrolled in that province (Table 5).

Table 5

Prevalence of Developmental Dyslexia in Andalusia. Specificity criterion <2 SDs

	Pr. Ed. (%)			ESO (%)			Pr. Ed. + ESO (%)		
	M	F	T	M	F	T	M	F	T
Almería	1.57	1.16	1.37	1.81	1.28	1.55	1.67	1.21	1.45
±95% CI	1.4–1.7	1.0–1.3	1.3–1.5	1.6–2.0	1.1–1.4	1.4–1.6	1.5–1.8	1.1–1.3	1.4–1.5
Cádiz	0.75	0.61	0.68	1.17	0.83	1.01	0.94	0.71	0.83
±95% CI	0.7–0.8	0.5–0.7	0.6–0.7	1.1–1.3	0.7–0.9	0.9–1.1	0.9–1.0	0.6–0.8	0.8–0.9
Córdoba	1.38	1.02	1.21	1.94	1.08	1.52	1.62	1.05	1.34
±95% CI	1.2–1.5	0.9–1.2	1.1–1.3	1.7–2.1	0.9–1.2	1.4–1.6	1.5–1.7	0.9–1.1	1.3–1.4
Granada	1.67	1.46	1.57	3.08	2.21	2.66	2.27	1.79	2.04
±95% CI	1.5–1.8	1.3–1.6	1.5–1.7	2.8–3.3	2.0–2.4	2.5–2.8	2.1–2.4	1.7–1.9	1.9–2.1
Huelva	1.05	0.66	0.86	1.61	1.05	1.34	1.29	0.82	1.06
±95% CI	0.9–1.2	0.5–0.8	0.8–1.0	1.4–1.8	0.9–1.2	1.2–1.5	1.2–1.4	0.7–0.9	1.0–1.1
Jaén	1.00	0.70	0.85	1.48	1.18	1.33	1.21	0.91	1.06
±95% CI	0.9–1.1	0.6–0.8	0.8–0.9	1.3–1.7	1.0–1.4	1.2–1.5	1.1–1.3	0.8–1.0	1.0–1.1
Málaga	1.06	0.86	0.96	1.81	1.36	1.59	1.38	1.08	1.23
±95% CI	1.0–1.1	0.8–0.9	0.9–1.0	1.7–1.9	1.2–1.5	1.5–1.7	1.3–1.4	1.0–1.1	1.2–1.3
Seville	1.08	0.85	0.97	1.61	1.11	1.37	1.31	0.96	1.14
±95% CI	1.0–1.2	0.8–0.9	0.9–1.0	1.5–1.7	1.0–1.2	1.3–1.4	1.2–1.4	0.9–1.0	1.1–1.2
Andalusia	1.15	0.90	1.03	1.77	1.24	1.51	1.42	1.05	1.24
±95% CI	1.1–1.2	0.9–1.0	1.0–1.1	1.7–1.8	1.2–1.3	1.5–1.6	1.4–1.5	1.0–1.1	1.2–1.3

M: boys; F: girls; T: boys+girls; 95 CI: 95% Confidence Interval.

3.2. By Gender

The population of students with DD is divided into 60% males and 40% females (1.5 males: 1 female). Comparing the prevalence of DD in males to females aged 6–16 years (1.42% in males/1.05% in females) reduces the ratio to 1.35 male/female (95% CI: 1.3523–1.3524) [11*–12*].

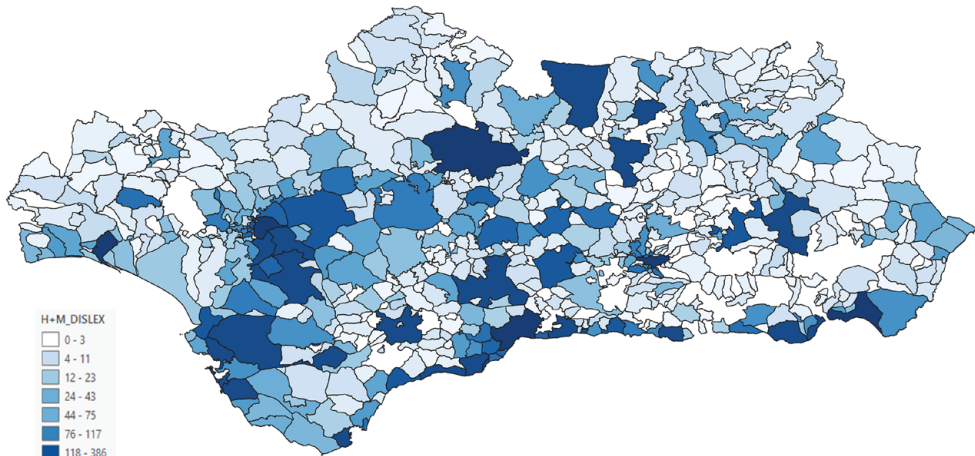
3.3. By Provinces

The overall estimated prevalence is 1.24% (95% CI: 1.22–1.26), indicating that 2 students out of every 161 enrolled in Primary Education and ESO in Andalusia exhibit a reading delay of 2 SDs or more compared to their age group (Figure 4).

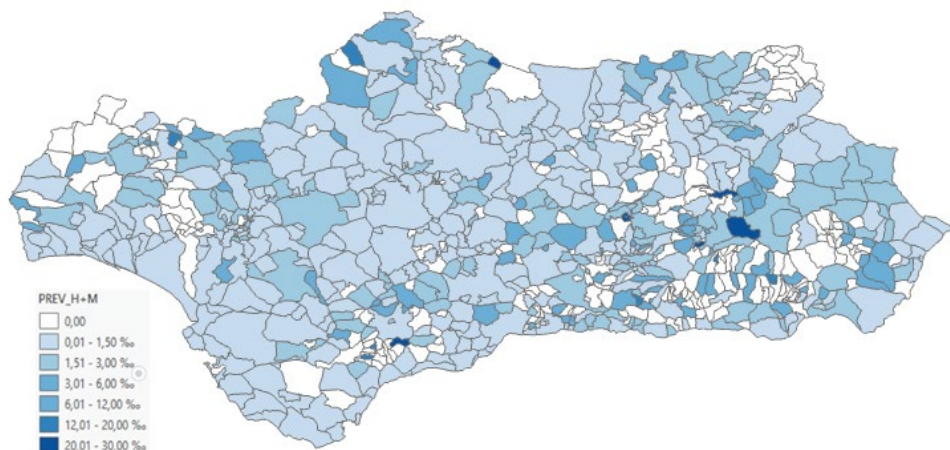
Figure 4

Distribution of Frequencies and Prevalence of Students with Dyslexia in Andalusia

Frequencies



Prevalence

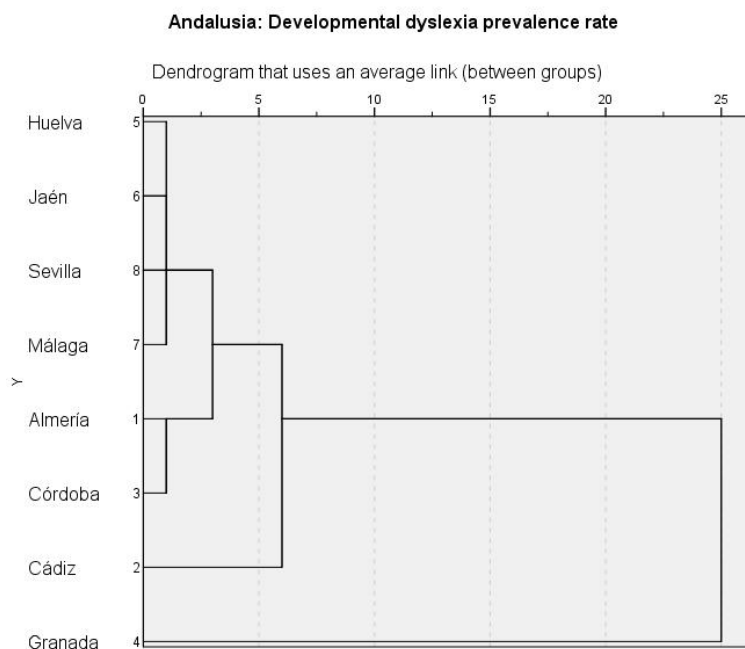


The hierarchical cluster analysis reveals three groups: Granada, with a prevalence of 2.04%; Cádiz, with a prevalence of 0.83%; and the rest of the provinces.

In the third group, two subgroups are distinguished: (1) Huelva (1.06%), Jaén (1.06%), Seville (1.14%) and Málaga (1.23%); and (2) Almería (1.45%) and Córdoba (1.34%) (Figure 5).

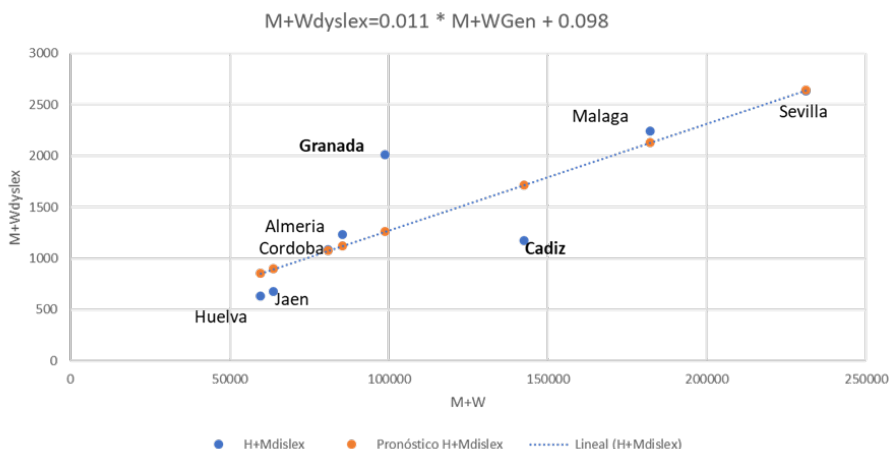
Figure 5

Dendrogram. Andalusia: Prevalence of Developmental Dyslexia



The prevalence of DD among students in ESO in Granada (3.08% in males and 2.66% in females) is at the upper end, making it the province with the highest DD prevalence in Andalusia. Conversely, Cádiz records the lowest prevalence (0.83%). Both values for Granada and Cádiz deviate from the overall prevalence observed in Andalusia (Figure 6).

Figure 6
Regression Analysis of Students with DD in Andalusia



The prevalence difference for each province compared to Andalusia positions Huelva, Jaén and Cádiz with negative values (below expectations), while Almería and, notably, Granada exhibit values higher than anticipated (Table 6).

Table 6
Difference in DD Prevalences Between Each Province and Andalusia

Province	Prev <2 SDs	NDD	Prev Dif [4*]	Prev Dif Var [5*]	+95 CI [6*]	-95 CI [7*]
Almería	1.45	1,584	0.21	7.385·10 ⁻⁹	0.210	0.000
Cádiz	0.83	1,707	-0.41	-1.482·10 ⁻⁹	-0.409	-0.413
Córdoba	1.34	1,510	0.1	5.409·10 ⁻⁹	0.100	0.000
Granada	2.04	2,832	0.8	1.343·10 ⁻⁸	0.800	0.000
Huelva	1.06	920	-0.18	1.239·10 ⁻⁹	-0.180	0.000
Jaén	1.06	990	-0.18	1.152·10 ⁻⁹	-0.180	0.000
Málaga	1.23	3,218	-0.01	1.576·10 ⁻⁹	-0.010	0.000
Seville	1.14	3,839	-0.1	7.453·10 ⁻¹⁰	-0.100	0.000

3.4. By Municipalities

The normality of data distribution is confirmed with a p-value from the Jarque-Bera test <0.05 ($p=0.00$). Students with DD are distributed proportionally to the population across the municipalities in Andalusia. The regression model (Figure 3) explains 86.72% of the variability in the distribution of students aged 6–16 years with DD in Andalusia (p -value: 0.00, adjusted R^2 : 0.867), showing a robust correlation between the distribution of students aged 6–16 years and those with DD (correlation coefficient: 0.931). The p -value of the Durbin-Watson (DW) statistic is greater than 0.05

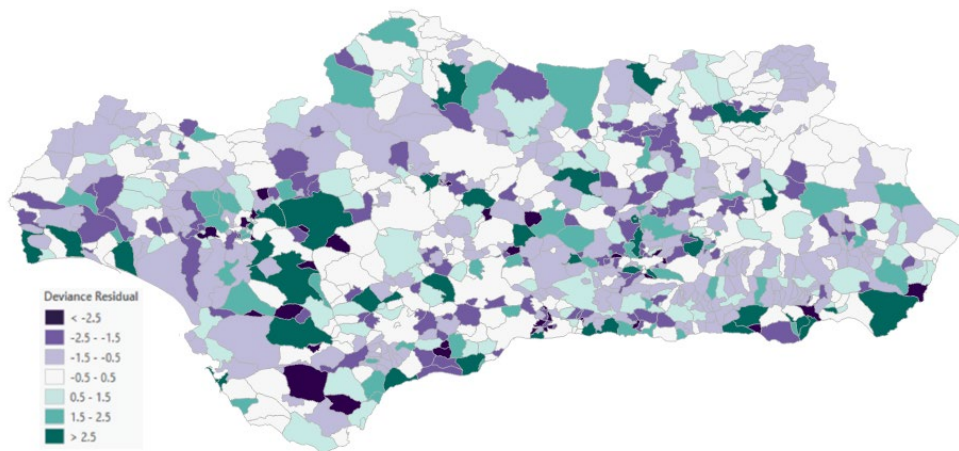
(DW: 1.97, p-value: 0.34), indicating no serial correlation in residuals, suggesting a random distribution of residuals. The global Moran's index (0.27; $z=5.15$; p-value: 0.00) suggests a probability of less than 1% that the clustered geostatistical pattern is due to random chance. In other words, there is a significant relationship between the prevalences found for each municipality and those of neighbouring municipalities.

The municipal regression analysis (geographically weighted regression[GWR], ArcGIS Pro.v2.7.0) identifies 16 municipalities with atypical prevalence (standardised residuals $SD > |2|$) (Figure 7).

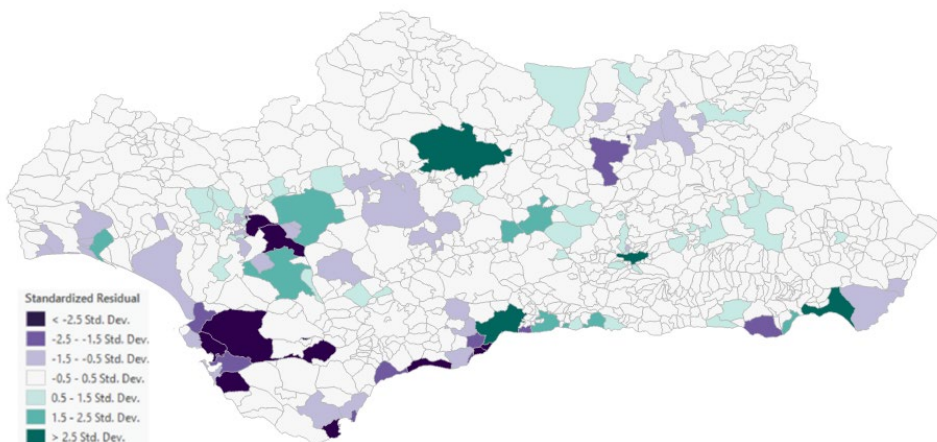
Figure 7

Municipalities with Atypical DD Prevalence in Andalusia

Residuals of the Regression Model



Standardised Residuals of the Regression Model



Municipalities such as Almería, Granada, Nerja and Carmona demonstrate higher prevalence than anticipated. In the province of Cádiz, the municipalities of Algeciras, Chiclana, Jerez, La Línea, El Puerto de Santa María and Sanlúcar exhibit lower prevalence than expected, ranging from 0.46% to 0.54%. Torremolinos (Málaga) records the lowest prevalence of all (0.28%) (Table 7).

Table 7

Municipalities in Andalusia with Atypical DD Prevalence Values $>|2 SD|$

Province	Municipality	Gen. M+F	M+F with DD	Predict. of M+F with DD	Residuals	Stand. Resid.	Prev. (%)
Almería	1. Almería	13,124	251	132.99	118.00	13.6	1.91
Cádiz	2. Algeciras	8,646	43	87.65	-44.65	-4.64	0.49
	3. Chiclana de la Frontera	6,103	28	61.90	-33.90	-3.49	0.46
	4. Jerez de la Frontera	14,304	75	144.94	-69.94	-7.53	0.52
	5. La Línea de la Concepción	3,974	17	40.34	-23.34	-2.39	0.43
	6. El Puerto de Santa María	6,016	32	61.02	-29.02	-2.98	0.53
	7. Sanlúcar de Barrameda	4,631	25	46.99	-21.99	-2.25	0.54
	Granada	8. Granada	12,832	301	130.04	170.96	22.9
Jaén	9. Jaén	6,852	49	69.48	-20.48	-2.1	0.72
Málaga	10. Benalmádena	4,521	20	45.88	-25.88	-2.65	0.44
	11. Marbella	9,834	67	99.68	-32.68	-3.38	0.68
	12. Nerja	1,204	36	12.29	23.71	2.42	2.99
	13. Torremolinos	4,334	12	43.98	-31.98	-3.28	0.28
Seville	14. Alcalá de Guadaíra	6,092	31	61.79	-30.79	-3.17	0.51
	15. Carmona	1,821	39	18.54	20.46	2.09	2.14
	16. Seville	41,096	358	416.24	-58.24	-7.58	0.87

3.5. Age Groups

Regarding age groups, there are 504 students with DD in the 6–8 years category (3%), 5,164 in the 8–12 years category (31%), 4,908 in the 12–16 years category (29.6%) and 6,024 in the >16 years category (36.3%).

K-means cluster analysis reveals two groups: Almería and Córdoba on the one hand, and on the other, the remaining provinces, further divided into two subgroups: (1) Cádiz-Huelva-Seville, and (2) Málaga-Jaén-Granada (Table 8).

ANOVA analysis only indicates significant differences in the 6–8 years group, with higher percentages in Málaga-Jaén-Granada and lower percentages in Cádiz-Huelva-Seville.

Table 8

Mean Percentage Distribution of Students with DD by Provinces

%	Almería-Córdoba	Cádiz-Huelva-Seville	Málaga-Jaén-Granada
6–8 years	2.83	2.70	3.75
8–12 years	30.23	31.40	33.40
12–16 years	30.97	28.47	29.20
>16 years	35.97	37.47	33.65

3.6. Age of Diagnosis

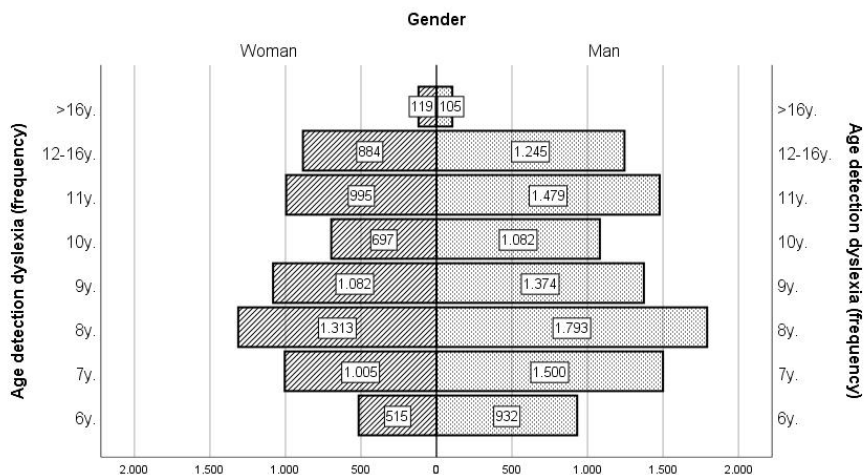
The analysis of ages of detection, using the *t*-test, yields an average value of 9 years and 4 months, with an SD of 2 years and 5 months. The confidence interval is 99%, with a standard error of 0.02 (bilateral significance: 0.00), spanning from 9 years and 4 months to 9 years and 5 months, with a median of 8 years and 9 months (Table 9).

Table 9
Age of Diagnosis of Reading Disorders (Developmental Dyslexia) in Andalusia

Age	Male		Female		Total		
	Male	%	Female	%	Total	%	Accum. %
6 years	932	9.86	515	7.79	1,447	8.98	9
7 years	1,500	15.86	1,005	15.20	2,505	15.54	24.38
8 years	1,739	18.39	1,313	19.86	3,106	19.27	43.65
9 years	1,374	14.53	1,082	16.37	2,456	15.24	58.89
10 years	1,082	11.44	697	10.54	1,779	11.04	69.93
11 years	1,479	15.64	995	15.05	2,474	15.35	85.28
12–16 years	1,245	13.17	884	13.37	2,129	13.21	98.49
>16 years	105	1.11	119	1.80	224	1.39	100
	9,456	100.00	6,610	100.00	16,120	100.00	

From the analysis of frequency percentages of detection ages (Table 7), 24.38% of students are identified at 7 years old. By the age of 10, this percentage increases to 70%, reaching 98.49% at 16 years old. The highest identification percentage (50%) occurs between 7–9 years (Figure 8).

Figure 8
Andalusia: Age of Diagnosis of Developmental Dyslexia



3.7. Academic Choices of Students with DD upon Completing ESO

In Andalusia, 16,600 students with DD are enrolled in non-university education, comprising 9,793 males (59%) and 6,807 females (41%) (Table 10).

Table 10

Distribution of Students with Developmental Dyslexia by Educational Stages

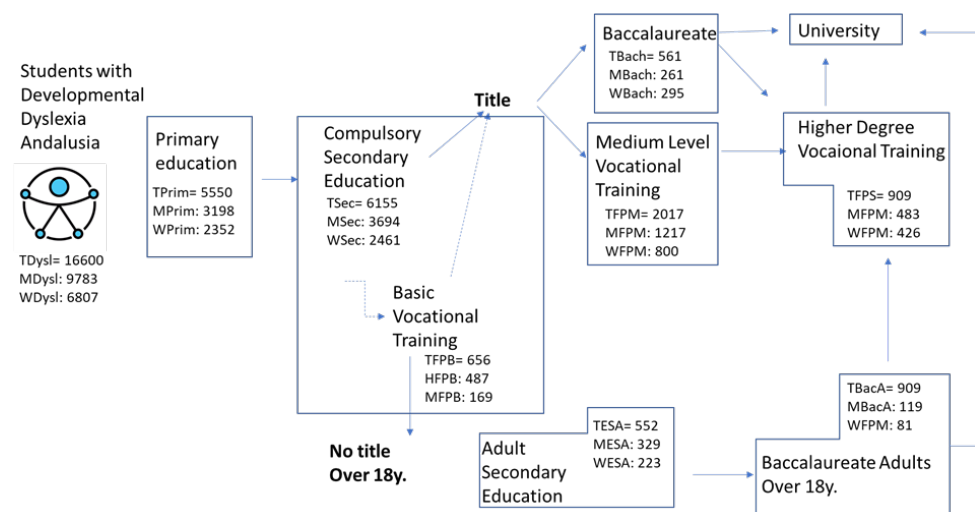
Educational Stage	Almería	Cádiz	Córdoba	Granada	Huelva	Jaén	Málaga	Seville	Andalusia
Pr. Ed.	689	543	557	878	295	307	1,006	1,275	5,550
ESO	544	635	528	1,138	339	371	1,237	1,363	6,155
BVT	38	67	87	133	44	47	129	111	656
IVTD	117	221	162	316	118	143	423	517	2,017
AVTD	74	64	89	136	52	51	169	274	909
Baccalaureate	42	70	33	112	23	27	132	122	561
ASE	47	90	41	85	39	37	91	122	552
Adult Bacc.	33	17	13	34	10	7	31	55	200
	1,584	1,707	1,510	2,832	920	990	3,218	3,839	16,600

Pr. Ed.: Primary Education; ESO: Compulsory Secondary Education; BVT: Basic Vocational Training; IVTD: Intermediate Vocational Training Diploma; AVTD: Advanced Vocational Training Diploma; ASE: Adult Secondary Education; Baccalaureate; Adult Baccalaureate.

656 students with DD—3.95%—(487 boys and 169 girls) opt for Basic Vocational Training as an alternative to ESO, and 552—3.33%—(329 boys and 223 girls) attend Adult Secondary Education after not obtaining the ESO diploma (Figure 9).

Figure 9

Distribution of Students with DD in Andalusia by Educational Stages



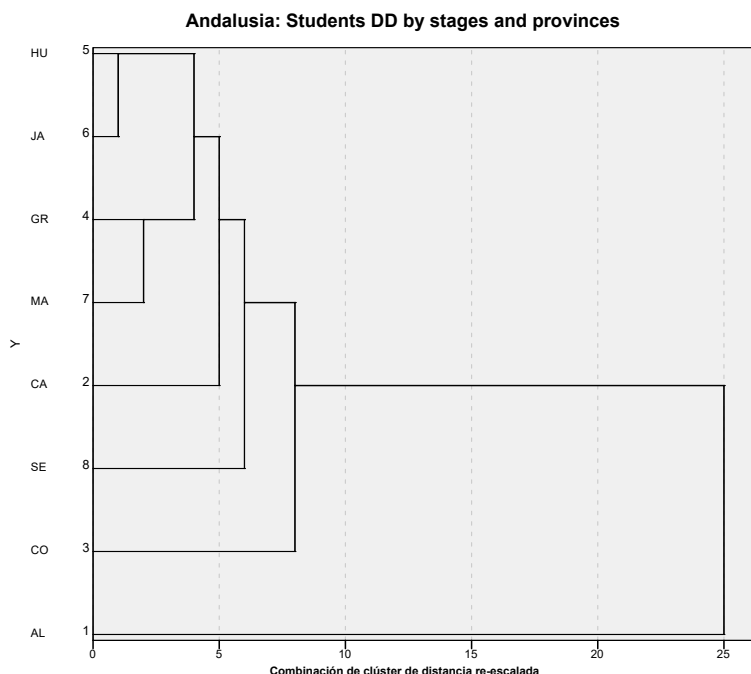
After completing ESO, 561 (3.38%) pursue Baccalaureate (266 boys and 295 girls), and 2,017 (12.5%) pursue an Intermediate Vocational Training Diploma (IVTD) (1,217 boys and 800 girls). The highest percentage of students with DD studying Baccalaureate is in Cádiz-Málaga (4.10%) and Granada (3.95%), while the lowest is in Almería (2.65%), Jaén (2.73%) and Huelva (2.50%).

Vocational Training is the preferred option for students with DD, with the highest percentage in Jaén (14.44%), followed by Seville (13.47%), Málaga (13.14%), Huelva (12.83%) and Cádiz (12.9%). Next are Córdoba (10.73%) and Granada (11.6%), and finally, Almería (7.39%).

Upon completing Baccalaureate or IVTD studies, 909—5.48% (483 boys and 426 girls)—continue studies in Higher Vocational Training. The exact number continuing university studies is unknown. The highest percentage is in Seville (7.14%), and the lowest is in Cádiz (3.75%). In between are Huelva-Córdoba (5.65–5.89%), Jaén-Málaga (5.15–5.25%) and Granada-Almería (4.80–4.67%) (Figure 10).

Figure 10

Dendrogram. Andalusia: Students with DD by Stages and Provinces



4. Discussion and Conclusions

4.1. Prevalence

In line with Brimo et al. (2021) and Jiménez et al. (2011), the gender-based prevalence differences for DD are 1.3 male/female.

The prevalence of DD in Andalusia, with a specificity criterion of <2 SDs, is 1.24%, meaning 1 in every 80 students requires specific intervention related to severe developmental dyslexia (Cuetos et al., 2007) or very severe dyslexia (Cuetos et al., 2020).

Assuming that reading ability conforms to the normal distribution, an approximate adjustment is performed of the observed prevalence for <2 SDs to an estimated prevalence for <1.5 SDs based on the empirical rule that relates data distribution percentages to the standard deviation (Dagnino, 2014; Johnson and Kuby, 2012) (Table 11).

This results in an estimated prevalence of DD in Andalusia, for the <1.5 SD criterion, of 3.61% (Figure 11), similar to those reported by Jiménez et al. (2009) and González-Martín et al. (2013) in the Canary Islands, at 3.2%, using the same <1.5 SD specificity criterion.

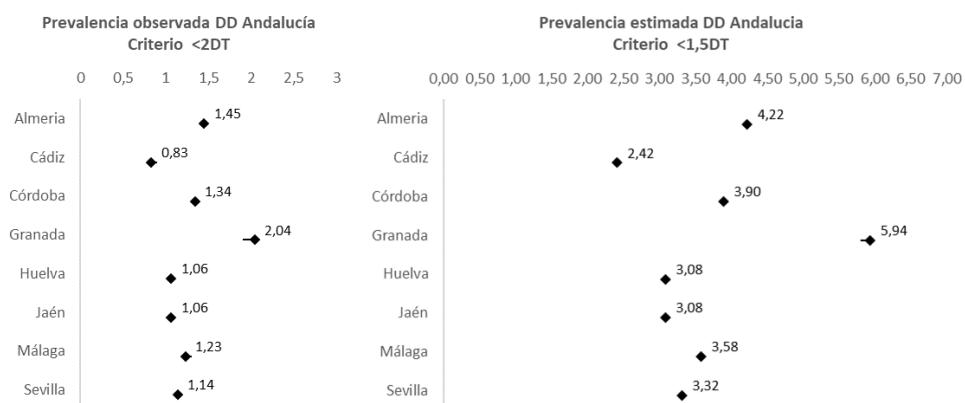
Table 11

Observed Prevalence (crit. of <2 SDs) and Estimated Prevalence (crit. of <1.5 SDs) of Students with DD in Andalusia

Province	Prev1 <2 SDs	Prev1 95% CI	Ndislex1 <2 SDs	Prev2 <1.5 SDs	Prev2 95% CI	Ndislex2 <1.5 SDs	Ndislex2 95% CI
Almería	1.45	1.4–1.5	1,584	4.22	4.11–4.33	4,609	4,493–4,726
Cádiz	0.83	0.8–0.9	1,707	2.42	2.36–2.47	4,967	4,962–5,073
Córdoba	1.34	1.3–1.4	1,510	3.90	3.80–4.00	4,394	4,282–4,506
Granada	2.04	1.9–2.1	2,832	5.94	5.82–6.05	8,241	8,079–8,403
Huelva	1.06	1.0–1.1	920	3.08	2.99–3.18	2,677	2,594–2,761
Jaén	1.06	1.0–1.1	990	3.08	2.99–3.18	2,881	2,794–2,967
Málaga	1.23	1.2–1.3	3,218	3.58	3.52–3.64	9,364	9,203–9,525
Seville	1.14	1.1–1.2	3,839	3.32	3.27–3.37	11,171	10,998–11,345
Andalusia	1.24	1.2–1.3	16,600	3.61	3.58–3.64	48,306	47,940– 48,672

Figure 11

Observed Prevalence (<2 SDs) and Estimated Prevalence (<1.5 SDs) of DD in Andalusia



Significant differences are evident for Granada (2.04%) and Cádiz (0.83%). It is important to review the identification and diagnosis processes of students with DD in the municipalities of Seville, Alcalá de Guadaira, Algeciras, Chiclana, Jerez, La Línea de la Concepción, El Puerto de Santa María, Sanlúcar, Jaén, Benalmádena, Marbella and Torremolinos, where the prevalence is lower than expected (Table 5).

Assuming that 16,600 students with DD need specific educational intervention (specificity criterion of <2 SDs), there would be an estimated 47,306 (95 CI: 47,940–48,672) students with DD for a specificity criterion of <1.5 SDs. This suggests that 31,706 students with reading difficulties might need compensatory educational measures to facilitate their learning, despite not being identified as students with DD. It is necessary to review the inclusion criteria for students with DD in the census of students with specific educational support needs in Andalusia.

4.2. Age of Diagnosis

The results of DD intervention are particularly effective in the first school year, when there is a more intensive approach to written language acquisition (Ehri et al., 2001). However, detection is relatively low at 7 years old (24.38%), having to wait until 10 years to reach 70% (fourth year of Primary Education). Early detection at younger ages is necessary.

4.3. Academic Choices of Students with DD upon Completing ESO

Upon completing ESO, 34.42% of the general student population pursue Vocational Training and 65.58% pursue Baccalaureate (Regional Government of Andalusia, 2019). Students with DD prefer the Vocational Training option (Donato et al., 2022;

Rinkute et al., 2014), and this decision is not contingent on gender. Upon completing ESO, 54.71% of students with DD in Andalusia pursue Vocational Training and 45.29% pursue Baccalaureate.

Of the total number of DD students enrolled in post-compulsory education (3,687), 79.36% (54.71% IVTD and 24.65% AVTD) pursue Vocational Training studies.

The decision to study Baccalaureate or Vocational Training could be influenced by academic difficulties associated with DD, potentially overshadowing their preferences or personal interests (Peer Review 1, 2023).

Almería is the province with the lowest percentage of DD students who, after completing ESO, enrol in IVTD or Baccalaureate. It is essential to know the number of DD students who do not complete ESO.

4.4. Limitations

The prevalence results obtained relate to a reading level below 2 SDs than that expected for their age, whereas reference studies use a criterion of 1.5 SDs. Therefore, an estimation based on the normal distribution for 1.5 SDs has been made.

Concerning the study of academic decisions made by students with DD, there is a lack of information on DD students pursuing university studies, as well as the number who leave the educational system without obtaining a basic qualification. Although the reintegration of DD students into the educational system with Adult Secondary Education has been explored, there is no data on students attempting to obtain qualifications through free tests.

4.5. Prospective

Regarding the prevalence of DD in Andalusia, it is advisable to conduct sample assessments in the different provinces of Andalusia to assess the reliability of the data used, with particular attention to the differences in the number of students who might experience reading difficulties due to a reading level below 1.5 SDs expected for their age and are not identified as students with DD.

Concerning the academic decisions made by students with DD, it is essential to understand which students do not complete ESO and discontinue studies in the various provinces of Andalusia.

5. Ethical Declaration

The study was approved by the Bioethics Committee of the University of Almería (UALBIO 2022/058).

6. References

- American Psychiatric Association (APA) (2013). *Manual diagnóstico y estadístico de trastornos mentales: DSM-5™ (5ª ed.)*. American Psychiatric Publishing, Inc. <https://doi.org/10.1176/appi.books.9780890425596>
- Anastasiou, D. & Polychronopoulou, S. (2009). Identification and overidentification of specific learning disabilities (dyslexia) in GREECE. *Learning Disability Quarterly*, 32(2), 55-69. <https://doi.org/10.2307/27740357>
- Andreola, C., Mascheretti, S., Belotti, R., Ogliari, A., Marino, C., Battaglia, M. & Scaini, S. (2021). The heritability of reading and reading-related neurocognitive components: A multi-level meta-analysis. *Neuroscience & Biobehavioral Reviews*, 121, 175-200. <https://doi.org/10.1016/j.neubiorev.2020.11.016>
- Angerri, X. (2005). Dislexia. In M. Puyuelo (Ed.). *Casos clínicos en logopedia 2* (pp. 253-287). Madrid: Masson.
- Barbiero, C., Montico, M., Lonciari, I., Monasta, L., Penge, R., Vio, C., Tressoldi, P. E., Carozzi, M., de-Petris, A., de-Cagno, A. G., Crescenzi, F., Tinarelli, G., Leccese, A., Pinton, A., Belacchi, C., Tucci, R., Musinu, M., Tossali, M. L., Antonucci, A. M., ... Ronfani, L. (2019). The lost children: The underdiagnosis of dyslexia in Italy. A cross-sectional national study. *PLoS ONE*, 14(1). <https://doi.org/10.1371/journal.pone.0210448>
- Berkeley, S., Mastropieri, M. A. & Scruggs, T. E. (2011). Reading Comprehension Strategy Instruction and Attribution Retraining for Secondary Students With Learning and Other Mild Disabilities. *Journal of Learning Disabilities*, 44(1), 18-32. <https://doi.org/10.1177/0022219410371677>
- Bosch-Bayard, J., Girini, K., Biscay, R. J., Valdes-Sosa, P., Evans, A. C. & Chiarenza, G. A. (2020). Resting EEG effective connectivity at the sources in developmental dysphonetic dyslexia. Differences with non-specific reading delay. *International Journal of Psychophysiology*, 153, 135-147. <https://doi.org/10.1016/j.ijpsycho.2020.04.021>
- Botella-Ausina, J. & Sánchez-Meca, J. (2015). *Meta-análisis en ciencias sociales y de la salud*. Madrid: Síntesis.
- Brimo, K., Dinkler, L., Gillberg, C., Lichtenstein, P., Lundström, S. & Åsberg-Johnels, J. (2021). The co-occurrence of neurodevelopmental problems in dyslexia. *Dyslexia*, 27(3), 277-293. <https://doi.org/10.1002/dys.1681>
- Camarata, S. & Woodcock, R. (2006). Sex differences in processing speed: Developmental effects in males and females. *Intelligence*, 34(3), 231-252. <https://doi.org/https://doi.org/10.1016/j.intell.2005.12.001>
- Canary Islands Government (2010). Orden 13 diciembre 2010, que regula la atención al alumnado con necesidades específicas de apoyo educativo en Comunidad Autónoma de Canarias. *Boletín Oficial Canarias*, 250, 32374-32398. <http://sede.gobcan.es/boc/boc-a-2010-250-7036.pdf>

- Carrillo, M. S., Alegría, J., Miranda, P. & Sánchez-Pérez, N. (2011). Evaluación de la dislexia en la escuela primaria: Prevalencia en español. *Escritos de Psicología / Psychological Writing*, 4(2), 35-44. <https://doi.org/10.5231/psy.writ.2011.1407>
- Castilla y León Government (2019). Acuerdo de Mesa de las Cortes de Castilla y León por el que se ordena publicación del Informe Anual correspondiente al año 2018 remitido por el Procurador del Común de Castilla-León. *Boletín Oficial de las Cortes de Castilla y León*, 12, 30/08/2019, 132-1066. <https://2004.ccyll.es/SIRDOC/PDF/PUBLOFI/BO/CCL/10L/BOCCL1000012A.pdf#page=2>
- Cheruiyot, I. & Muthoni-Mathai, M. K. (2011). Prevalence of Dyslexia among Children Aged 7 to 9 in Nairobi, Kenya. *Journal for the Education of the Gifted*, 010(32), 47-74. <http://erepository.uonbi.ac.ke/handle/11295/94938#.YjhO849TGgU.mendeley>
- Cheyney-Collante, K., Gonsalves, V. & Giuliani, S. (2021). Online Dyslexia Professional Development for Diverse Practitioners: A Multiple-Case Study. *Teacher Education and Special Education (November 2021)*. <https://doi.org/10.1177/08884064211050344>
- Costa-Ball, C. D. (2021). *Estudio epidemiológico del déficit lector en educación primaria en Uruguay* [doctoral thesis]. Universidad de Murcia. <http://hdl.handle.net/10201/115024>
- Cuadro, A., Von-Hagen, A. & Costa-Ball, D. (2017). Diferencias procedimentales en el cálculo de la prevalencia del retraso lector en escolares hispanoparlantes. *Estudios de Psicología*, 38(1), 169-197. <https://doi.org/10.1080/02109395.2016.1268388>
- Cuetos, F., Arribas, D., Suárez-Coalla, P. & Martínez-García, C. (2020). *PROLEXIA. Diagnóstico y Detección Temprana de la Dislexia. Manual*. Madrid: TEA.
- Cuetos, F., Rodríguez, B., Ruano, E. & Arribas, D. (2007). *Prolec-R. Batería de Evaluación de los Procesos Lectores, Revisada. Manual*. Madrid: TEA.
- Dagnino, J. (2014). La distribución normal. *Bioestadística y epidemiología. Revista Chilena de Anestesiología*, 43 (2), 116-121. <https://doi.org/10.25237/revchilanestv43n02.08>
- Dale, P. S., McMillan, A. J., Hayiou-Thomas, M. E. & Plomin, R. (2014). Illusory recovery: Are recovered children with early language delay at continuing elevated risk? *American Journal of Speech-Language Pathology*, 23(3), 437-447. https://doi.org/10.1044/2014_AJSLP-13-0116
- Deacon, L., Macdonald, S. J. & Donaghue, J. (2020). «What's wrong with you, are you stupid?» Listening to the biographical narratives of adults with dyslexia in an age of 'inclusive' and 'anti-discriminatory' practice. *Disability and Society*, 35, 1-21. <https://doi.org/10.1080/09687599.2020.1815522>
- Defior-Citoler, S., Fonseca, L. E., Gottheil, B., Aldrey, A., Pujals, M., Rosa, G., Jiménez-Fernández, G. & Serrano-Chica, F. (2006). *LEE. Test de Lectura y Escritura en Español. Manual*. Barcelona: Paidós.

- De-Reyes-Aragón, C., Lewis-Harb, S., Mendoza-Rebolledo, C., Neira-Mezza, D., León-Jacobus, A. & Peña-Ortiz, M. (2008). Estudio de prevalencia de dificultades de lectura en niños escolarizados de 7 años de Barranquilla (Colombia). *Psicología desde el Caribe*, 22, 37-49. <https://www.redalyc.org/articulo.oa?id=21311866004>
- Diakogiorgi, K. & Tsiligirian, E. (2016). Parents' and school career counsellors' evaluations of the occupational competence of children with dyslexia. *The European Journal of Counselling Psychology*, 4(1), 32-61. <https://doi.org/10.5964/ejcop.v4i1.97>
- Díaz-Quijano, F. A. (2016). Regresiones aplicadas al estudio de eventos discretos en epidemiología. *Revista de La Universidad Industrial de Santander. Salud*, 48(1), 9-15. <https://doi.org/10.18273/revsal.v48n1-2016001>
- Donato, A., Muscolo, M., Arias-Romero, M., Capri, T., Calarese, T. & Olmedo-Moreno, E. M. (2022). Students with dyslexia between school and university: Post-diploma choices and the reasons that determine them. An Italian study. *Dyslexia*, 28(1), 110-127. <https://doi.org/10.1002/dys.1692>
- Ehri, L. C., Nunes, S. R., Stahl, S. A. & Willows, D. M. (2001). Systematic phonics instruction helps students learn to read: Evidence from the national reading panel's meta-analysis. *Review of Educational Research*, 71(3), 393-447. <https://doi.org/10.3102/00346543071003393>
- Escalante-Angulo, C. (2004). El tamaño de una muestra en un estudio de prevalencia. *Ciencia y Tecnología para la salud visual y ocular*, 2(2). <https://ciencia.lasalle.edu.co/svo/vol2/iss2/8/>
- Fawcett, A. J. & Nicolson, R. I. (2011). *DST-J. Test para la Detección de la Dislexia en Niños. Manual*. Madrid: TEA.
- Fluss, J., Ziegler, J., Ecalle, J., Magnan, A., Warszawski, J., Ducot, B., Richard, G. & Billard, C. (2008). Prevalence of reading disabilities in early elementary school: impact of socioeconomic environment on reading development in 3 different educational zones. *Archives de Pediatrie: Organe Officiel de La Societe Francaise de Pediatrie*, 15(6), 1049-1057. <https://doi.org/10.1016/j.arcped.2008.02.012>
- Galuschka, K., Ise, E., Krick, K. & Schulte-Körne, G. (2014). Effectiveness of treatment approaches for children and adolescents with reading disabilities: A meta-analysis of randomized controlled trials. *PLoS ONE*, 9(2). <https://doi.org/10.1371/journal.pone.0089900>
- Galve-Manzano, J. L. (2020). BECOLE-R: Una herramienta actualizada para evaluar la lectura, la escritura, la dislexia y la disgrafía. *Revista Digital EOS Perú*, 8(1), 19-36. <https://revistaeos.net.pe/index.php/revistadigitaleos/article/view/40>
- González-Martín, D., Jiménez-González, J. E., Rodríguez, C. & Díaz-Megolla, A. (2013). Dislexia en adolescentes españoles. *Revista de Psicología y Educación*, 8(2), 31-49. <http://www.revistadepsicologiayeducacion.es/pdf/89.pdf>
- González-Valenzuela, M. J. & Martín-Ruiz, I. (2020). Assessing dyslexia at six year of age. *Journal of Visualized Experiments*, 159, 1-12. <https://doi.org/10.3791/60858>

- Hulme, C. & Snowling, M. J. (2016). Reading disorders and dyslexia. *Current opinion in pediatrics*, 28(6), 731-735. <https://doi.org/10.1097/MOP.0000000000000411>
- Ingesson, S. G. (2007). Growing up with dyslexia: Interviews with teenagers and young adults. *School Psychology International*, 28(5), 574-591. <https://doi.org/10.1177/0143034307085659>
- Jiménez, J. E., García, C., Siegel, L. S., O'Sanaban, I., García, E. & Rodríguez, C. (2011). Gender ratio and cognitive profiles in dyslexia: a cross-national study. *Reading and Writing*, 24, 729-747. <https://doi.org/10.1007/s11145-009-9222-6>
- Jiménez, J. E., Guzmán, R., Rodríguez, C. & Artilles, C. (2009). Prevalencia de las dificultades específicas de aprendizaje: La dislexia en español. *Anales de Psicología*, 25(1), 78-85. <https://revistas.um.es/analesps/article/view/71521>
- Jiménez, J. E., Rodríguez, C. & Ramírez, G. (2009). Spanish developmental dyslexia: Prevalence, cognitive profile, and home literacy experiences. *Journal of Experimental Child Psychology*, 103(2), 167-185. <https://doi.org/10.1016/j.jecp.2009.02.004>
- Jiménez, J. E., Siegel, L. S. & López, M. R. (2003). The Relationship Between IQ and Reading Disabilities in English-Speaking Canadian and Spanish Children. *Journal of Learning Disabilities*, 36(1), 15-23. <https://doi.org/10.1177/00222194030360010301>
- Johnson, R. & Kubly, P. (2012). *Elementary Statistic*. Cengage Learning.
- Junta-Andalucía (2017). Modificación 8 marzo 2017 del Anexo I de Circular 10/09/2012 de Dirección General Participación y Equidad, que establece criterios y orientaciones para registro y actualización de datos en el censo del alumnado con necesidades específicas de apoyo educativo en sistema de información Séneca. <https://n9.cl/9iwx>
- Junta-Andalucía (2021a). Estadística sobre alumnado escolarizado en sistema educativo andaluz, a excepción del universitario. Estadística-cartografía (updated as 5-21-2021). https://www.juntadeandalucia.es/export/drupaljda/producto_estadistica/19/06/Datos%20avance%20alumnado%202020_2021_0.xls
- Junta-Andalucía (2021b). *Consejería de Educación y Deporte: Estadística y cartografía*. <https://juntadeandalucia.es/organismos/educacionydeporte/servicios/estadistica-cartografia.html>
- Krivec, T., Košak-Babuder, M., Godec, P., Weingerl, P. & Stankovič-Elesini, U. (2020). Impact of digital text variables on legibility for persons with dyslexia. *Dyslexia*, 26(1), 87-103. <https://doi.org/10.1002/dys.1646>
- Lewandowski, L. J., Lovett, B. J. & Rogers, C. L. (2008). Extended Time as a Testing Accommodation for Students With Reading Disabilities. *Journal of Psychoeducational Assessment*, 26(4), 315-324. <https://doi.org/10.1177/0734282908315757>
- Lin, Y., Zhang, X., Huang, Q., Lv, L., Huang, A., Li, A., Wu, K. & Huang, Y. (2020). The prevalence of dyslexia in primary school children and their Chinese literacy

- assessment in Shantou, China. *International Journal of Environmental Research and Public Health*, 17(19), 1-12. <https://doi.org/10.3390/ijerph1719140>
- Lindstrom, J. H. (2007). Determining Appropriate Accommodations for Postsecondary Students with Reading and Written Expression Disorders. *Learning Disabilities Research & Practice*, 22(4), 229-236. <https://doi.org/10.1111/j.1540-5826.2007.00251.x>
- Lithari, E. (2019). Fractured academic identities: dyslexia, secondary education, self-esteem and school experiences. *International Journal of Inclusive Education*, 23(3), 280-296. <https://doi.org/10.1080/13603116.2018.1433242>
- Liu, L., Wang, J., Shao, S., Luo, X., Kong, R., Zhang, X. & Song, R. (2016). Descriptive epidemiology of prenatal and perinatal risk factors in a Chinese population with reading disorder. *Scientific Reports*, 6(1), 36697. <https://doi.org/10.1038/srep36697>
- Lyon, G. R., Shaywitz, S. E. & Shaywitz, B. A. (2003). A definition of dyslexia. *Annals of Dyslexia*, 53, 1-14. <https://doi.org/10.1007/s11881-003-0001-9>
- McArthur, G., Sheehan, Y., Badcock, N. A., Francis, D. A., Wang, H. C., Kohnen, S., Banales, E., Anandakumar, T., Marinus, E. & Castles, A. (2018). Phonics training for English-speaking poor readers. *Cochrane Database of Systematic Reviews*, 2018(11). <https://doi.org/10.1002/14651858.CD009115.pub3>
- Merletti, F., Solkolne, C. & Vineis, P. (2011). Epidemiología y Estadística. In *Enciclopedia OIT. Tomo I* (pp. 28.1-28.40). Organización Internacional del Trabajo. <https://www.insst.es/documents/94886/161958/Capitulo+28.+Epidemiologia+y+estadística>
- Moll, K. & Landerl, K. (2009). Double dissociation between reading and spelling deficits. *Scientific Studies of Reading*, 13, 359-382. <https://doi.org/10.1080/10888430903162878>
- Moll, K., Thompson, P. A., Mikulajova, M., Jagercikova, Z., Kucharska, A., Franke, H., Hulme, C. & Snowling, M. J. (2016). Precursors of Reading Difficulties in Czech and Slovak Children At-Risk of Dyslexia. *Dyslexia*, 22, 120-136. <https://doi.org/10.1002/dys.1526>
- Moojen, S. M. P., Gonçalves, H. A., Bassôa, A., Navas, A. L., De-Jou, G. & Miguel, E. S. (2020). Adults with dyslexia: how can they achieve academic success despite impairments in basic reading and writing abilities? The role of text structure sensitivity as a compensatory skill. *Annals of Dyslexia*, 70(1), 115-140. <https://doi.org/10.1007/s11881-020-00195-w>
- Moore, D. S., McCabe, G. P. & Craig, B. A. (2014). *Introduction the Practice of Statistics*, 8^a ed. W. F. Freeman.
- Morfidi, E., Van-Der-Leij, A., De Jong, P. F., Scheltinga, F. & Bekebrede, J. (2007). Reading in two orthographies: A cross-linguistic study of Dutch average and poor readers who learn English as a second language. *Reading and Writing*, 20(8). <https://doi.org/10.1007/s11145-006-9035-9>

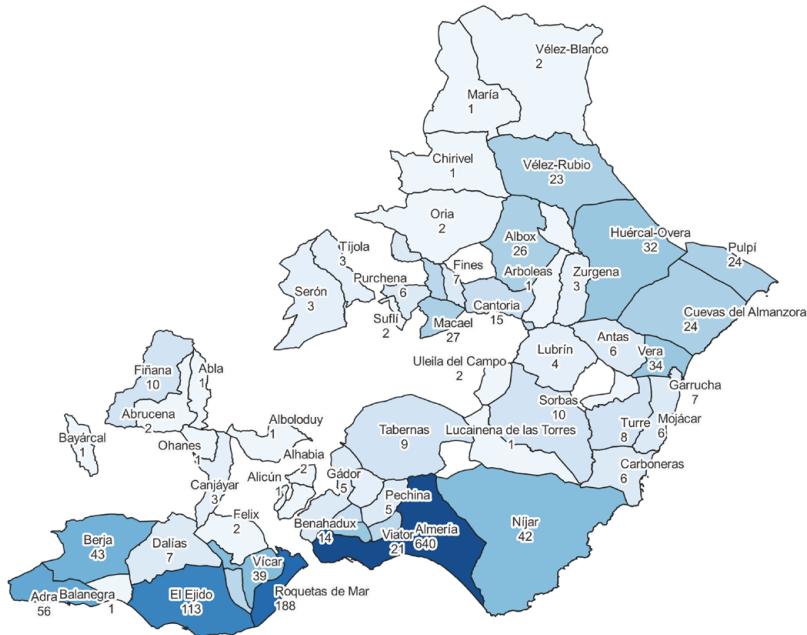
- Outón, P. & Ferraces, M. J. (2021). Rapid serial naming: Developmental trajectory and relationship with the Bangor Dyslexia Test in Spanish students. *Dyslexia*, 27(3), 325-341. <https://doi.org/10.1002/dys.1683>
- Pardo-Cardozo, N. A. (2015). *Prevalencia del trastorno específico de la lectura en una muestra de instituciones educativas de la localidad 19 de Bogotá* [Tesis]. Universidad Nacional Colombia. [https://repositorio.unal.edu.co/bitstream/handle/unal/52637/05599185.2015.pdf?sequence=1&isAllowed=y#:~:text=La%20correlaci%C3%B3n%20entre%20rendimiento%20acad%C3%A9mico,%25%20\(n%3D%208](https://repositorio.unal.edu.co/bitstream/handle/unal/52637/05599185.2015.pdf?sequence=1&isAllowed=y#:~:text=La%20correlaci%C3%B3n%20entre%20rendimiento%20acad%C3%A9mico,%25%20(n%3D%208)
- Parrila, R., Dudley, D., Song, S. & Gerogiou, G. K. (2020). A meta-analysis of reading-level match dyslexia studies in consistent alphabetic orthographies. *Annals of Dyslexia*, 70, 1-26. <https://doi.org/10.1007/s11881-019-00187-5>
- Ramos, J. L. & Cuetos, F. (2009). *Prolec-SE. Evaluación de los Procesos Lectores. Manual*. Madrid: Tea.
- Reilly, D., Neumann, D. L. & Andrews, G. (2019). Gender differences in reading and writing achievement: Evidence from the National Assessment of Educational Progress (NAEP). *American Psychologist*, 74(4), 445-458. <https://doi.org/10.1037/amp0000356>
- Reynolds, C. R. & Shaywitz, S. E. (2009). Response to intervention: Prevention and remediation, perhaps. *Diagnosis*, no. *Child Development Perspectives*, 3(1), 44-47. <https://doi.org/10.1111/j.1750-8606.2008.00075.x>
- Rimkute, L., Torppa, M., Eklund, K., Nurmi, J. E. & Lyytinen, H. (2014). The impact of adolescents' dyslexia on parents' and their own educational expectations. *Reading and Writing*, 27(7), 1231-1253. <https://doi.org/10.1007/s11145-013-9484-x>
- Rubio-Hurtado, M. J. & Berlanga-Silvestre, V. (2012). Cómo aplicar las pruebas paramétricas bivariadas t de Student y ANOVA en SPSS. Caso práctico. *Revista D'Innovació i Recerca en Educació*, 5(2), 83-100. <https://doi.org/10.1344/reire2012.5.2527>
- Shaywitz, S. E. & Shaywitz, B. A. (2005). Dyslexia (Specific Reading Disability). *Biological Psychiatry*, 57(11), 1301-1309. <https://doi.org/10.1016/j.biopsych.2005.01.043>
- Soriano-Ferrer, M. (2017). Perspectivas Actuales en el Estudio de la Dislexia Evolutiva. *Electronic Journal of Research in Education Psychology*, 2(4). <https://doi.org/10.25115/ejrep.v2i4.1146>
- Soriano-Ferrer, M. & Miranda Casas, A. (2003). Dislexia evolutiva II: Evaluación e intervención. In A. Miranda Casas, E. Vidal-Abarca Gámez y M. Soriano-Ferrer. *Evaluación e intervención psicoeducativa en dificultades de aprendizaje* (pp. 99-128). Madrid: Pirámide.
- Soriano-Ferrer, M. & Piedra-Martínez, E. (2017). A review of the neurobiological basis of dyslexia in the adult population. *Neurología (English Edition)*, 32(1), 50-57. <https://doi.org/10.1016/j.nrleng.2014.08.008>
- Stuebing, K. K., Fletcher, J. M., LeDoux, J. M., Lyon, G. R., Shaywitz, S. E. & Shaywitz, B. A. (2002). Validity of IQ-Discrepancy Classifications of Reading Disabilities: A

- Meta-Analysis. *American Educational Research Journal*, 39(2), 469–518. <https://doi.org/10.3102/00028312039002469>
- Suárez-Coalla, P., García-Castro, M. & Cuetos, F. (2013). Variables predictoras de la lectura y la escritura en castellano. *Infancia y Aprendizaje*, 36(1), 77–89. <https://doi.org/10.1174/021037013804826537>
- Syal, S. & Torppa, M. (2019). Task-avoidant behaviour and dyslexia: A follow-up from Grade 2 to age 20. *Dyslexia*, 25(4), 374–389. <https://doi.org/10.1002/dys.1627>
- Undheim, A. M. (2003). Dyslexia and psychosocial factors: A follow-up study of young Norwegian adults with a history of dyslexia in childhood. *Nordic Journal of Psychiatry*, 57(3), 221–226. <https://doi.org/10.1080/08039480310001391>
- Vale, A. P., Sucena, A. & Viana, F. (2011). Prevalência da dislexia entre crianças do 1. o ciclo do ensino básico falantes do português europeu. *Revista Lusófona de Educaçao*, 18, 45–56. <https://www.redalyc.org/pdf/349/34922201004.pdf>
- Van-Viersen, S., Kroesbergen, E. H., Slot, E. M. & de-Bree, E. H. (2016). High Reading Skills Mask Dyslexia in Gifted Children. *Journal of Learning Disabilities*, 49(2), 189–199. <https://doi.org/10.1177/0022219414538517>
- Vilà-Baños, R., Rubio, M. J., Berlanga-Silvente, V. & Torrado-Fonseca, M. (2014). Applying a hierarchical cluster SPSS. *REIRE. Revista d'Innovació i Recerca En Educació*, 7(2), 113–127. <https://doi.org/10.1344/reire2014.7.1717>
- Wagner, R. K., Zirps, F. A., Edwards, A. A., Wood, S. G., Joyner, R. E., Becker, B. J., Liu, G. & Beal, B. (2020). The Prevalence of Dyslexia: A New Approach to Its Estimation. *Journal of Learning Disabilities*, 53(5), 354–365. <https://doi.org/10.1177/0022219420920377>
- Wilmot, A., Pizzey, H., Leitão, S., Hasking, P. & Boyes, M. (2023). Growing up with dyslexia: Child and parent perspectives on school struggles, self-esteem, and mental health. *Dyslexia*, 29(1), 40–54. <https://doi.org/10.1002/dys.1729>
- World Health Organization (WHO) (2019). *Clasificación estadística internacional de enfermedades y problemas de salud conexos (11ª ed.)-CIE 11*. <https://icd.who.int/browse11/l-m/es>
- Zhao, H., Zhang, B., Chen, Y., Zhou, X. & Zuo, P. (2016). Environmental Risk Factors in Han and Uyghur Children with Dyslexia: A Comparative Study. *PLoS ONE*, 11(7), 1–16. <https://doi.org/10.1371/journal.pone.0159042>
- Ziegler, J. C., Perry, C., Ma-Wyatt, A., Ladner, D. & Schulte-Körne, G. (2003). Developmental dyslexia in different languages: Language-specific or universal? *Journal of Experimental Child Psychology*, 86(3), 169–193. [https://doi.org/10.1016/S0022-0965\(03\)00139-5](https://doi.org/10.1016/S0022-0965(03)00139-5)
- Zuppardo, L., Fuentes, A. R., Pirrone, C. & Serrano, F. (2020). Las repercusiones de la Dislexia en la Autoestima, en el Comportamiento Socioemocional y en la Ansiedad en Escolares. *Psicología Educativa*, 26(2), 175–183. <https://doi.org/10.5093/psed2020a4>

Appendix. Distribution of Students with Developmental Dyslexia in Andalusia by Provinces

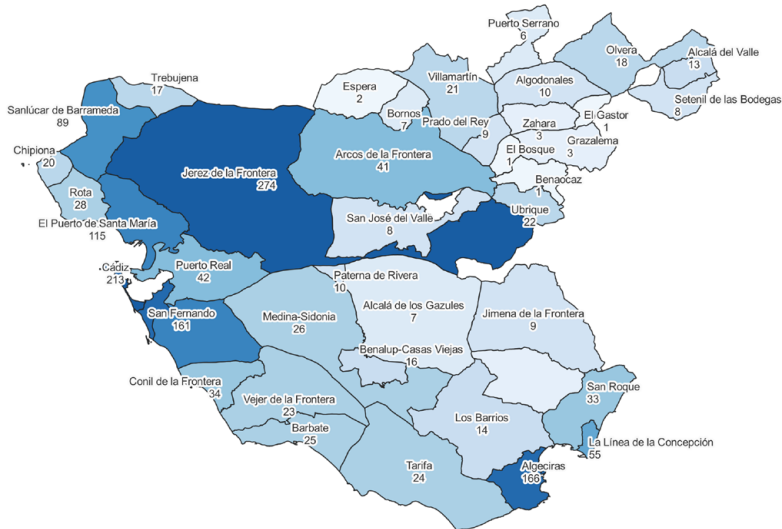
Almería

1,584 students with Dyslexia
Prevalence 1.45 % [Specificity Criterion <2 SDs]



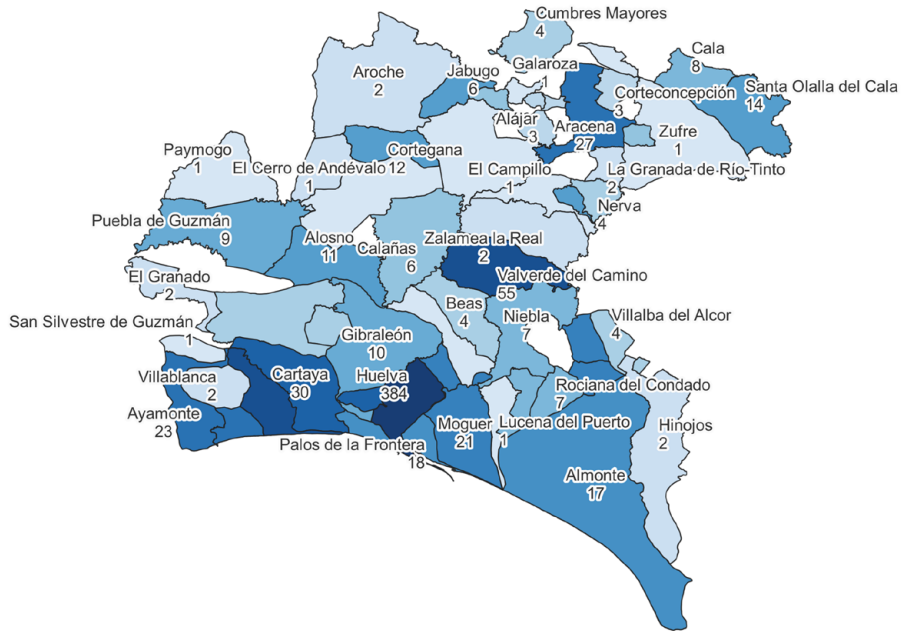
Cádiz

1,707 students with Dyslexia
Prevalence 0.83 % [Specificity Criterion <2 SDs]



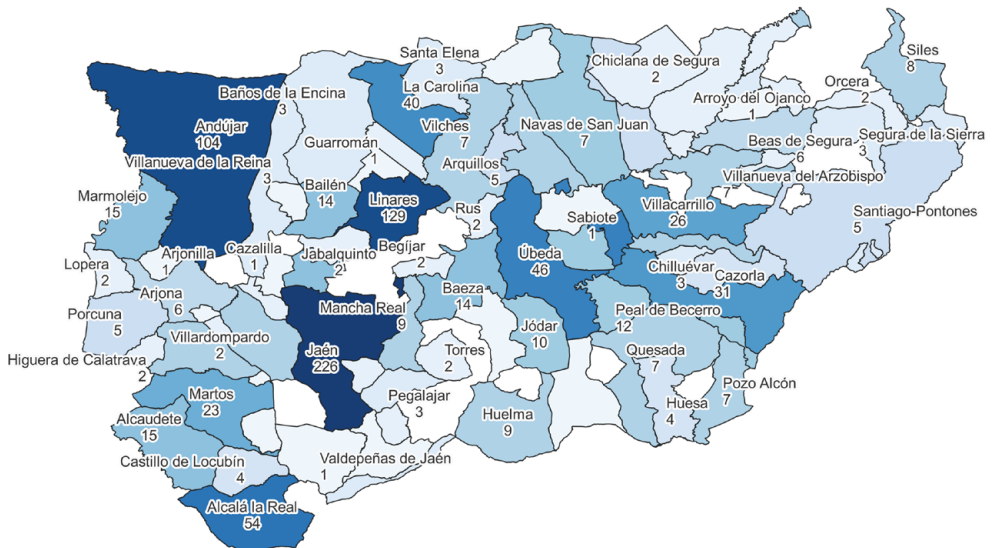
Huelva

920 students with Dyslexia
 Prevalence 1.06% [Specificity Criterion <2 SDs]



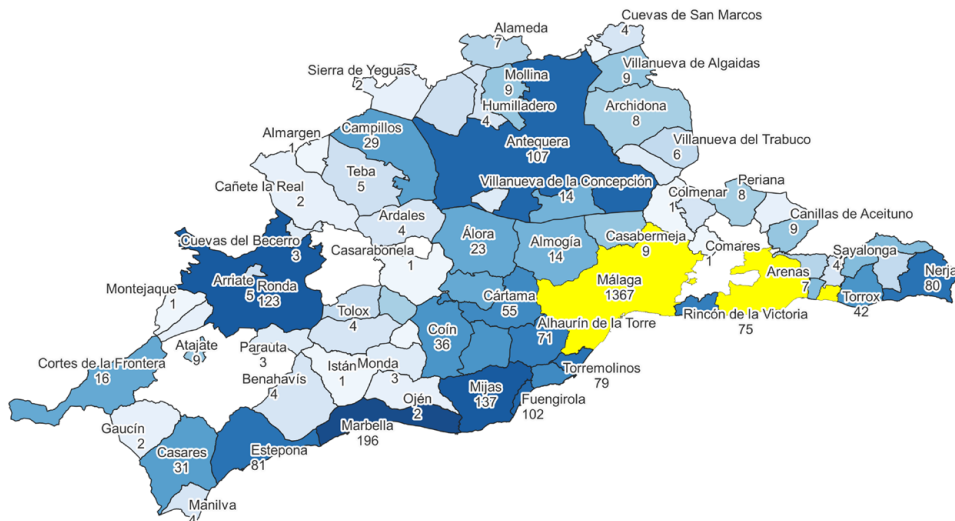
Jaén

990 students with Dyslexia
 Prevalence 1.06% [Specificity Criterion <2 SDs]



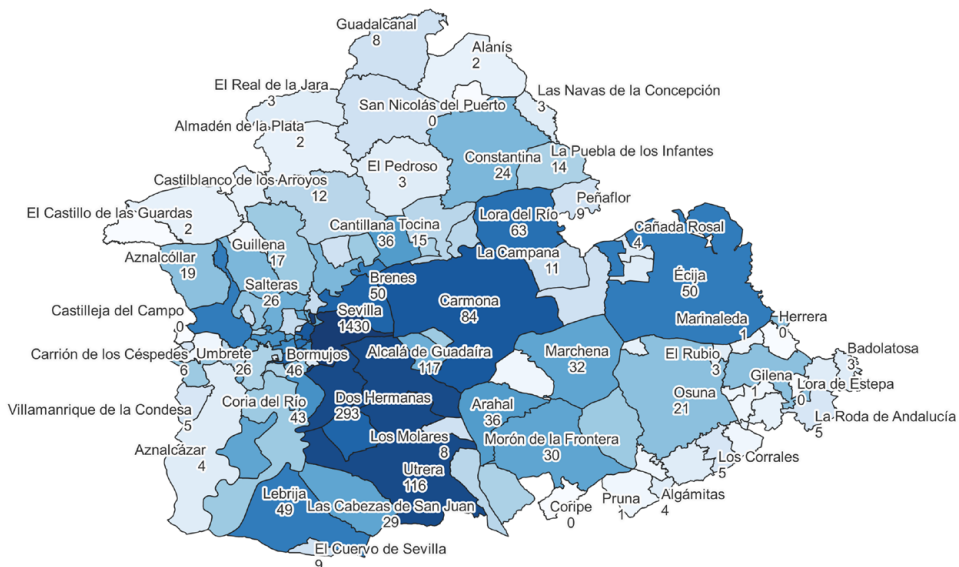
Málaga

3,218 students with Dyslexia
Prevalence 1.23% [Specificity Criterion <2 SDs]



Sevilla

3,839 students with Dyslexia
Prevalence 1.14% [Specificity Criterion <2 SDs]



The Author

Francisco Villegas Lirola holds a PhD in Psychopedagogy and has pursued his professional career as a special education teacher, hearing and language educator, a guidance counsellor at a secondary school, coordinator of the Specialised Educational Guidance Team of Almería and Coordinator of the Area of Special Educational Needs in the Provincial Technical Guidance Team. Currently, he serves as the Coordinator of the Area of Technical Resources for students with special educational needs in the Provincial Technical Team. Concurrent with his guidance activities, he has been a professor at the University of Almería in the Department of Education since 2004. He has been a member of the Research Group HUM-782-UAL: Diversity, Disability and Special Educational Needs since 2002.

ARTICLE/ARTÍCULO

Teacher Training and Discriminatory Bullying. Analysis of a Reality

La formación docente y el bullying discriminatorio.
Análisis de una realidad

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ABSTRACT

Discriminatory bullying in students with special educational needs (SEN) poses a societal challenge impacting not only school coexistence but also the lives of those affected and their surroundings. Research on bullying in initial teacher training reveals a limited level of knowledge among university students. Consequently, this study aims to scrutinise the extent of training related to the conceptualisation, organisation, legislation, detection, prevention and intervention of bullying in students with SEN. Simultaneously, the research assesses the importance that prospective teachers attribute to these aspects. A quantitative study is designed to examine the training of students pursuing degrees in Early Childhood and Primary Education in Andalusia. Data is collected through a questionnaire and analysed using SPSS-V26.0. The findings indicate that the level of initial training is modest across all evaluated dimensions, excluding conceptualisation. The detection of bullying in students with SEN is a lesser-known aspect among the respondents.

KEYWORDS: bullying; special educational needs; teacher training; discrimination.

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RESUMEN

El *bullying* discriminatorio en alumnado con necesidades educativas especiales (NEE) supone un problema social que afecta no solo a la convivencia escolar, sino a la vida de las personas que lo padecen y a su entorno. Las investigaciones sobre *bullying* en la formación inicial docente revelan un bajo nivel de conocimiento del alumnado universitario. Por tanto, el objetivo de esta investigación es analizar el grado de formación en relación a la conceptualización, organización, legislación, detección, prevención e intervención del *bullying* en alumnado con NEE; a su vez, se evalúa el grado de importancia que concede el futuro profesorado a estos contenidos. Se diseña un estudio cuantitativo para analizar la formación de estudiantes de Grados de Infantil y Primaria en Andalucía. Los datos se obtienen mediante cuestionario y se analizan con SPSS-V26.0. Se concluye que el grado de formación inicial es poco en todas las dimensiones evaluadas, excepto en la conceptualización. La detección de acoso escolar en alumnado con NEE es un aspecto menos conocido por los encuestados.

PALABRAS CLAVE: acoso escolar; necesidades educativas especiales; formación docente; discriminación.

1. Introduction

Discriminatory or social stigma-based bullying represents a significant contemporary issue, affecting the coexistence of students in educational institutions. This phenomenon results in power imbalances directed towards more vulnerable social groups (Downes and Cefai, 2019). Characteristics associated with disability or a deficit in certain abilities are perceived as deviations from the norm within peer groups. Consequently, these characteristics become a pretext for engaging in interpersonal violence against students with *special educational needs* (SEN) (Rose and Espelage, 2012).

In Spain, the incidence of bullying has reached alarming levels in recent years, with Andalusia having the highest enrolment of students with SEN in its classrooms and the highest number of reported bullying cases at the national level. More than 30% of bullying incidents reported in Andalusia involved students with SEN (Lobato, 2019).

The repercussions of discriminatory bullying are more detrimental than those of traditional bullying (Salmon et al., 2018), impacting cognitive and social-emotional development and persisting throughout the victim's life if there is no proper intervention (Earnshaw et al., 2018).

This social issue is evident, with there being a clear need to implement public policies for both prevention and intervention. Given this foundational concern, we raise the question that motivates this study: Do teachers possess the necessary tools to address this problem?

Studies on the topic assert that university students lack the required training to confront bullying, as they are unfamiliar with the phenomenon and its primary educational and organisational aspects. However, despite the limited level of training, research indicates that prospective teachers attribute significant importance to content related to bullying in their initial teacher training (Álvarez García et al., 2010; Bauman and Del Río, 2005; Benítez et al., 2006; García et al., 2006).

2. Theoretical Framework

The introduction of the concept of students with special educational needs dates back to the enactment of the Organic Act 1/1990 of 3 October, which established the General Organisation of the Educational System (LOGSE, for its initials in Spanish). At this time, it was suggested that the focus on these students should be guided by the principles of normalisation and school integration (Fernández, 2011).

In 2006, the Organic Education Act was enacted, dedicating Chapter I to aspects related to students with specific needs for educational support, encompassing those with SEN. From this juncture, the concept of inclusion gained prominence, representing a significant stride towards the normalisation of these students.

UNESCO (2005) defines the term “inclusion” as:

“The process of addressing and responding to the diversity of needs of all learners through increasing participation in learning, cultures and communities, and reducing exclusion within and from education. It involves changes and modifications in content, approaches, structures and strategies, with a common vision which covers all children of the appropriate age range and a conviction that it is the responsibility of the regular system to educate all children” (p. 13).

The concept of inclusion, coupled with effective practices for these students, has gained momentum in the educational system. Echeita and Ainscow (2011) underscore the increasing interest in the concept of inclusive education, noting that actions are currently under way to deliver effective educational responses to the entire student body, transcending their physical, personal and/or social characteristics.

Familiarity with alternative methodologies and educational innovation within the classroom is essential for achieving genuine inclusion of students with SEN. This not only benefits these students but also contributes to the ability to foster empathy and cultivate emotional intelligence among other students, on the one hand, and all those involved in the classroom and school environment, on the other (Bascón et al., 2019).

Studies show that the inclusion of students with special educational needs in regular classrooms is pivotal, yet educational needs go beyond purely academic adaptations. It involves addressing these needs in all facets of the educational journey, mirroring the approach taken with other students.

In the Autonomous Community of Andalusia, the Instruction of 8 March 2017, from the General Directorate of Participation and Equity, updating the protocol for detecting and identifying students with specific needs for educational support (SNES) and organising the educational response in Andalusia, defines students with SEN as those requiring particular support and educational attention distinct from regular education due to various degrees and types of abilities. These abilities can be physical, psychological, cognitive, sensory or severe behavioural disorders.

When examining data from the educational system and current challenges within classrooms and educational institutions, bullying emerges as one of the most significant problems faced by teachers. Studies not only reveal the existence of this practice among children and adolescents but also underscore the critical role of teachers in addressing this social issue.

The Ministry of Education and Culture, with data updated as of 25 September 2020, discloses a total of 5,500 reported cases of bullying in the period from 2012 to 2017 in Spain. In the last year alone, this number is higher, reaching 1,054 incidents of school bullying. Additionally, in 2017, Andalusia stands out as the autonomous community with the highest number of recorded bullying cases. In detail, there are 33 cases in the age group of 6 to 8 years and 76 cases between 9 and 11 years, totalling 109 cases in the Primary Education stage. Although any student can be a victim of bullying, certain groups face a higher risk. The probability of students with SEN experiencing bullying is 2 to 4 times higher than that of the rest of the student body (Hernández, 2017; Rose et al., 2015). The second cycle of Primary Education observes a higher proportion of bullying in students with SEN, constituting 37% of reported cases.

Andalusia has a substantial number of students with disabilities enrolled in the 2016–2017 academic year. The average for students with SEN who have experienced bullying surpasses the national average (Lobato, 2019). Despite the significance of the issue, it currently remains a less-explored area of study (Falla et al., 2021).

2.1. Conceptualisation of Discriminatory or Social Stigma-Based Bullying

Since the seventies, numerous studies have been conducted to analyse and comprehend school bullying. The pioneer in these investigations, Dan Olweus (1993), defines bullying as any negative and recurring action over time directed by a student or group of students towards another in a power-imbalanced relationship, with the intent of causing harm through physical, verbal or socially excluding aggression.

This phenomenon of interpersonal violence, impacting both the school and social environment, possesses three fundamental characteristics for classification as bullying: repetition over time, power imbalance and the intention to cause harm (Olweus, 1993; Ortega, 2010; Volk et al., 2014).

Concerning the first characteristic, repetition, it is important to note that the aggressor conceals their aggressive behaviour from adults to evade negative consequences. The victim, driven by fear or shame, also maintains silence about the aggression. Other students refrain from disclosing the situation due to a subjective social norm, suggesting that occurrences within the peer network should not be reported to adults. Consequently, the failure to report the situation accentuates the perpetuation of bullying. This process is known as *the law of silence* (Martín-Criado and Casas, 2019; Ortiz et al., 2017).

The second characteristic of school bullying is the power imbalance. This concept is a crucial aspect of discriminatory bullying. Individuals subjected to aggression over an extended period encounter difficulty in self-defence, thereby fostering a power imbalance. This process is termed *victimisation*. Consequently, the victim perceives themselves as socially and/or psychologically weaker and may even attribute blame to themselves, exacerbating their sense of helplessness (Ortega and Mora-Merchán, 2008; Ortiz et al., 2017; Volk et al., 2014).

Lastly, bullying is characterised by a clear intention to do harm. The aggressor aims to harm the victim, and/or the victim perceives the action as premeditated to cause harm (Ortiz et al., 2017; Volk et al., 2014). At this point, discriminatory bullying can be defined as aggressive behaviour, repeated over time, with a clear intention, akin to traditional bullying. However, concerning the power imbalance, it is significantly intensified in discriminatory bullying, perpetuating the dominance-submission schema (Martín-Criado and Casas, 2019). This is justified by a social position of superiority on the part of the aggressor based on stigma and discrimination. Consequently, the victim is placed in a socially inferior position simply by presenting personal characteristics typical of students with SEN (Downes and Cefai, 2019; Earnshaw et al., 2018; Salmon et al., 2018).

It should be noted that individuals who experience the phenomenon of violence and discrimination are more likely to belong to stigmatised social groups (Rodríguez-Hidalgo et al., 2021). However, some students who do not have SEN also experience discriminatory bullying but are targeted based on prejudice towards disability (Rodríguez-Hidalgo et al., 2019). The study by Rose and Espelage (2012) contends that characteristics associated with disability or deficits in certain abilities are perceived as deviations from the norm within peer groups. Consequently, these differences become a pretext for engaging in aggressive behaviour.

Psychological repercussions that have a lasting impact on an individual's development are among the most critical factors when addressing and analysing bullying. In the case of discriminatory bullying, its consequences could be deemed more severe than those of traditional bullying (Salmon et al., 2018). The effects of this type of bullying have a more prolonged duration, often extending throughout an individual's entire life (Earnshaw et al., 2018).

Discriminatory victimisation negatively correlates with the principles of inclusion, as it impedes the presence, participation and progress or learning of the students who experience it (Ashburner et al., 2019). Furthermore, the effects can be so harmful that they impact emotional balance and psychological well-being (Chiu et al., 2018; Paul et al., 2018; Pérez-Garín et al., 2018), and may even contribute to suicidal thoughts in students subjected to discriminatory victimisation (King et al., 2018).

2.2. Importance of Initial Teacher Training

In certain cases, student victimisation stems from teachers attributing lower social competence to students with SEN. When teachers victimise students, it increases the probability of aggression in peer relationships (Villalobos-Parada et al., 2014), thereby significantly hindering the inclusion process. For various reasons, initial teacher training is deemed crucial for preventing, detecting and intervening in potential bullying situations involving students with SEN.

Studies on initial teacher training in the United Kingdom concerning bullying indicate that, despite university students recognising it as a relevant topic, they are not adequately equipped to address it (Nicolaidis et al., 2002).

Similarly, in the United States, aspiring teaching students have a limited understanding of the term bullying. Moreover, there is a deficiency in training, leading to ineffective intervention. Nonetheless, there persists an interest in acquiring knowledge about bullying during their initial training. Prospective teachers in the United States express higher confidence in dealing with the families of both victims and aggressors. Likewise, students exhibit a keen interest in intervention training, with no significant differences based on gender (Bauman and Del Rio, 2005).

Another study conducted in the United States on initial teacher training in bullying prevention shows similar results. It is observed that future teachers, mostly women, attach great importance to bullying prevention. Despite this, a substantial number of students do not feel prepared and lack confidence in their ability to educate on violence-prevention strategies. In fact, the study highlights that the majority of university students have not received training on prevention during their university years (Kandakai and King, 2002).

The study by Álvarez-García et al. (2010) with students from the University of Oviedo reveals that the level of knowledge about school bullying is quite low, particularly regarding the legal and organisational framework of the bullying phenomenon. Similarly, there is a limited level of training regarding resources for prevention, intervention and instruments for assessing coexistence to detect bullying, with the latter being the content with the least degree of knowledge. Additionally, university students express dissatisfaction with the initial teacher training they receive.

A study conducted in Huelva examined initial teacher training in the Primary Teaching Degree and programme for prospective teachers for Compulsory Secondary Education (ESO, for its initials in Spanish). The results reveal, on the one hand, a lack of knowledge about the conceptualisation of bullying among university students, and, on the other hand, future teachers consider it a highly relevant topic, thus advocating for specialised training for bullying prevention and intervention (García et al., 2006).

The study by Benítez et al. (2006), conducted in Granada, emphasises that prospective teachers, both men and women, highly value content related to commu-

nication with students and families. Similarly, the content receiving the highest ratings is that which provides a response to situations of violence that have already occurred, i.e., in the realm of intervention. Students in the Early Childhood Education stage attribute greater importance to prevention-related content. Despite the significance placed on this content by students, the study data reflects a very low level of knowledge regarding bullying.

The same research group conducted a new study, distributing pre-service teachers in Early Childhood, Primary and Secondary Education into experimental and control groups. The results reveal a significant improvement in the experimental group that received training on bullying. Therefore, it is concluded that the inclusion of specific content on school violence in the curriculum for future teachers is necessary (Benítez et al., 2009).

Given this data, various authors argue that specific training has a positive impact. Therefore, specific content on bullying should be included in the university curriculum to achieve quality education (Benítez et al., 2009; Sahin, 2010).

3. Objectives and Hypotheses

This study represents an exploratory investigation with two objectives. Firstly, to analyse the level of knowledge among students in the initial teacher training programmes for Early Childhood and Primary Education degrees at Andalusian universities, in relation to the conceptualisation, organisation and legislation, prevention, detection and intervention related to bullying in students with SEN in the Autonomous Community of Andalusia. Secondly, to assess the importance that students in Early Childhood and Primary Education degree programmes attribute to their initial training regarding content on school bullying in students identified with SEN.

Given these two overarching objectives, the following working hypotheses are proposed:

H1: The level of knowledge of prospective teachers concerning the conceptualisation of bullying is correlated with the extent of training on organisational and legislative aspects of bullying and students with SEN, with both areas demonstrating a low level of knowledge.

H2: The level of training on the conceptualisation of bullying in students with SEN influences the knowledge level regarding detection, prevention and intervention, and this influence occurs in a specific direction.

H3: Students in the Early Childhood and Primary Education degree programmes possess an equal understanding of strategies and methodologies for preventing bullying in students with SEN.

H4: The knowledge of intervention procedures for bullying in students with SEN is equal among men and women.

H5: Women place greater importance on initial teacher training on bullying content in students with SEN than men.

H6: Students in the Early Childhood Education degree place greater importance on training for the prevention of bullying in students with SEN than those in the Primary Education degree.

H7: Prospective teachers place greater importance on intervention content than prevention content regarding social stigma-based bullying in students with SEN.

4. Methodology

4.1. Design

The study follows a quantitative paradigm with a prospective cross-sectional research design, collecting data at a specific point in time in an exploratory and descriptive manner. Consequently, no interventions are conducted on the sample; the reality is depicted without alterations concerning two variables, with no control over either (Pinto, 2018). It also adopts an *ex post facto* approach (Kerlinger and Lee, 1999), where information is gathered in its natural context without manipulating the study variables. Data collection is performed through a survey.

Regarding the sample, after reviewing the teaching guides, students enrolled in the second year or beyond were selected, as they have already covered content related to coexistence and bullying. Faculty from various Andalusian universities were contacted via email, requesting the participation of their students. The sample constitutes a non-probabilistic incidental convenience sample (Otzen and Manterola, 2017) of 604 students, starting from the second year of the degree in Early Childhood or Primary Education, or those who have completed their studies in one of these two degrees in the last five years in Andalusia.

The analysis of the obtained information describes the characteristics of the sample based on socio-demographic variables. The participants' average age is 22.94 years, with a minimum age of 18 years and a maximum of 57 years.

Concerning gender distribution, the number of women (82.10%) in the sample is more than four times higher than that of men (17.90%). It is noteworthy that the sample is part of an Education Sciences degree, where the number of enrolled women is typically higher than that of men (Ministry of Science, Innovation and Universities, 2019).

The data representation reveals an equitable distribution between students in the Primary Education degree (55.5%) and in the Early Childhood Education degree (44.5%). Additionally, students' enrolment corresponds to the second year (28.3%), third year (33.8%), fourth year (21.2%) and those who completed their studies in the last five years (16.7%). Concerning the type of university centres in the sample, it is divided among public centres (67.7%) and affiliated centres (32.3%). Furthermore, the province of the participants' universities is ranked in descending order as follows: Córdoba (36.9%), Seville (17.1%), Granada (16.6%), Málaga (12.7%), Jaén (5.6%), Cádiz (2.6%) and Almería (1.5%).

For data collection, a questionnaire is administered, encompassing socio-demographic, criterion and explanatory variables. Socio-demographic variables include gender, age, degree, enrolment year, type of centre and province of the university. Regarding explanatory variables, attention is given to the conceptualisation of bullying; organisation and legislation of bullying and students with SEN; detection of bullying and students with SEN; prevention of bullying in students with SEN; intervention for bullying in students with SEN; and, finally, the importance attributed to bullying and SEN content. The criterion variable indicates the extent of training on bullying in students with special educational needs.

To measure the criterion variable, three already validated instruments on school coexistence and bullying are adapted to SEN, as there is no specific instrument that evaluates this phenomenon in students with SEN. The reference instruments employed are the Questionnaire on Peer Abuse in Schools developed by Nicolaides et al. (2002), translated and adapted by Benítez et al. (2006), the Questionnaire on Bullying Training for ESO Teachers (Sobrino et al., 2015) and the Test on Resources for School Coexistence (Álvarez-García et al., 2010). The resulting instrument has been designated as the Questionnaire on Initial Teacher Training in Bullying and Special Educational Needs. It is crucial to note the recorded reliability measurement for our instrument, indicated by a Cronbach's Alpha of $\alpha = 0.95$.

In addressing the study's objectives, the analysis will scrutinise the level of knowledge in the initial teacher training programmes for the degrees in Early Childhood and Primary Education at Andalusian universities. This examination will specifically delve into the dimensions of conceptualisation, organisation and legislation, prevention, detection and intervention concerning bullying in students with SEN. Furthermore, the study will assess the significance attributed by students in the Early Childhood and Primary Education degrees to their initial training regarding content on bullying in students with SEN.

Regarding its structure, the questionnaire is divided into six dimensions based on explanatory variables, comprising a total of 53 items with a 5-level Likert scale response. The questionnaire was administered online through Google Forms at the conclusion of the academic year. IBM SPSS Statistics V26.0 software was used.

5. Results

Andalusia has the highest enrolment of students with disabilities, as indicated by data from the 2016–2017 academic year. In this period, Andalusia also recorded the highest number of cases of students with SEN who have experienced bullying. In light of the above, and considering the results obtained from our research, they seem to align with findings from other studies; however, some variations exist.

The following are the results. Firstly, regarding the conceptualisation of bullying, the least familiar content is the law of silence in bullying, followed by what the dominance-submission schema implies. In contrast, the role of the victim is the most familiar, with an average score of 4.14. Secondly, the data show that the role of the aggressor is the second most familiar (4.00), and in third place, with an average of 4.07, students with SEN are more likely to be victims of bullying.

Table 1

Conceptualisation of Bullying

	Mean	Dev.
1. I am familiar with the role of the aggressor in bullying	4.00	1.09
2. I am familiar with the role of the victim in bullying	4.14	1.03
3. I am familiar with the role of the defender in bullying	3.80	1.07
4. I am familiar with the role of the collaborator in bullying	3.70	1.23
5. I am familiar with the role of the neutral bystander in bullying	3.88	1.16
6. I am familiar with the role of the victimised aggressor in bullying	3.46	1.35
7. I am familiar with the types of direct and indirect physical violence	3.77	1.20
8. I am familiar with the types of direct and indirect social violence	4.02	1.05
9. I am familiar with the types of direct and indirect verbal violence	3.59	1.23
10. I am familiar with the types of physical and verbal sexual harassment	3.80	1.21
11. I know and understand what the law of silence implies in bullying	3.00	1.50
12. I know and understand what the dominance-submission schema implies in bullying	3.23	1.36
13. I am familiar with the different coping strategies students use against bullying	3.37	1.20
14. I am familiar with cyberbullying and its types	3.13	1.23
15. Students with SEN are more likely to be victims of bullying	4.07	0.95

Source: own research using the data obtained. Rating scale from 1 to 5.

Concerning the extent of training related to the organisation and legislation of bullying and students with SEN (Table 2), the least familiar topics are the Coexistence Committee and the Instructions of 8 March 2017. In contrast, the Coexistence Plan is somewhat more familiar, with average scores of 2.54 and 3.21, respectively.

Table 2
Organisation and Legislation of Bullying and SEN

	Mean	Dev.
16. I know what the Coexistence Plan is and what it should contain	3.21	1.24
17. I know what the Mediation Protocol in conflict resolution is and what it should contain	2.96	1.20
18. I know what the Action Protocol is and what it should contain	3.10	1.20
19. I know what the "School: Space of Peace" project is and what it should contain	3.01	1.24
21. I know the roles of Educational Inspection in the case of school violence	2.65	1.22
22. I know groups in the community working on school violence prevention	2.66	1.24
23. I know the roles of the Coexistence Committee	2.54	1.23
24. I know the Instructions of 8 March 2017, protocol for detecting and identifying students with specific needs for educational support and organising the educational response	2.59	1.34

Source: own research using the data obtained. Rating scale from 1 to 5.

Table 3 highlights that there is a lesser familiarity with questionnaires assessing school violence and social climate. Conversely, slightly higher scores are obtained for the detection of possible behavioural disorders and cases of bullying in students with SEN. We conclude that the latter are more widely known.

Table 3
Bullying and SEN Detection

	Mean	Dev.
25. I am familiar with questionnaires assessing school violence and social climate	2.52	1.23
26. I am familiar with procedures for recording observed behaviours in the classroom	2.99	1.22
27. I know how to detect possible behavioural disorders	3.29	1.03
28. I know how to detect possible cases of bullying in students with SEN	3.28	1.11

Source: own research using the data obtained. Rating scale from 1 to 5.

Table 4 demonstrates knowledge about inclusive methodologies such as cooperative learning, which receives the highest score when analysing bullying prevention. In second place (3.49), students are familiar with inclusive strategies such as interactive groups. These data highlight the importance of implementing educational innovation actions in the classroom, focusing on the genuine inclusion of students. Inclusive methodologies create a collaborative environment that benefits all those coexisting within the classroom.

Table 4
Prevention of Bullying in Students with SEN

	Mean	Dev.
29. I am familiar with actions developed in the classroom group to prevent bullying in students with SEN	3.05	1.14
30. I am familiar with and can implement techniques based on Conflict Resolution Education	3.28	1.13
31. I am familiar with inclusive methodologies such as Cooperative Learning	3.88	1.08
32. I am familiar with inclusive methodologies such as Universal Design for Learning	2.83	1.27
33. I am familiar with inclusive strategies such as Interactive Groups	3.49	1.24
34. I am familiar with inclusive strategies such as Dialogic Talks	3.15	1.36
35. I am familiar with inclusive strategies such as Shared Teaching	2.97	1.31

Source: own research using the data obtained. Rating scale from 1 to 5.

Regarding the explanatory variable intervention, it is noteworthy that respondents possess knowledge to support the victim without blaming them, with an average response of 3.23 (Table 5).

Table 5
Intervention in Bullying of Students with SEN

	Mean	Dev.
36. I have knowledge to act in a case of bullying in students with SEN	2.90	1.17
37. I have knowledge to support victims with SEN without blaming them	3.23	1.19
38. I have knowledge to talk to aggressors with SEN without blaming them	2.87	1.18
39. I have knowledge to make aggressors with SEN stop bullying	2.73	1.16
40. I have knowledge to help bystanders take a more active role in supporting victims with SEN	3.08	1.18
41. I have knowledge to work with the family of victims with SEN	2.79	1.23
42. I have knowledge to work with the family of aggressors with SEN	2.70	1.23

Source: own research using the data obtained. Rating scale from 1 to 5.

Finally, Table 6 illustrates that discussing teachers' activities to prevent and intervene in bullying in students with SEN is the lowest rated content, presenting an average of 4.67. Conversely, how to communicate with victims with SEN is the most highly rated item.

Table 6
Relevance Attributed to Bullying and SEN Content

	Mean	Dev.
43. How to discover the existence of bullying in students with SEN	4.74	0.67
44. How to talk to students about bullying	4.71	0.68
45. How to talk to victims with SEN	4.75	0.68
46. How to talk to aggressors with SEN	4.74	0.67
47. How to talk to bystanders	4.70	0.65
48. How to improve school coexistence to prevent bullying in students with SEN	4.73	0.65
49. How to improve the physical environment of the school to prevent bullying in students with SEN	4.69	0.67
50. Discussing teachers' activities to prevent and intervene in bullying in students with SEN	4.67	0.68
51. Discussing students' activities to prevent and intervene in bullying in students with SEN	4.68	0.66
52. How to work with the family of victims with SEN	4.72	0.66
53. How to work with the family of aggressors with SEN	4.73	0.70

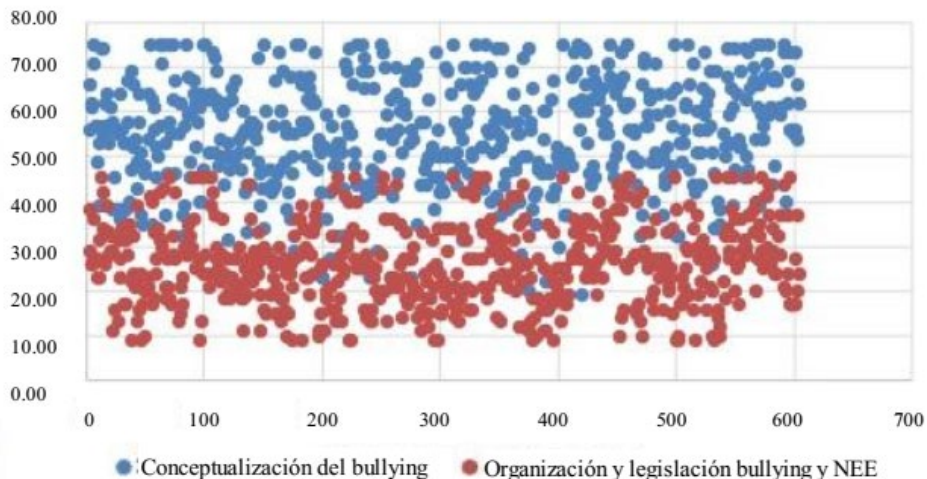
Source: own research using the data obtained. Rating scale from 1 to 5.

5.1. Analysis of the Level of Initial Teacher Training on Bullying and SEN

In relation to the first hypothesis, we conclude that it is partially affirmed. Based on the data, the response frequencies for both dimensions and all their items are studied. If we observe Figure 1, we see that for the dimension of conceptualisation of bullying, the response frequencies concentrate on higher scores, coinciding with the upper end of the Likert scale. That is, students are quite or very knowledgeable about the phenomenon of peer violence. However, for the dimension of organisation and legislation of bullying and students with SEN, the response frequencies concentrate on lower scores, coinciding with the lower end of the Likert scale. That is, future teachers have little to no knowledge or only some knowledge about the organisational and legislative content.

Figure 1

Scatter Plot of the Dimensions of Conceptualisation of Bullying and Organisation and Legislation of Bullying and Students with SEN



Source: own research using the data obtained.

In examining the extent of training related to the conceptualisation of bullying in students with SEN and its impact on knowledge about detection, prevention and intervention (hypothesis 2), we conducted a multiple linear regression involving the dependent variable “Conceptualisation of bullying” and the predictor variables “Detection”, “Prevention” and “Intervention” of bullying in students with SEN.

Following an ANOVA on the multiple linear regression of these dimensions, a $p = 0.00$ was obtained. Therefore, it is established that the regression is significant, as its $p < 0.05$ renders it statistically meaningful. Additionally, an adjusted R_2 was obtained, with $R_2 > 0.20$. Specifically, $R_2 = 0.30$, explaining 30% of the variance. Examining Table 7 reveals that the dimension of “Intervention in bullying in students with SEN” does not significantly contribute to the model. In contrast, the other dimensions do, with $p < 0.05$, where $p = 0.29$. Consequently, this dimension should be excluded. Moreover, the coefficients obtained for B and β indicate that the detection dimension makes a more substantial contribution to the model, followed by prevention.

Table 7

Coefficients of the Model in Multiple Linear Regression in Prevention, Intervention and Detection

Model	Unstandardised coefficients		Standardised coefficients	t	Sig.	Collinearity statistics	
	B	Dev. Error	Beta			Tolerance	VIF
(Constant)	31.06	1.58		19.66	0.00		
Prevention	0.31	0.08	0.16	3.56	0.00	0.51	1.93
Intervention	0.08	0.08	0.05	1.04	0.29	0.45	2.19
Detection	1.24	0.16	0.38	7.48	0.00	0.43	2.29

Source: own research using the data obtained in the study.

After excluding the intervention dimension, independent values are considered, yielding a Durbin-Watson score of 1.79. This value should be below 3. Additionally, as detailed in Table 8, collinearity in the study is optimal, being below 10, with VIF = 1.73. Consequently, this implies a linear relationship between the dependent variable “Conceptualisation of bullying” and the predictor variables, “Prevention” and “Detection” of bullying in students with SEN. Similarly, tolerance confirms that there is no issue with collinearity, as the value exceeds 0.10, with Tolerance = 0.57. It is concluded that an average student obtains a score of 31.10 points regarding the level of knowledge related to the conceptualisation of bullying.

For each unit of the “Detection” dimension that increases or decreases, their knowledge level about conceptualisation will increase or decrease by 1.33. Additionally, for each unit increased or decreased in “Prevention”, their knowledge level about conceptualisation will increase or decrease by 0.34 points. Therefore, hypothesis 2 is partially affirmed. The results reveal that the level of knowledge concerning the detection and prevention of bullying in students with SEN slightly influences the extent of training related to the conceptualisation of bullying in students with SEN, with prevention training being the least influential. Nevertheless, the level of knowledge regarding bullying intervention in boys and girls with SEN does not impact the conceptualisation of the phenomenon.

Table 8

Coefficients of the Model in Multiple Linear Regression in Prevention and Detection

Model	Unstandardised coefficients		Standardised coefficients	t	Sig.	Collinearity statistics	
	B	Dev. Error	Beta			Tolerance	VIF
(Constant)	31.10	1.57		19.69	0.00		
Prevention	0.34	0.08	0.18	4.11	0.00	0.57	1.73
Detection	1.33	0.14	0.41	9.20	0.00	0.57	1.73

Source: own research using the data obtained.

Regarding hypothesis 3, to assess whether the means are significant in students of the degrees in Early Childhood and Primary Education concerning the dimension of “Prevention of bullying in students with SEN”, a t-statistic is employed. In this case, it is noted that $p = 0.74$. Consequently, with $p > 0.05$, there are no significant differences between the two studied groups. Therefore, the hypothesis is corroborated. However, it is important to note, as shown in Table 1, that the level of knowledge concerning prevention ranges between little and some.

As for hypothesis 4, the extent of training on the “Intervention in bullying in students with SEN” based on gender, a t-statistic is used for the mean comparison. Since $p > 0.05$, with $p = 0.73$, it can be inferred that there are no significant differences in the level of knowledge about intervention in bullying in students with SEN between men and women.

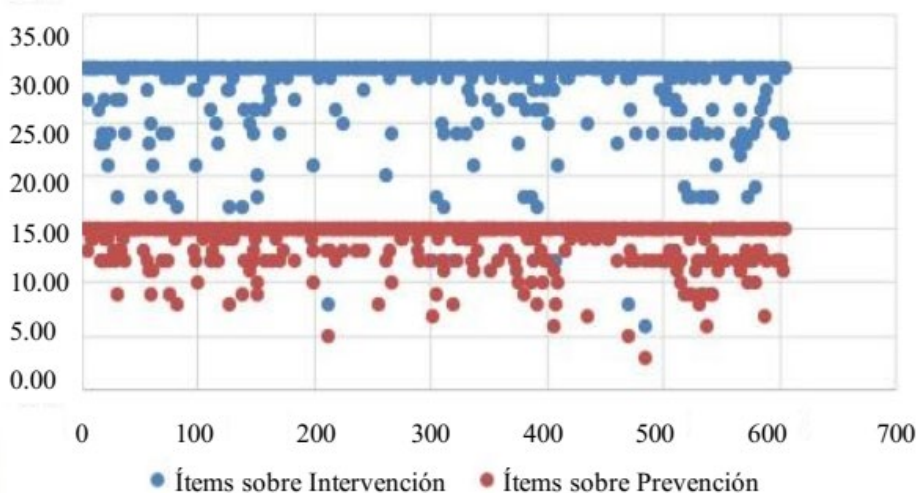
Hypothesis 5 is accepted, confirming that women place greater importance on initial teacher training regarding content on bullying and students with SEN. The t-statistic is then applied to estimate means on the relevance attributed to bullying and students with SEN content by gender, resulting in $p = 0.00$. Therefore, as $p < 0.05$, it is assumed that there are differences by gender regarding the importance given to content on bullying and students with SEN in their own initial teacher training. Furthermore, to identify who assigns greater importance to training on the bullying phenomenon in students with SEN, mean values are analysed. Men score slightly lower ($\bar{X} = 49.82$) than women ($\bar{X} = 52.30$).

Similarly, the t-statistic is used to estimate means between the degree groups, degree in Early Childhood Education and degree in Primary Education, and the set of prevention items in the dimension of the relevance attributed to content on bullying and students with SEN. With $p = 0.00$, as $p < 0.05$, the existence of significant differences in the importance given to bullying prevention in SEN according to the degree is assumed. Consequently, the mean results conclude that students of the degree in Early Childhood Education ($\bar{X} = 14.34$) place greater importance on prevention content than students of the degree in Primary Education ($\bar{X} = 13.78$). Hypothesis 6 is accepted.

Finally, regarding hypothesis 7, it can be affirmed that greater importance is given to intervention content than to prevention content. Therefore, the hypothesis is confirmed, as in both degrees, higher importance is assigned to intervention than to the prevention of bullying in students with SEN. As shown in Figure 2, it is concluded that there is a high level of relationship intensity between the importance assigned by future teachers to content on intervention and prevention of bullying in students with SEN.

Figure 2

Scatter Plot of Intervention and Prevention Items in the Dimension of the Relevance Attributed to Content on Bullying and Students with SEN



Source: own research using the data obtained.

6. Discussion and Conclusions

This work aimed to address two objectives. Concerning the first objective, the data confirm a high level of knowledge regarding the conceptualisation of the phenomenon. However, a significantly lower level of training is corroborated regarding other content areas. Additionally, it is verified that the extent of knowledge about the detection of bullying in students with SEN is the most limited, as asserted in previous studies (Álvarez-García et al., 2010).

This study reveals that the extent of training regarding the conceptualisation of bullying is very high, which differs from the results reported in the aforementioned studies. Those studies claim that students aspiring to become teachers are not fa-

miliar with the phenomenon of school bullying (Álvarez-García et al., 2010; Bauman and Del Río, 2005; Benítez et al., 2006; García et al., 2007; Kandakai and King, 2002; Nicolaides et al., 2002).

The results indicate that students in the Andalusian degree programmes in Early Childhood and Primary Education lack sufficient knowledge about the organisation of the school and legislation regarding bullying in students with SEN. In line with the article by Álvarez-García et al. (2010), prospective teachers are found to have little to no knowledge of legislation, the professional bodies involved and projects at the school related to coexistence, bullying and students with SEN. The analysis concludes that the results of this study are slightly higher than those reported by the previous authors. This could be attributed to the increased emphasis on the phenomenon of interpersonal violence in recent years, with a greater number of research studies on school bullying (Zych et al., 2015).

With reference to the second objective, it is confirmed that significant value is attributed to initial teacher training. However, the study data reflect very limited knowledge regarding organisation and legislation, detection, prevention and intervention in bullying in students with SEN.

Similarly, the results detail that students in the Andalusian degree programmes in Early Childhood and Primary Education lack sufficient knowledge about the organisation of the school and legislation related to bullying in students with SEN. In line with the article by Álvarez-García et al. (2010), prospective teachers are found to have little to no knowledge of legislation, the professional bodies involved and projects at the school related to coexistence, bullying and students with SEN. It is worth noting that in this research, the results are slightly higher than those presented by previous authors. This may be attributed to the increased emphasis on the issue in recent years (Zych et al., 2015).

According to Álvarez-García et al. (2010), acquiring knowledge about the conceptualisation of the phenomenon of interpersonal violence enables and enhances skills for bullying detection, prevention and intervention. In contrast, the results of this study indicate that there is no significant relationship between the level of knowledge about conceptualisation and intervention in bullying in students with SEN.

Regarding hypothesis 3, it is confirmed, although the level of knowledge about prevention ranges from little to some. In line with Kandakai and King (2002), there are similarities in the results. On the one hand, the conclusion is that the extent of training in prevention is very limited. On the other hand, there are no significant differences between the two degrees regarding the knowledge level about the training in bullying prevention for students with SEN.

Considering hypothesis 4, a study (Nicolaides et al., 2002) concludes that bullying intervention procedures are known at the same level in men and women. Specifically, an evaluation is conducted to assess the existence of gender differences in the level of knowledge about intervention in students with SEN. Thus, means are contrasted, and it is concluded that there are no significant differences, indicating a similar level of training in both men and women.

Hypothesis 5 is accepted, and consistent with existing literature, a study has revealed significant gender differences, with women assigning greater relevance to bullying content in their initial teacher training (Benítez et al., 2006). In contrast, several studies suggest that there are no significant gender differences in the importance attributed to bullying content in initial teacher training (Bauman and Del Río, 2005; Nicolaides et al., 2002).

The literature posits that women generally possess a greater capacity for empathy than men (Grau et al., 2017; Lucas-Molina et al., 2017; Luna-Bernal and Gante-Casas, 2017; Vizoso-Gómez, 2019). Some authors attribute this gender difference to the transmission of socialisation processes through societal roles; historically, men have faced greater challenges in expressing their emotions and concerns for others than women (Sampaio et al., 2011).

The same methodology was applied to validate hypothesis 6. This finding aligns with the study conducted by Benítez et al. (2006), indicating that students in the Early Childhood Education stage assign greater importance to content related to bullying prevention.

Hypothesis 7 is confirmed. This result is consistent with the data obtained by Benítez et al. (2006), stating that the content receiving the highest ratings is that which provides a response to situations of violence that have already occurred. In other words, prospective teachers perceive the intervention aspect of the bullying phenomenon in students with SEN as more crucial.

In conclusion, this study reveals that the level of initial teacher training is relatively low in all evaluated dimensions, except in conceptualisation, with detection in students with SEN being the least familiar content. Therefore, the direction that public policies should take on this issue becomes evident.

7. Bibliography

- Agencia de datos & Europa Press (September 25, 2020). *Acoso escolar, datos, cifras y estadísticas*. Epdata. Recovered on February 2, 2021 from <https://bit.ly/3488cpr>
- Álvarez-García, D., Rodríguez, C., González-Castro, P., Núñez, J. C. & Álvarez, L. (2010). La formación inicial de los futuros maestros en recursos para la convivencia escolar y el manejo del aula. *European Journal of Education and Psychology*, 3(2), 187-198. <https://doi.org/10.30552/ejep.v3i2.56>
- Ashburner, J., Sagers, B., Campbell, M. A., Dillon-Wallace, J. A., Hwang, Y.-S., Carrington, S. & Bobir, N. (2019). How are students on the autism spectrum affected by bullying? Perspectives of students and parents. *Journal of Research in Special Educational Needs*, 19(1), 27-44. <https://doi.org/10.1111/1471-3802.12421>
- Bascón Jiménez, M., Navarro Herrera, C. & Jiménez Aguilar, J. E. (2019). *El caso Pelayo: una experiencia de inclusión Educativa*. Madrid: Dykinson. <https://doi.org/10.2307/j.ctv2sojcd.109>
- Bauman, S. & Del Río, A. (2005). Knowledge and beliefs about bullying in schools comparing pre-service teachers in the United States and the United Kingdom. *School Psychology International*, 26(4), 428-442. <https://doi.org/10.1177/0143034305059019>
- Benítez, J. L., Berbén, A. G. & Fernández, M. (2006). El maltrato entre alumnos: conocimientos, percepciones y actitudes de los futuros docentes. *Revista de Investigación Educativa*, 24(2), 329-352.
- Benítez, J. L., García, A. & Fernández, M. (2009). Impact of a course on peer abuse in the teacher's initial curriculum. *Electronic Journal of Research in Educational Psychology*, 7(1).
- Booth, T. & Ainscow, M. (2000). *Index for Inclusion. Developing learning and participation in schools*. Centre for Studies on Inclusive Education.
- Chiu, L., Kao, S., Tou, S. W. & Lin, F. G. (2018). Effects of heterogeneous risk factors on psychological distress in adolescents with autism and victimization experiences in Taiwan. *Disability and Rehabilitation*, 40(1), 42-51. <https://doi.org/10.1080/09638288.2016.1242173>
- Downes, P. & Cefai, C. (2019). Strategic clarity on different prevention levels of school bullying and violence: Rethinking peer defenders and selected prevention. *Journal of school violence*, 18(4), 510-521. <https://doi.org/10.1080/15388220.2019.1566915>
- Earnshaw, V. A., Reisner, S. L., Menino, D. D., Poteat, V. P., Bogart, L. M., Barnes, T. N. & Schuster, M. A. (2018). Stigma-based bullying interventions: A systematic review. *Developmental Review*, 48, 178-200. <https://doi.org/10.1016/j.dr.2018.02.001>
- Falla, D., Sanchez, S. & Casas, J. A. (2021). What Do We Know about Bullying in Schoolchildren with Disabilities? A Systematic Review of Recent Work. *Sustainability*, 13(1), Article 416. <https://doi.org/10.3390/su13010416>

- García, A., Benítez J. & Fernández M. (2007). La autoeficacia y las demandas de formación del profesorado en activo vs. en formación para afrontar el bullying. In J. Gázquez, M. Pérez, A. Cangas, & N. Yuste (Eds.). *Mejora de la convivencia y programas encaminados a la prevención e intervención del acoso escolar* (pp. 119-126). Grupo Editorial Universitario.
- Grau, A., Toran, P., Zamora, A., Quesada, M., Carrion, C., Vilert, E. & Cordon, F. (2017). Empathy assessment in medical students. *Educación Médica*, 18(2), 114-120. <https://doi.org/10.1016/j.edumed.2016.04.001>
- Hernández, J. M. (2017). *Acoso escolar y Trastorno del Espectro del Autismo (TEA): guía de actuación para profesorado y familias*. Confederación Autismo España.
- Instrucciones de 8 de marzo de 2017, de la Dirección General de Participación y Equidad, por las que se actualiza el protocolo de detección, identificación del alumnado con necesidades específicas de apoyo educativo y organización de la respuesta educativa.
- Kandakai, T. L. & King, K. A. (2002). Preservice teachers' perceived confidence in teaching school violence prevention. *American Journal of Health Behavior*, 26(5), 342-353. <https://doi.org/10.5993/ajhb.26.5.3>
- Lobato, S. (2019). *Acoso y ciberacoso escolar en alumnado con discapacidad*. Fundación ONCE Comité Español de Representantes de Personas con Discapacidad (CERMI). <http://hdl.handle.net/11181/5749>
- Lucas-Molina, B., Pérez-Albéniz, A., Ortuño-Sierra, J. & Fonseca-Pedrero, E. (2017). Dimensionalidad e invarianza de la medida del Interpersonal Reactivity Index (IRI) en función del género. *Psicothema*, 29(4), 590-595.
- Luna-Bernal, A. & De Gante-Casas, A. (2017). Empatía y gestión de conflictos en estudiantes de secundaria y bachillerato. *Revista de educación y desarrollo*, 40, 27-37.
- Martín-Criado, J. M. & Casas, J. A. (2019). Evaluación del efecto programa «ayuda entre iguales de Córdoba» sobre el fomento de la competencia social y la reducción del bullying. *Aula Abierta*, 48(2), 221-228. <https://doi.org/10.17811/rifie.48.2.2019.221-228>
- Ministerio de Ciencia, Innovación y Universidades (2019). *Presencia de mujeres en la Educación Superior española*. [flyer] Secretaría General Técnica del Ministerio de Ciencia Innovación y Universidades. <https://cpage.mpr.gob.es/producto/folleto-de-transparencia-y-gobierno-abiertodel-ministerio-de-ciencia-innovacion-y-universidades-4/>
- Moore, H., Astor, R. A. & Benbenishty, R. (2019). A statewide study of school-based victimization, discriminatory bullying, and weapon victimization by student homelessness status. *Social Work Research*, 43(3), 181-194. <https://doi.org/10.1093/swr/svz010>
- Nicolaides, S., Toda, Y. & Smith, P. K. (2002). Knowledge and attitudes about school bullying in trainee teachers. *British Journal of Educational Psychology*, 72, 105-118. <https://doi.org/10.1348/000709902158793>

- Ortega, R. (2010). *Agresividad injustificada y bullying*. Madrid: Alianza Editorial.
- Ortega, R. & Mora-Merchán, J. A. (2008). Las redes de iguales y el fenómeno del acoso escolar: explorando el esquema dominio-sumisión. *Infancia y aprendizaje*, 31(4), 515-528. <https://doi.org/10.1174/021037008786140922>
- Ortiz, O. G., Ruiz, R. O. & Rodríguez-Hidalgo, A. J. (2017). Detectar y prevenir el acoso escolar: escuela y familia trabajando juntas. In O. Gómez-Ortiz, R. Ortega-Ruiz & A. J. Rodríguez-Hidalgo (Eds.). *Acoso escolar, ciberacoso y discriminación: educar en diversidad y convivencia* (pp. 29-42). Madrid: Los Libros de la Catarata.
- Otzen, T. & Manterola, C. (2017). Técnicas de Muestreo sobre una Población a Estudio. *International Journal of Morphology*, 35(1), 227-232. <http://dx.doi.org/10.4067/S0717-95022017000100037>
- Paul, A., Gallot, C., Lelouche, C., Bouvard, M. P. & Amestoy, A. (2018). Victimization in a French population of children and youths with autism spectrum disorder: A case control study. *Child and Adolescent Psychiatry and Mental Health*, 12(1), 1- 13. <https://doi.org/10.1186/s13034-018-0256-x>
- Pérez-Garín, D., Recio, P., Magallares, A., Molero, F. & García-Ael, C. (2018). Perceived discrimination and emotional reactions in people with different types of disabilities: A qualitative approach. *The Spanish Journal of Psychology*, 21, E12. <https://doi.org/10.1017/sjp.2018.13>
- Pinto, J. E. M. (2018). *Metodología de la investigación social: Paradigmas: cuantitativo, sociocrítico, cualitativo, complementario*. Bogotá: Ediciones de la U.
- Rodríguez-Hidalgo, A. J., Alcívar, A. & Herrera-López, M. (2019). Traditional bullying and discriminatory bullying around special educational needs: psychometric properties of two instruments to measure it. *International Journal of Environmental Research and Public Health*, 16(1), 142. <https://doi.org/10.3390/ijerph16010142>
- Rodríguez-Hidalgo, A. J., Ortega-Ruiz, R. & Monks, C. P. (2015). Peer-victimisation in multi-cultural contexts: A structural model of the effects on self-esteem and emotions. *Psicología Educativa*, 21(1), 3-9. <https://doi.org/10.1016/j.pse.2015.02.002>
- Rodríguez-Hidalgo, A. J., Pincay, A. A., Payán, A. M., Herrera-López, M. & Ortega Ruiz, R. (2021). Los predictores psicosociales del bullying discriminatorio debido al estigma ligado a las Necesidades Educativas Especiales (NEE) y la discapacidad. *Psicología Educativa*, 27(2), 187-197. <https://doi.org/10.5093/psed2020a22>
- Rose, C. A., Stormont, M., Wang, Z., Simpson, C. G., Preat, J. L. & Green, A. L. (2015). Bullying and Students with Disabilities: Examination of Disability Status and Educational Placement. *School Psychology Review*, 44(4), 425-444. <https://doi.org/10.17105/spr-15-0080.1>
- Rose, C. A. & Espelage, D. L. (2012). Risk and protective factors associated with the bullying involvement of students with emotional and behavioral disorders. *Behavioral Disorders*, 37(3), 133-148. <https://doi.org/10.1177/019874291203700302>

- Sahin, M. (2010). Teachers' Perceptions of Bullying in High Schools: A Turkish Study. *Social Behavior and Personality*, 38(1), 127-142. <https://doi.org/10.2224/sbp.2010.38.1.127>
- Salmon, S., Turner, S., Taillieu, T., Fortier, J. & Afifi, T. O. (2018). Bullying victimization experiences among middle and high school adolescents: Traditional bullying, discriminatory harassment, and cybervictimization. *Journal of Adolescence*, 63, 29-40. <https://doi.org/10.1016/j.adolescence.2017.12.005>
- Sampaio, L. R., Guimarães, P. R. B., dos Santos Camino, C. P., Formiga, N. S. y Menezes, I. G. (2011). Estudos sobre a dimensionalidade da empatia: tradução e adaptação do Interpersonal Reactivity Index (IRI). *Psico*, 42(1).
- Sobrino, M. S., Carbonell, M. D. L. D. P. & Ramos-Santana, G. (2015). Formación del profesorado de educación secundaria obligatoria sobre el bullying. *Revista Española de Orientación y Psicopedagogía*, 22(1), 58-68. <http://dx.doi.org/10.5565/rev/educar.716>
- UNESCO (2005). *Guidelines for inclusion: Ensuring Access to Education for All*. UNESCO.
- Villalobos-Parada, B., López, V., Bilbao, M., Carrasco Aguilar, C., Ascorra, P., Morales, M., Álvarez, J. P., Ayala, A., Olavarría, D. & Ortiz, S. (2015). Victimización del personal de la escuela hacia estudiantes referidos a proyectos de integración escolar. *Psicología, Sociedad y Educación*, 7(2), 133-152. <http://dx.doi.org/10.25115/psye.v7i2.529>
- Vizoso-Gómez, C. M. (2019). Empatía en futuros maestros: diferencias por género. *Revista INFAD de Psicología. International Journal of Developmental and Educational Psychology*, 5(1), 541-546. <https://doi.org/10.17060/ijodaep.2019.n1.v5.1636>
- Volk, A. A., Dane, A. V. & Marini, Z. A. (2014). What is bullying? A theoretical redefinition. *Developmental Review*, 34(4), 327-343. <https://doi.org/10.1016/j.dr.2014.09.001>
- Zych, I., Ortega-Ruiz, R. & Del Rey, R. (2015). Scientific research on bullying and cyberbullying: Where have we been and where are we going. *Aggression and Violent Behavior*, 24, 188-198. <https://doi.org/10.1016/j.avb.2015.05.015>

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ARTICLE/ARTÍCULO

In the Future, Probably: Male Students at University (1985–2022)

Probablemente, en un futuro: los estudiantes varones en la Universidad (1985-2022)

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ABSTRACT

Spanish universities have transformed over the last four decades. The growing access of women has been a significant process within these social changes, although it has not led to greater equality in gender distribution, but rather to growing inequality, this time to the detriment of male university students.

This article describes the evolution of the presence of men in the university system, taking into account undergraduate and postgraduate enrolment, as well as data on graduates.

Secondary data provided by the Ministry of Education and Vocational Training are used from the 1985–1986 academic year to 2021–2022. The results indicate that males became progressively less prominent in undergraduate enrolments, a finding accentuated among graduates. According to the branch of knowledge, there is a majority of women in four of the five branches, Engineering and Architecture being the only area in which there is a majority of men.

KEYWORDS: university; undergraduate student; branch of study; student sociology; access to education.

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RESUMEN

La Universidad española se ha transformado en las últimas cuatro décadas. El acceso creciente de las mujeres ha sido un proceso significativo dentro de estos cambios sociales, si bien no ha determinado una mayor igualdad en la distribución por sexos sino una desigualdad creciente, esta vez en perjuicio del universitario masculino. El presente trabajo describe la evolución de la presencia de los varones en el sistema universitario, teniendo en cuenta la matriculación en Grado y Posgrado, así como los datos de egresados.

Se utilizan datos secundarios del Ministerio de Educación y Formación Profesional desde el curso 1985-1986 hasta 2021-2022. Los resultados indican una progresiva pérdida de peso de los varones en las matriculaciones en grados, acentuada entre los egresados. Según rama de conocimiento, existe mayoría de mujeres en cuatro de las cinco ramas, únicamente en Ingenierías y Arquitectura se registra una mayoría masculina.

PALABRAS CLAVE: universidad; estudiante universitario; rama de estudios; sociología del estudiante; acceso a la educación.

1. Introduction

The year 2010 marked the centenary of one of the greatest social achievements related to the university sphere: the free access of women to these studies. The Decree of 8 March 1910 amends a historical handicap that other countries had eliminated over the course of the 19th century. Women's access to university education was one of the great social transformations of the last century (Del Amo, 2009; Guil and Flecha, 2015).

Both in the media and in scientific works, the feminisation of the university is presented as an advancement of women, who have been acquiring majority positions since the latter decades of the 20th century. Achieving broad access of women to higher education makes it possible to keep moving towards other objectives, such as their greater inclusion among teaching staff or management positions. Nevertheless, the fact that a greater number of women has been consolidated should not mean the end to analyses of differences on grounds of gender in the university sphere; rather, they must remain an object of study, particularly in a space that represents the future of work for people and the foundations on which to build their life and social well-being (Armenteros and Pérez, 2017; Martínez, 2019).

In this regard, the theories linking education and economics are well known in the sociology of education, especially through two main paradigms, such as the theory of human capital and the theory of credentialism (Moreno, 1998). Both highlight the importance of higher education and its determination in individual adult trajectories.

The significance of education can be directly verified in the unemployment rate according to the level of education (table 1).

Table 1
Unemployment rate by level of education (2022)

	Male rate	Female rate
Illiterate	26.3	46.7
Primary education	24.1	30.5
Secondary (stage 1)	14.7	22.5
Secondary (stage 2)	11.7	17.2
Higher education	6.2	8.8

Source: Spanish National Statistics Institute (INE). Economically Active Population Survey.

The differences between the levels below higher education are of particular relevance, with the rate decreasing constantly as the level of education increases. For males, obtaining a higher education means reducing their unemployment rate by more than 400% compared to the lower level.

Given this feminisation of the university, studies on female presence and the traditional gender perspective have been transferred to Vocational Training (VT), where women have a lower percentage. A few years ago, a monograph was published in the journal *Revista de Sociología de la Educación* (2020, vol. 13–3) guided by the concern about the inequalities that persist, since it is in vocational training where the greatest gender inequalities remain (Merino, 2020, p. 305). However, there are inequalities in specific branches of VT, as, if an equality understood between 40–60% is applied, VT cannot be said to be a markedly masculinised educational stage (Aguado, Cano and Sánchez, 2020, p. 315). Despite this last assertion, the situation of women in VT has previously been studied in various analyses (Merino, 2020; Mariño and Rial, 2019).

Furthermore, on institutionalising equality policies and units in universities, the main focus of these bodies, as of 2007, has been on the situation of women. Currently, the activity of these units is dedicated, in particular, to the lower presence of women in scientific careers (STEM). Inequality in technical degree programmes is evident, and it is an object of appropriate intervention; however, the paradox is that there is no action around other inequalities, nor are these inequalities made visible. Thus, for example, there are similar situations of imbalance for men in other areas, such as health sciences, where there appears to be no concern from a male perspective. Rather, these realities are mentioned exceptionally, arguing that it likely also requires specific future intervention, in this case in favour of the integration of more students (Gala, 2010, p. 39).

Studies with a gender perspective in the university sphere are fundamentally related to three interrelated blocks: the student body, the teaching staff and management positions.

1. In the field of students, it is common that the concern about women in university education does not reside in their access to these studies, but rather shifts to other issues (multiple authors, 2010). The concern is that there are still degrees or studies that women do not choose, and where they are enrolled in a much lower proportion than men, as is the case of engineering, in particular, or technical degrees, in general (Oliveira, Unbehaum and Gava, 2019; Olmedo et al., 2018).
2. Gender studies focused on the employment of women in the teaching profession, where women are under-represented (Guil and Flecha, 2015; Pérez, 2005). If women have a majority in the classrooms and obtain better results, there would be a process of discrimination in their access to the university teaching staff. Women are not the majority among university teaching staff and their proportion is extremely low in the body of professors. In this area, the parity policies of the Spanish National Agency for Quality Assessment and Accreditation (ANECA) have intervened with the recognition of care and maternity in the accreditation processes of research activities and higher teaching bodies.
3. Thirdly, the small number of female university graduates in positions of responsibility and management is evident, although the situation has been changing in recent years (Castellón Declaration, 2018; Pérez, 2005). Their presence is not yet significant among figures associated with heads of departments, deaneries or rectorates, being proportionally lower as responsibility increases.

The research conducted as part of this study is limited to the first block, related to the student body. The objective is to describe and analyse the distribution by gender in university students from 1985 to 2022 from a male perspective.

2. Background

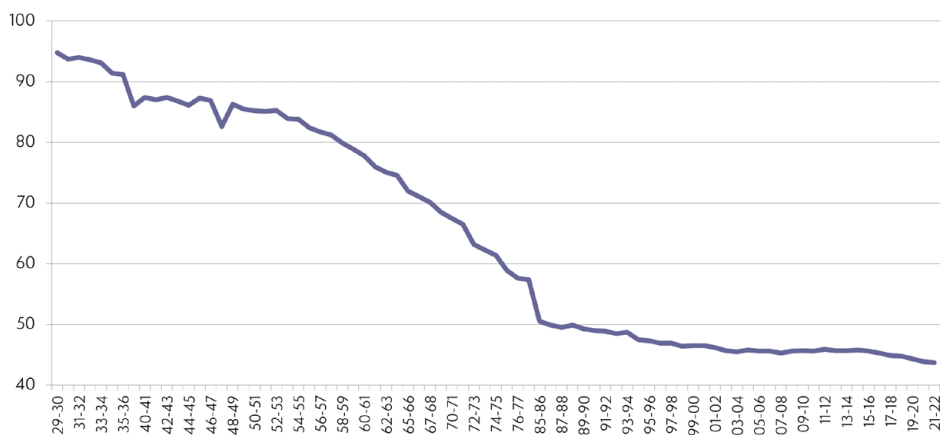
2.1. Enrolment by gender at university

Since the 1986–1987 academic year, women have made up the majority at Spanish universities, a finding also seen in the general international context (Michavila, Martínez and Merhi, 2015). The entry of women was a process that, like many other transformations in Spain, had a pendulum motion, from not having been present for centuries to being in the majority in a short period of time. Women themselves have been struck by this incorporation, which they describe as an avalanche, with an unexpected and continuous growth of women at university (Almarcha, González and González, 1994), and the president of the Women and Science Committee and rector of the Ramon Llull University could not fail to recognise how far women have come in such a short space of time (Giménez-Salinas, 2010, p. 7).

At present, the presence of men is a minority in almost all university areas and their enrolments have not ceased to decline in the period analysed, creating a historical trend (Figure 1).

Figure 1

Proportion of males enrolled in undergraduate degree programmes



Source: Barrera and López, 1984: Up to 1977–1978. Ministry of Education and Vocational Training (1985–1986 onwards). Own elaboration using data from Barrera and López, 1984 (up to 1977–1978) and from the Ministry of Education and Vocational Training (from 1985–1986 onwards).

Since the 1929–1930 academic year, the percentage of males in university classrooms has been decreasing, with a less accelerated rate in recent decades. They accounted for 94.8% at the beginning of the data series, 75% in 1962, 50% in 1985 and 43.7% in 2021.

In a broad egalitarian framework, as men have not fallen below 40%, in a range of 60–40%, it would not be a real problem. That said, this same rule would have determined that if women reached 40% around the seventies in Spain—and in the sixties internationally—the debate about their presence at university would have ended decades ago. Quite the opposite is true, however, and this can be exemplified by a report from that time when female university students were a minority. The year 1970 is declared the International Education Year and UNESCO published a report on the education and promotion of women (Chabaud, 1970). This article proposes equal access to education for women, which “only” means 43% in the education system. This percentage leads to assertions such as “these figures are sufficient to show that girls do not have the same opportunities for access to education as their brothers” (ibid., p. 16). With similar percentages of men at Spanish universities at present, it is necessary to understand and question this historical investment in the proportion of genders.

Likewise, in the first decade of the 21st century, when women enrolled in university postgraduate studies fell from 59% to 51%, the Spanish Foundation for Science and Technology (FECYT) voiced its concern that this decrease suggested the system may be stimulating men to continue their studies and thus increase their professional and intellectual competence to a much greater extent than women (2005, p. 15). Undoubtedly, it is not the figure of 40% that has marked the limit of the issue.

2.2. The unequal choice of studies

With the majority presence of women at university being evident, a persistent theme is the unequal choice of studies according to gender (Arranz, 2004; Fernández et al., 2019; Guil and Flecha, 2015; Sainz and Müller, 2017; multiple authors, 2010). While women opt for certain degrees, and not for others, men do so in a different way. Thus, women are highly represented in degrees such as Teaching, Social Work and Social Sciences in general, or in programmes related to Health Sciences, as well as in other degrees such as Biology. There is a higher percentage of men in technical degrees and engineering.

It can be deduced from this differing situation that women are concentrated in the less socially valued studies and are destined to professions with less prestige and remuneration. On the contrary, men would study the most prestigious degrees with better paid career opportunities (Alberdi and Alberdi, 1984; Guil and Flecha, 2015). The explanation for these choices would be found in the female or male image of training and professions, in gender roles. The main determinants would be in the family, society in general and the media in particular.

These factors condition that, even if the choice of each gender appears free, in reality there would not be an authentic free choice. There is discrimination according to gender, based on a differential socialisation in which women's access did not imply a change in the educational model, being the priority and preferential model for men (Acereda, 2010; Alberdi and Alberdi, 1984; Arranz, 2004; Marqués and Roca, 2010).

Regarding society, social discrimination based on gender causes women to tend to value the public sphere, where they are more protected and have a greater possibility of work-life balance. They choose to study as an objective way to obtain degrees so as not to be discriminated against, opting for degrees with professional opportunities in the public sphere (Almarcha, González and González, 1994; Carabaña, 1984). In short, female degree programmes are formed, chosen mostly by women (Arranz, 2004; Marqués and Roca, 2010; Pérez, 1996).

However, it is not simply a matter of presence or not. The main problem, together with the completion of university studies, is quality and performance. It is well known that the university results of women are higher than those of men, that they have lower drop-out rates and that they finish their studies earlier (Hernández and Pérez, 2018). However, this has not resulted in interest being taken in what happens or there being concern about the problems of men at university. Very much to the contrary, it has been used as an objective display of the superior dedication of women and the fact that men have poorer performance and less presence at university has been normalised. It is a merit of women who invest in education compared to the conduct of men (Almarcha, González and González, 1994).

Durkheim and the concept of idol (a kind of ghost that disfigures reality, but appears to be reality) have been called upon to point out how the majority presence of

women at university disfigures the real problem: their discrimination in the choice of degree programmes, as well as reaching positions as teaching staff and management (Arranz, 2004). There are even authors who question whether universities prioritise the gender of their teaching staff over educational excellence (Guil and Flecha, 2015).

The concern and discrimination of educational access has been disappearing to the extent that women predominate. When this problem appears, it is as a historical situation of women in the past (e.g., Montero, 2009; Palermo, 2006). For university students, there has only been the egalitarian unease that, of the five branches of knowledge, women are not sufficiently represented in one. This concern is dispelled if the disproportion is reversed, with male under-representation. Proof of this is that the main focus of equality is on degree programmes or branches where there is a lower percentage of women: engineering and STEM disciplines.

2.3. STEM disciplines, an example of concern for women

Specifically, the movement to make science and technology equal began in the United States in the 1970s; the Association for Women in Science was founded in 1971. Europe joins in the following decade, culminating in the formation of the “Helsinki Group” as a means of analysing the situation of women in science. In 1997, the magazine *Technology & Culture* dedicated a monographic issue to gender in technology¹, the first work on this topic in 1976 (Cowan, 1976).

In 1998, there was a joint conference of the Parliament and the European Commission in Brussels on “Women and Science”, declaring the need to intensify efforts to increase the presence of women in research. This means, for the first time, a line of work in the European Commission’s Fifth Framework Programme for Research, a Communication and an Action Plan in 1999.

The United Nations began celebrating the International Day of Women and Girls in Science on 11 February 2015 because “a significant gender gap has persisted throughout the years at all levels of science, technology, engineering and mathematics (STEM) disciplines all over the world”.²

To this we must add events such as “European Women in Technology” and “Women in Technology”. The idea of women as equally capable as—and not inferior to—men in all branches of science is encouraged. Another example, the Fondation L’Oréal sponsors events such as “For Women in Science”, and Vodafone, “Code Like a Girl”.

The trend seen in Spain is consistent with that of its international environment. Since the 1990s, the Polytechnic University of Catalonia has been developing the programme “*Programa Dona*”, and the Autonomous University of Barcelona has recorded the first analyses of sexism (Pastor, 2010). In 2001, the Association of Women in Research and Technology (AMIT) was founded, born out of the need to defend the rights and opportunities of female researchers and technologists. Since 2001, the National Research Council (CSIC) has been preparing reports on its staff, through its

Women and Science Committee. Furthermore, the Spanish Foundation for Science and Technology (FECYT) has a line of work and reflection on the role of women and published a study on “Women and Science” (2005).

At the university level, the creation of the Equality Units was a very decisive boost. Programmes and activities were initiated to address the gender gap that disadvantaged women. This line remains strong at universities and is an essential part of the “Women Rectors Summit” that was extended to the international context with the European Women Rectors Association (EWORA).

Universities hold events such as “Girls’ Day”³, for secondary school students, with the aim of making women choose more technical degree programmes and engineering. Another project is “*Quiero ser ingeniera*” (I want to be an engineer)⁴, which sees the involvement of several Spanish universities and the Institute for Women and Equal Opportunities. The Santander WomenNOW Summit was celebrated in March 2019, an international event that turns Madrid into the European capital of women. It has extremely broad objectives and develops specific forums dedicated to women in science. In general, university events on women and science continue to multiply year after year.

The political sphere is also not exempt from this gender trend. In November 2002, the Congress of Deputies debated a non-legislative proposal in relation to improvements in the situation of women in science and technology. Countless actions are taken in relation to the female issue within the university sphere and raising awareness of the problem, with it becoming part of the 370 proposals that the political party PSOE offered to Unidas Podemos in September 2019 as an investiture pact. Specifically, measure 58 promises to boost STEM vocations, giving free enrolment in the first year to women if their presence is less than 30%, and with additional points in grants. This interest is still evident in research funded by the Ministry of Education and Vocational Training, such as that carried out by Grañeras et al. (2022) on the gender gap in STEM education.

From the observation of the lack of analysis on the male university student, this article proposes this view and shares Vila’s assertion that reliable data are essential for beginning an analysis; without data to support a claim, anyone can say that the situation does not exist, or that it is not so serious or that it will simply change over time (2010, p. 161).

In light of this context and background, the main objective is to analyse the male proportion of students at university enrolled in programmes in different branches of knowledge, obtaining an extensive longitudinal perspective. The information provided is from the male perspective, that is, shedding light on percentage of male presence. As a specific objective, the distribution of students at all levels of the university system will be explored, from their enrolment in degrees to data in master’s and doctoral studies.

3. Methodology

A quantitative methodology is used. A secondary analysis of the data extracted from the Ministry of Education and Vocational Training is conducted⁵, with a large amount of data available on the student body, included in university statistics and reports.

The sources are statistics of university students, statistics of doctoral theses, and data and figures of the Spanish university system. Using these as a basis, the variables used are obtained: number of enrolments and graduates at each university level, as well as the doctoral theses defended. In all the variables, the division by gender is considered to achieve the objective of describing and analysing male presence at the different university levels.

The level of analysis of these sources is descriptive, using, at all times, cross-sectional variables that enable the construction of contingency tables, with the gender of university students as the main variable.

All data presented refer to the university system as a whole. This means that the data analysed include both campus-based universities and those offering distance learning, the actual centres and affiliated centres, and those of a public and private nature.

The selected academic courses cover a period of almost forty years, from 1985–1986 to 2021–2022. The choice of the initial academic year of the analysis is justified for several reasons. Firstly, because this is the year from which the Ministry offers information on its website, making it possible to create series directly and contemplate several decades of evolution. Secondly, it is since the mid-eighties that women have reached a majority percentage in the Spanish university system and men, a lower percentage, and therefore the aim is to discover how the situation has evolved until now. Last but not least, choosing that start date allows the debate to continue, which, as stated above, had certain relevance in the mid-eighties, before being subsequently diluted.

4. Results

The results are structured according to the different contexts where university students are present. A first approach focuses on male students enrolled in undergraduate degree programmes, where the majority of students are concentrated. Secondly, the situation at the levels of master's and doctoral studies is addressed.

4.1. Undergraduate degree programmes

This section analyses two key issues related to university students. On the one hand, enrolments in general and, on the other, differentiation according to branches of knowledge.

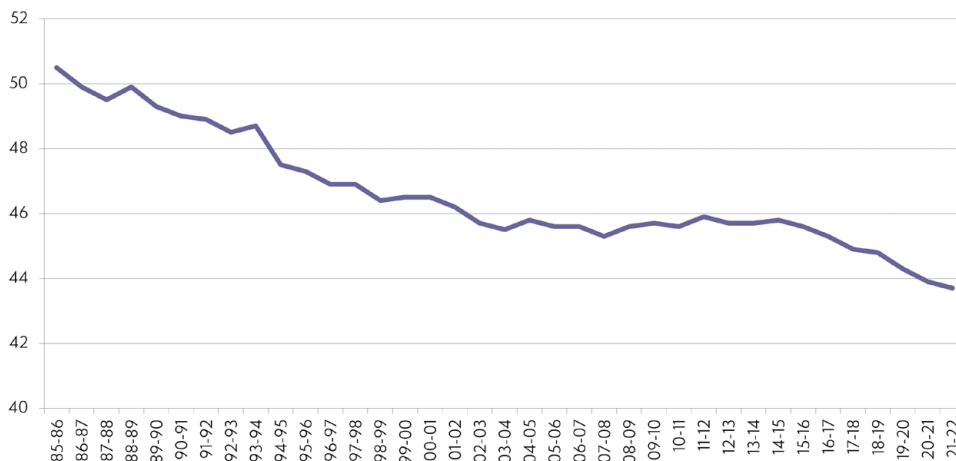
4.1.1. Enrolments

Undergraduate degree programmes constitute the central core of university studies and are essential stages for continuing formative development. The changes in the university sphere, related to the process of European convergence and the Bologna Process, have led to the current degree structure being entirely imposed, although statistics from years ago were fundamentally of cycles. For comparative purposes, they are added in a single category that encompasses the bulk of university students, who are in the process of obtaining a bachelor's degree.

The gender distribution of these students (since the mid-eighties) is represented in Figure 2.

Figure 2

Proportion of males enrolled in undergraduate degree programmes



Source: Ministry of Education and Vocational Training. Own elaboration using data from the Ministry of Education and Vocational Training.

The most recent record of data by gender (2021–2022) indicates that the distribution is as follows: 43.7% for males and 56.3% for females. There is a difference of about 13 percentage points, and therefore it is common to agree on the feminisation of the university.

It is the evolution of this process, however, that is more interesting. Longitudinally, a progressive decrease in the proportion of men at university is evident. Thus, while in the 1985–1986 academic year they accounted for 50.5% of the students enrolled—the last year that they exceed 50%—, their percentage fell to 46.5% in the 2000–2001 academic year. The representativeness of males continues to fall in

a gentle yet steady fashion; a decade later, in 2010–2011, they accounted for 45.6%, and in 2021–2022, 43.7%.

This evolution has had three phases of development. There is a first phase in which the decline was more pronounced, mainly in the last fifteen years of the 20th century. From 1985 to 2000, the percentage fell by 4 points. Secondly, there is an intermediate phase of certain stabilisation; in the period 2000–2016 the decline is one percentage point per year. Lastly, the decrease is seen to accelerate somewhat more from 2017 onwards, registering a drop of 2 percentage points.

It is true that there are exceptional academic years where there is a certain increase (for example, 2008–2009), however this is only a few tenths, and they are specific peaks that do not distort the descending reality. This increase can be associated with the period of economic crisis experienced in Spain since 2007. The impact of unemployment was especially felt in the most masculine sectors, such as construction, which influenced university enrolment as a means of improving job qualifications (Graves and Kuehn, 2020).

Therefore, male students, who started the historical series at parity with females, have gradually become less prominent, and there is now a significant gap in enrolment.

Given that this is the reality, and if the aim is equality or parity, it can be said that this is not being achieved by the university system in undergraduate degree programmes. On the contrary, inequality is being accentuated with respect to men, who are less and less represented as students.

In any case, where the analyses of the differentiation by gender end, a very relevant factor that must be included to understand in real terms the situation according to gender at university is overlooked. It is important to note that the ideal equality or parity can be imagined at 50–50, where both males and females would have a typically perfect presence. However, this would not be egalitarian if the actual composition of both groups is not 50–50. In other words, if generationally there were more women than men, or vice versa, would it be acceptable for the percentages to be limited to 50%?

That said, with a greater degree of flexibility, the margin that could be considered egalitarian would range between 60–40%, which would be reasonable (Aguado, Cano and Sánchez, 2020). From another perspective, it could be assumed that the fair and egalitarian thing would be to preserve the generational population proportion and give opportunities to all people; if there are more women demographically, it is logical that there are more female university students. In order to judge equality, the gender ratio at university ages must be known.

According to data from the Spanish National Statistics Institute (INE) for the age group that conforms the majority of university students in undergraduate degree programmes (18 to 24 years old), there is a slight difference. The proportion of men in 1985 was 50.9% compared to 49.1% of women, a proportion that has barely fluctuated over the course of these three decades. Table 2 represents the male proportion in the ages indicated by five-year periods, whereby the stability of the data can be verified around just over 51%.

Table 2
18–24-year-old male demographic

	1985	1990	1995	2000	2005	2010	2015	2020
Percentage of males	50.9	51.6	51.1	51.2	51.3	51.0	51.1	51.4
Total population*	4,492	4,555	4,740	4,461	3,923	3,541	3,156	3,328

*Total population aged 18–24 in thousands. Source: own research using INE data.

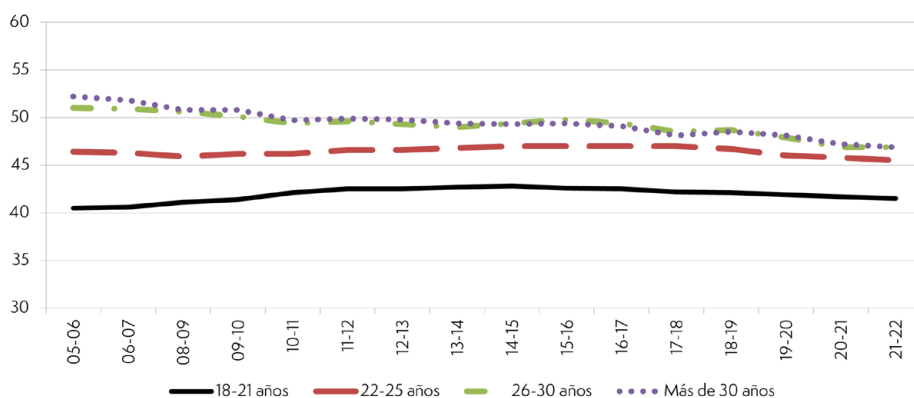
Based on these percentage figures and comparing them with the proportions of students enrolled according to gender, the differences are even more disadvantageous for men. The gap between the actual generational proportion of males and their access to university is continuously increasing.

In the 1985–1986 academic year this gap was only 0.4%; however, during the period analysed this difference has increased, rising from 2.6% in the 1990–1991 academic year to 3.8% in 1995–1996, 4.7% in 2000–2001, 5.7% in 2005–2006, 5.4% in 2010–2011, before finally reaching 7.5% in the 2020–2021 academic year. In other words, the distance between living males and those enrolling in university degrees has been increasing, which means that over the years a greater proportion of males have been left out of the university context.

In short, there is a significant gender gap in university students. The value ranges between 6.3% deficit (if it is deemed that the presence must be 50% parity) and 7.5% (if it is deemed that they must be represented according to their own demographic reality).

The loss in prominence of male students is also detected if the male students are represented according to age (Figure 3).

Figure 3
Proportion of males enrolled in undergraduate degree programmes by age group



Source: Ministry of Education and Vocational Training. Own elaboration using data from the Ministry of Education and Vocational Training.

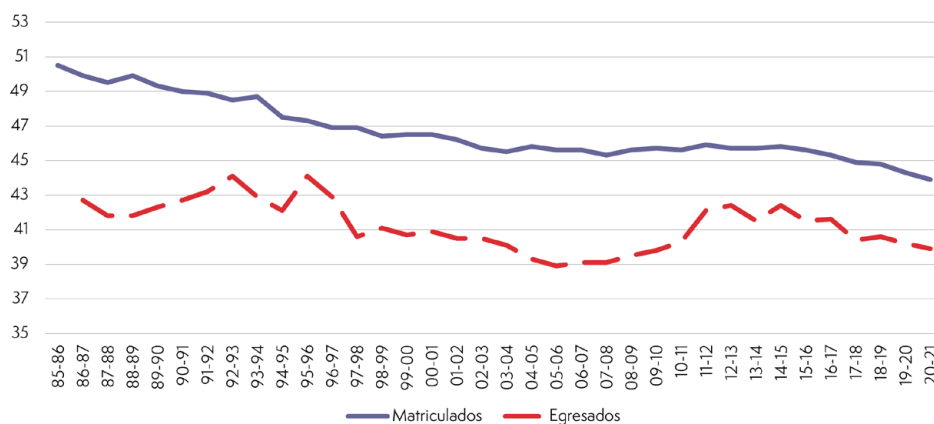
The lowest proportion of males appears in the younger groups, where their enrolment has decreased; however, their presence is somewhat greater in the older groups (without being the majority in any of the age groups). For the most recent academic year, 2021–2022, males represent 41.5% of those aged 18 to 21 and among those over the age of 30 years, 46.9%. However, these data must take into account two factors that increase the percentage difference among men. First, males generally have a higher tendency to delay the completion of their studies, meaning they are more present at older ages; and second, the economic crisis caused males with an atypical age to enrol at university (Armenteros and Pérez, 2017; Feito, 2019; Graves and Kuehn, 2019).

From a strict perspective of the first entry of men to university, the 41.5% reflected would be approaching the lower limit of the conventional equality margin 40–60%.

Since male enrolment in the Spanish university system is in decline and a minority, the situation is even more differential in relation to graduates. Figure 4 shows the evolution of enrolled and graduated students from the 1985–1986 academic year to 2020–2021. In contrast to enrolments, the trend of graduates is not so linear, with increases and decreases, especially in the second half of the 1990s and the first half of the 21st century.

Figure 4

Proportion of males enrolled in and who are graduates of undergraduate degree programmes



Source: Ministry of Education and Vocational Training. Own elaboration using data from the Ministry of Education and Vocational Training.

Overlooking the oscillations, there are results that can be derived from the data. Firstly, the percentage of male graduates is lower than that of enrolments. This means that at the end of the degree, the gap between the genders has increased even

more, with a higher percentage of female graduates compared to enrolments. Males are affected by longer periods of study or, in the worst-case scenario, have dropped out (Fernández-Mellizo, 2022; Rubio, 2009).

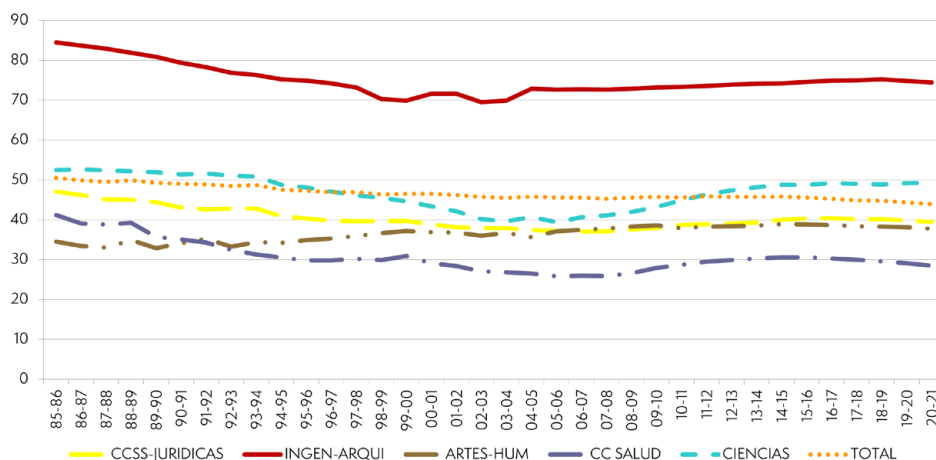
A positive aspect is that the differential between the male percentage of enrolled students and graduates has decreased. In the second half of the eighties it oscillated between 7% and even 8.2% (1988–1989), and then dropped to 5–6% in the nineties. In the 21st century, it varies by around 5% in the first decade, before decreasing in recent years. In the 2020–2021 academic year, this percentage is 3.6%. The reason for this decrease in the gap may be due to the fact that, since the percentage of male university students is lower, perhaps the strong selection makes them more motivated to complete their studies. On the other hand, the implementation of the four-year degree facilitates a higher completion rate than the previous five-year degrees.

4.1.2. Differentiation according to areas of learning

The presence of men and women can be analysed in a more detailed way by dividing them according to the area of learning (Figure 5).

Figure 5

Proportion of males enrolled in undergraduate degree programmes according to the area of learning



Source: Ministry of Education and Vocational Training. Own elaboration using data from the Ministry of Education and Vocational Training.

From this perspective, some substantial differences between areas are evident. A first general analysis shows a low participation of males in almost all areas, with the

exception of one. A downward trend in male presence in the period is common in the five areas, with certain stabilisation in the last third of the academic years analysed, but without marking the initial values of the analysed period.

Analysing this in detail, in most areas they are below 50% of the total number of university students. Thus, both in Arts and Humanities and in Social and Legal Sciences, men are always below the average. Male representation in Arts and Humanities has oscillated between 32% and 38%, with the final result being the only one to be higher than the initial percentage of the period.

In Social and Legal Sciences, as in the rest of the areas, the percentage of male students has only decreased. In the eighties the proportion of men was 47%, at the end of the 20th century this proportion did not reach 40%, and the lowest level was recorded at the beginning of the 21st century with 37%. Subsequently, the percentage of male students went on to recover slightly in recent academic years (39%).

The branch of Science was one of the few that began the period with slightly more men than women (52.5%); however, in the second half of the 1990s, specifically in the 1994–1995 academic year, the proportion of men fell from 50% to 39.6% in the 2003–2004 academic year. From this date, a certain increase is once again seen, ending the period at around half, with 49.2% in 2021–2022.

At the bottom, Health Sciences stands out, the branch with the lowest proportion of men in the entire university system. The highest figure recorded in the period was 41.2% (1985–1986); however, this marked the start of a decline to its lowest figure, 22.3% men in the 2006–2007 academic year. In 2021–2022, the figure recovered to 28.2%, yet only three out of ten enrolled students are male.

Undoubtedly, the line that extends in the top part of Figure 5 is striking. This line maps the branch of Engineering and Architecture. In this area there is a strong male presence, to the detriment of females. The period begins with 84.5% males, but the trend shows a progressive decline that, within a decade, stands at 74.2% (1996–1997), before continuing to decline with peaks and troughs to reach 69.5% for the 2002–2003 academic year. However, following this minimum, the increase and recovery of male representation is slow but constant, reaching 75.2% in the 2018–2019 academic year, with a certain subsequent decline to 73.5% in 2021–2022. This proportion is similar to that recorded twenty-five years earlier (1997–1998 with 73.2%). Although it seems that progress has not been made in equality, it should be noted that the latter percentage is more than ten points lower than the initial figure of the series.

In any case, of the five areas of learning into which the university system is divided, male representation is below average in four, and in some cases well below, as in Health Sciences. Only the branch of Engineering and Architecture stands out above, being the exception in the university context.

4.2. Master's and doctoral programmes

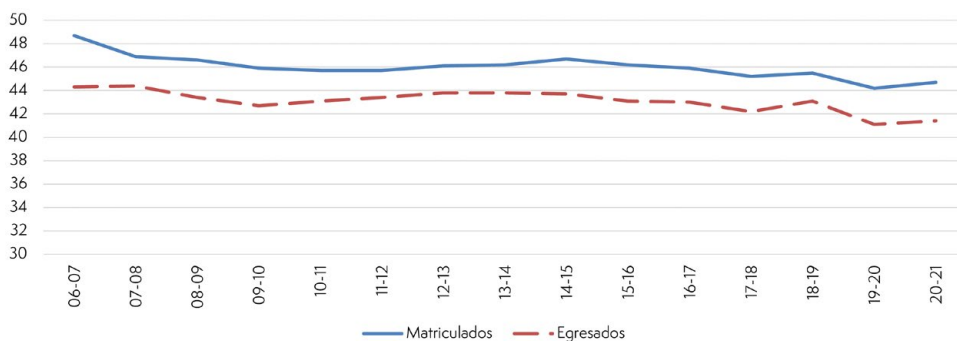
University students can continue their education by completing a master's or doctoral programme. The master's degree is a relatively new qualification, but a series has been created from the 2006–2007 academic year to 2021–2022 (Figure 6).

The data show, once again, that the male presence in master's degrees is lower than that of women and, in addition, has been weakening. Their enrolment at the start of the data series was 48.7%, while in 2021–2022, a value of 45.2% was recorded.

However, it is noteworthy that the enrolment of men at this university level of master's degree is higher compared to undergraduate degrees in all the years analysed.

Figure 6

Proportion of males enrolled in and who are graduates of university master's degrees



Source: Ministry of Education and Vocational Training. Own elaboration using data from the Ministry of Education and Vocational Training.

As for the percentage of graduates, the general trend is in line with enrolment, drawing almost parallel lines. The characteristic, which it shares with the degree, is that the percentage of males who finish is always lower than those enrolled.

It is true that any university enrolment data is higher than that of graduates, as there are always people who do not finish or drop out, however this dynamic affects men in particular. For example, in the 2020–2021 academic year, 56.1% of those enrolled were women, while 60.1% of those who graduated were women. Undoubtedly, in absolute numbers there will have been drop-outs, but the percentage is clear in terms of their proportional gain in prominence.

Finally, the highest level of university degree is the doctorate, in which the corresponding thesis must be defended. Regarding enrolment in doctoral programmes, it should be noted that this level of education is where the greatest equality in the entire university system is found, with 50% usually recorded for each gender.

However, if unequal access and the unbalanced presence by gender at the undergraduate and master's levels do not usually generate analysis, this subsequent equalisation in doctoral studies is very much taken into account by the gender perspective, which considers it a loss of female human capital (Pérez, 2005, p. 55).

The general data should not hide significant differences according to the branch of knowledge, which remain very stable over time. According to enrolment data for the 2021–2022 academic year, males represent more balanced percentages in the doctoral programmes in Social and Legal Sciences (49.3%) and Arts and Humanities (46.1%). In contrast, in the doctoral programmes in Science (53.2%) and, above all, in Engineering and Architecture (69.3%), men are in the majority. At the opposite extreme, male presence is a minority in Health Sciences (37.7%).

Lastly, with reference to the defence of doctoral theses, the overall data according to gender indicate a similar equality to enrolments in doctorates. In the last available year, 2021, of the 11,344 theses defended, 50.9% were by men and 49.1% by women.

5. Discussion

The data reflect a clear reality: the decrease in male presence at Spanish universities, which does not seem to arouse interest or research in the academic community or in society or politics. The analysis is almost always presented with a gender perspective that focuses on women and, if only secondarily, on men. This study offers a pioneering approach to the male perspective on presence according to gender at university. This provides a complementary vision to that offered from the female perspective.

The description over a broad period of time, and considering all university levels, is precise to understand the different features that appear throughout the university system. However, this descriptive nature limits the possibilities for analysis and in-depth theoretical and qualitative research that determine these data, which remains as a future line of study. It was necessary to understand and present the situation in order to subsequently interpret it. Even so, it is possible to understand that the processes and factors that lead to a low enrolment of men in university cannot simply be identified with those that once caused a low presence of female university students. The figures may be similar to other periods, but the casuistry is yet to be determined.

Inequalities in enrolment are often attributed to “gender biases”, as the CRUE (Confederation of Rectors of Spanish Universities) Equality Policy Delegate recently put it⁶, adding that eliminating them “is not a matter of equality, but of social justice”. The socio-cultural environment is blamed for the fact that women do not have STEM vocations, and the egalitarian conditions and dissemination actions that make role models of each gender visible in the professions must be promoted early on. Conversely, the same mechanisms could be conditioning men, with the difference that there are no systematic and specific programmes for them, unlike women.

The hegemonic explanation, within the socio-cultural or economic field, banishes any mention of possible differences in cognitive development and non-cognitive skills according to gender, which may be an explanation of the educational problems of men (Buchmann, DiPetre and McDaniel, 2008; Calvo, 2011). It may be logical that sociology is not primarily dedicated to these issues, but they must be considered in an overview of inequalities together with, of course, others such as educational structure and practices.

In any case, the concern does not reside in the inequality of university access, which disadvantages men, but rather remains in the parity distribution according to gender in the different studies.

It should be added that, although this study is framed in the context of the university system, inequalities by gender are preceding and subsequent, with the university sphere being only a specific context. If the educational intervention is comprehensive, the entire system, which has different situations, should be considered. From starting nursery to defending a doctoral thesis, the inequalities vary, although this overview indicates that they are almost always included in a range of between 40 and 60. Within this range there are very different causes that give rise to a greater or lesser presence, and therefore there must be different measures and policies for each context. While in nursery or primary school the disproportion is demographic, in upper secondary education it responds to different motivations, which permeate the university sphere.

In any case, obtaining higher education training is essential to achieve quality employment, as it guarantees a better employment rate, better working conditions and higher salaries (Armenteros and Pérez, 2018; Martínez, 2019). Therefore, in this final phase, special attention must be paid to the decrease in male students, which will affect the whole of society not only in the aforementioned aspects, but also in others such as the marriage market, family formation and birth rates.

6. Conclusions

This article seeks to open a line of research that takes into account the situation of male university students. They are the other side of the coin of university students and their data, as communicating vessels, are affected by the same processes, advances or setbacks present in women and/or society.

In this sense, the extensive data series presented shows the loss of male prominence at university, which has slowed in recent years, but which continues to decline. The most recent data indicate 43.7% of males in degrees, which would generate a gender gap whose size will depend on whether a parity of 40–60% or a representation adjusted to the actual proportion that young men represent with respect to women of the same age is considered desirable. This would be another extensive and remarkably interesting debate on what objective equality policies should be set in the university sphere or in society in general.

The truth is that, as men are more demographically in the age range of university access, the real proportion of university students with respect to the generation total of men has only decreased. In the 2020–2021 academic year, the gap stood at 7.5%, while for the 1985–1986 academic year it was only 0.4%. This means that fewer and fewer men are accessing university in proportion to their demographic reality in Spanish society. I consider this demographic nuance to be of great significance; however, as it is not present in the considerations on equality, it must be an issue to be introduced.

From a perspective focused exclusively on enrolment data, the gap between men and women is 12.6% in favour of women, since for the 2020–2021 academic year they represent 56.3% of university students, while men represent 43.7%.

In any case, the differences according to gender are very significant according to areas of learning. Women are in the majority in almost all of them, with there being only one case where men have a very prominent presence: Engineering and Architecture. On the other hand, following completion of the undergraduate level, similar proportions are seen in master's degrees, while doctoral programmes are principally characterised by equal enrolment and thesis defence.

Within this analysed context, an extensive amount of time has been spent promoting women in spaces where their enrolment is not the majority or where they are under-represented; this same impulse, however, has not been detected with respect to men. In the review carried out, no actions, measures or conferences have been found that are specifically dedicated to the support of male university students in any area. While it may be that there has been an isolated action that has not been disseminated, the real explanation is its non-existence, based on the fact that male problems remain in the dark. The challenges of dropping out, under-representation or student failure, where men have a prominent role, are developed in a context of analysis and intervention where they are configured as general problems (Rubio, 2009).

If the objective of the state and universities is real equality, all educational spaces where inequality can manifest itself, regardless of gender, must be analysed and corrective measures applied where necessary. The units of equality must be the ideal platforms and they must start from a basis founded on equal attention to the inequalities between the genders.

Lastly, this study must acknowledge its limitations, the first being its descriptive nature. It is true that the approach could be more analytical and theoretical in terms of the processes that give rise to these inequalities. However, the total lack of the male perspective requires, from the outset, a description and data that give us an accurate understanding of the situation. A future line of research should be to delve into the causes, associated factors and explanations of this male inequality, with the performance, for example, of qualitative analyses.

Finally, university is a stage in the life course of individuals, which implies the limitation of not having a broad picture of the professional opportunities and future constraints that university choices can have for each person.

7. Bibliographic References

- Acereda, A. (2010). Mujeres, toma de decisiones y liderazgo en las organizaciones. En VV. AA. *Doctas, doctoras y catedráticas: Cien años de acceso libre de la mujer a la Universidad* (pp. 139-150). Barcelona: Generalitat de Catalunya.
- Aguado Hernández, J. A., Cano Montero, F. J. & Sánchez Pérez, M. J. (2020). Segregación por género y Formación Profesional: aportaciones al debate sobre la situación actual. *Revista de Sociología de la Educación*, 13 (3), 308-327. <https://doi.org/10.7203/RASE.13.3.16583>
- Alberdi, I. & Alberdi, I. (1984). Mujer y Educación: Un largo camino hacia la igualdad de oportunidades. *Revista de Educación*, 275, 5-18. <https://www.educacionyfp.gob.es/dam/jcr:6d872204-3c1b-4484-a393-6218a17f3a2e/re2750100501-pdf.pdf>
- Alcalá Cortijo, P. (Coord.) (2005). *Mujer y ciencia*. Madrid: Fundación Española para la Ciencia y la Tecnología.
- Almarcha Barbado, A., González Rodríguez, B. & González Jorge, C. (1994). Cambio y desigualdad en el profesorado universitario. *Revista Española de Investigaciones Sociológicas*, 66, 117-139. <https://doi.org/10.2307/40183720>
- Armenteros, J. H. & Pérez García, J. A. (2017). *La Universidad Española en cifras (2015-2016)*. Madrid: CRUE Universidades Españolas.
- Arranz Lozano, F. (2004). Las mujeres y la universidad española: estructuras de dominación y disposiciones feminizadas en el profesorado universitario. *Política y sociedad*, 41 (2), 223-242.
- Barrera Peña, M. L. & López Peña, A. (1984). *Sociología de la mujer en la Universidad: Análisis histórico-comparativo Galicia-España, 1900-1981*. Santiago: Universidad de Santiago de Compostela.
- Calvo Charro, María (2011). *La masculinidad robada. Varones en crisis o el necesario reencuentro con la masculinidad*. Córdoba: Almuzara.
- Carabaña, J. (1984). Modesto intento de interpretación de las tasas femeninas de escolaridad. *Revista de Educación*, 275, 19-43.
- Chabaud, J. (1970). *Educación y promoción de la mujer*. Paris: UNESCO.
- Cowan, R. S. (1976). The «industrial revolution» in the home: Household technology and social change in the 20th century. *Technology & Culture*, 17 (1), 1-23. <https://doi.org/10.1353/tech.1993.0065>
- Declaración de Castellón (2018). *Políticas universitarias en materia de género a debate*. Castellón: Cumbre de Rectores de las Universidades Públicas Españolas.
- Del Amo, M. C. (2009). La educación de las mujeres en España: de la «amiga» a la Universidad. *Participación educativa*, 11, 8-22.
- FECYT (2005). *Mujer y ciencia. La situación de las mujeres investigadoras en el sistema español de ciencia y tecnología*. Madrid: FECYT.

- Feito, R. (2019). La evolución de las tasas de idoneidad. In M. A. Ruiz Rosillo, M. A. Sancho Gargallo & M. De Esteban Villar, *Indicadores comentados sobre el estado del sistema educativo español* (pp. 47–50). Madrid: Fundación Ramón Areces–Fundación Europea Sociedad y Educación.
- Fernández García, M. C., Torío López, S., García Pérez, O. & Inda Caro, M. (2019). Parental Support, Self-Efficacy Beliefs, Outcome Expectations and Interests in Science, Technology, Engineering and Mathematics (STEM). *Universitas Psychologica*, 18(2), 1–15. <https://doi.org/10.11144/Javeriana.upsy18-2.psse>
- Fernández-Mellizo, M. (2022). *Análisis del abandono de los estudiantes de grado en las universidades presenciales en España*. Madrid: Ministerio de Universidades.
- Gala Durán, C. (2010). Políticas de igualdad en el ámbito universitario: nuevas perspectivas. In VV. AA. *Doctas, doctoras y catedráticas: Cien años de acceso libre de la mujer a la Universidad* (pp. 33–44). Barcelona: Generalitat de Catalunya.
- Giménez-Salinas Colomer, E. (2010). Introducción. In VV. AA. *Doctas, doctoras y catedráticas: Cien años de acceso libre de la mujer a la Universidad* (pp. 7–8). Barcelona: Generalitat de Catalunya.
- Grañeras Pastrana, M. et al. (2022). *Radiografía de la brecha de género en la formación STEAM*. Madrid: Ministerio de Educación y Formación Profesional.
- Graves, J. & Kuehn, Z. (2020). *Impacto de los ciclos económicos sobre las decisiones de los estudiantes de educación superior*. Madrid: Fundación Ramón Areces–Fundación Europea Sociedad y Educación.
- Guil Bozal, A. & Flecha García, C. (2015). Universitarias en España: De los inicios a la actualidad. *Revista Historia de la Educación Latinoamérica*, 17 (24), 125–148. <https://doi.org/10.19053/01227238.3303>
- Hernández Armenteros, J. & Pérez García, J. A. (Dir.) (2018). *La Universidad española en cifras 2016–2017*. Madrid: CRUE.
- Marqués Calvo, M. & Roca Rossell, A. (2010). Mujeres y carreras técnicas. In VV. AA. *Doctas, doctoras y catedráticas: Cien años de acceso libre de la mujer a la Universidad* (pp. 45–56). Barcelona: Generalitat de Catalunya.
- Martínez Pastor, J. I. (2019). La relación entre el nivel de estudios y los salarios. In *Indicadores comentados sobre el estado del sistema educativo español 2019* (pp. 165–170). Madrid: Fundación Ramón Areces–Fundación Europea Sociedad y Educación.
- Mariño, R. & Rial, A. (2019). Balance de las necesidades formativas demandadas por mujeres que cursan o que han cursado ciclos de FP en familias profesionales masculinizadas: el caso de Galicia. *EDUCAR*, 55 (1), 251–272. <https://doi.org/10.5565/rev/educar.890>
- Merino Pareja, R. (2020). Formación Profesional y género: Desigualdades que persisten, algunos cambios y debates pendientes. *Revista de Sociología de la Educación*, 13(3), 305–307. <https://doi.org/10.7203/RASE.13.3.17444>

- Michavila, F., Martínez, J. M. & Merhi, R. (2015). *Comparación internacional del sistema universitario español*. Madrid: CRUE Universidades Españolas.
- Montero, M. (2009). El acceso de la mujer española a la universidad y su proyección en la vida pública (1910-1936). *Anuario de Historia de la Iglesia*, 18, 311-324. <https://doi.org/10.15581/007.18.9821>
- Moreno Becerra, J. L. (1998). *Economía de la educación*. Madrid: Pirámide.
- Oliveira, E. R., Unbehaum, S. & Gava, T. (2019). STEM Education and Gender: A Contribution to Discussion in Brazil. *Cadernos de Pesquisa*, 49(171), 130-159. <https://doi.org/10.1590/198053145644>
- Olmedo Torre, N., Sánchez Carracedo, F., Salán Ballesteros, N., López, D., Pérez Poch, A. & López Beltrán, M. (2018). Do Female Motives for Enrolling Vary According to STEM Profile? *IEEE Transactions on Education*, 61(4), 289-297. <https://doi.org/10.1109/TE.2018.2820643>
- Palermo, A. I. (2006). El acceso de las mujeres a la educación universitaria. *Revista Argentina de Sociología*, 4(7), 11-46. [RAS 7 Ger_edu imprenta Ger.indd \(scielo.org.ar\)](https://doi.org/10.1016/S0034-9851(06)00007-0)
- Pastor, I. (2010). Las mujeres en la Universidad. ¿De la igualdad de oportunidades a la igualdad efectiva? In VV. AA. *Doctas, doctoras y catedráticas: Cien años de acceso libre de la mujer a la Universidad* (pp. 101-114). Barcelona: Generalitat de Catalunya.
- Pérez Sedeño, E. (1996). De la biología imaginaria a la sociología real: obstáculos para el acceso de las mujeres a la ciencia. In M. A. García de León, M. García de Cortázar, & F. Ortega. *Sociología de las mujeres españolas* (pp. 219-241). Madrid: Editorial Complutense.
- Pérez Sedeño, E. (Dir.) (2005). *La situación de las mujeres en el sistema educativo de ciencia y tecnología en España y su contexto internacional. Programa de análisis y estudios de acciones destinadas a la mejora de la calidad de la enseñanza superior y de actividades del profesorado universitario* (REF: S2/EA2003-0031). <https://www.ohchr.org/Documents/Issues/CulturalRights/ConsultationEnjoyBenefits/UNESCOLASITUACIaNDELASMUJERESENELSISTEMA.pdf>
- Rubio Castro, A. (2009). El abandono y la falta de éxito de los chicos en la escuela, un problema de género. *Participación educativa*, 11, 23-39. <https://redined.mecd.gob.es/xmlui/bitstream/handle/11162/91767/00820113014271.pdf?sequence=1&isAllowed=y>
- Sainz Ibáñez, M. & Müller, J. (2017). Gender and family influences on Spanish students' aspirations and values in stem fields. *International Journal of Science Education*, 40 (2), 188-203. <https://doi.org/10.1080/09500693.2017.1405464>
- Vila, A. (2010). Las mujeres en la investigación científica: apuntes sobre la historia y el futuro. In VV. AA. *Doctas, doctoras y catedráticas: Cien años de acceso libre de la mujer a la Universidad* (pp. 159-166). Barcelona: Generalitat de Catalunya.
- VV. AA. (2010). *Doctas, doctoras y catedráticas: Cien años de acceso libre de la mujer a la Universidad*. Barcelona: Generalitat de Catalunya.

Notes

- 1 Special Issue *Technology & Culture* (1997). Gender Analysis and the History of Technology, vol. 38 (1).
- 2 The United Nations has a website on the event where the reasons and objectives of the activities can be elaborated on. Retrieved from: <https://www.un.org/es/events/women-and-girls-in-science-day/> [23-5-2023].
- 3 Further information can be found on the website. Retrieved from: <https://www.uv.es/uvweb/universidad/es/listado-noticias/-girls-day-captar-estudiantes-ingenieria-ciencias-1285846070123/Noticia.html?id=1285920638113> [23-5-2023].
- 4 The development of the activity can be found on its website. Retrieved from: <https://quieroseringenera.ugr.es/> [23-5-2023].
- 5 The data are public and accessible on the Ministry's website. Retrieved from: <https://www.universidades.gob.es/estadistica-de-estudiantes/> [23-5-2023].
- 6 Statements retrieved from: <https://www.crue.org/2023/03/delegada-de-igualdad-sesgos-de-genero-ambito-academico/> [23-5-2023].

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RESEARCH
NOTE
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INVESTIGACION

RESEARCH NOTE/NOTA DE INVESTIGACIÓN

Students as Rational Actors in Multiple-choice Tests and How to Mark their Mistakes

El estudiante como actor racional ante exámenes tipo test y cómo puntuar sus errores

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ABSTRACT

Sociologists teaching at universities have seen how multiple-choice tests with closed-ended questions have become the norm in the discipline. If wrong answers are not penalised, these tests become a context that favours the emergence of rational actors in the form of the student-player. Such students minimise their effort by taking advantage of the probability of answering correctly out of luck. By applying the definition of a Bernoulli random variable, this methodological note presents the score that must be awarded to incorrect answers in exams, regardless of the number of questions and response options. Deviating from this score means one of two things: favouring the emergence of the student-player, or overly penalising the risks taken by students when sitting exams.

KEYWORDS: closed-ended question; evaluation; exam; mark, penalty; rational action; score; student; test.

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RESUMEN

La experiencia de los sociólogos que enseñamos la disciplina en la universidad muestra que el uso de los exámenes tipo test con respuestas cerradas se ha generalizado en nuestra disciplina, entre otras. Si no se penalizan las respuestas erróneas, estos test se transforman en un contexto que favorece el surgimiento de un actor racional en la forma del estudiante-jugador. Este minimiza su esfuerzo aprovechando la probabilidad de acertar con que le obsequia la suerte. Aplicando la definición de variable aleatoria de tipo Bernoulli, en esta nota metodológica presentamos la puntuación que deben tener las respuestas erróneas en exámenes de cualquier extensión en su número de preguntas y opciones de respuesta. Desviarse de esta puntuación supone, o bien favorecer el surgimiento del estudiante-jugador, o bien penalizar en exceso la asunción del riesgo a equivocarse que todo estudiante debe afrontar en un test.

PALABRAS CLAVE: acción racional; estudiante; evaluación; examen; nota; penalización; pregunta cerrada; puntuación; test.

1. Introduction

Multiple-choice exams (referred to hereinafter as “exams” or “tests”) have been the subject of sociological reflection for more than fifty years (see, for example, Goslin and Glass, 1967). Nevertheless, their expansion beyond controversial intelligence tests and American university entrance exams is more recent. As Edwards (2006) points out, their proliferation can be linked to Parsons’ claims about school: in meritocratic societies, this institution fulfils the dual function of (a) talent selection, and (b) the subsequent allocation of individuals to jobs (see, however, Bennett de Marrais and LeCompte, 1998, for a critique of this argument).

In recent years, these tests have been taken in numerous Spanish university degrees, including the social sciences, where discursive subjects abound and, therefore, it does not appear to be the best way to evaluate the knowledge acquired. It is the task of sociologists to study the causes of this trend. Although this is not the aim of this brief methodological note, it should be mentioned that the most cited reason, in my experience, is that students and teachers prefer tests because they require less effort than exams with open-ended questions: not only do teachers correct them more easily and quickly, but the conflict in mark reviews or appeals is also reduced. Furthermore, students are spared having to write their own rationale, as well as the prospect of making grammatical and spelling errors when answering the questions. Another advantage of tests is that, even if the decisions regarding their design and contents are subjective, the standardisation of their closed answers makes their evaluation more objective (Andreassen, Rasmussen and Ydesen, 2013).

Nonetheless, the objective of this methodological note is to point out that those tests in which wrong answers are not penalised is a social context that favours the rational calculation of the well-known *homo economicus* (Levitt and List, 2008). In this case, the ideal typical model, in the Weberian sense (Weber, [1922] 1982), is a student solely motivated by the aim of passing with the least effort (i.e., without studying). This stereotypical idle student answers the test questions at random. Faced with this situation, many teachers are unaware of how wrong answers should be evaluated to reduce the student-player’s expectation of passing to zero. In some cases there are no penalties,

thereby giving a generous advantage to the student who has not studied. As will be seen later, this is equivalent to the probability of randomly guessing the correct answer from each question's response options. (Several studies, for example, Dehnad, Nasser and Hosseini, 2014, and Schneid et al., 2014, conclude that three response options is the optimal number to maximise the validity and reliability of the tests). Translated into points, the student-player would obtain on average the maximum exam score, for example, 10, multiplied by the previous probability; for example, if there are 3 possible answers, on average the student's final score would be $10 \cdot \frac{1}{3} = 3.3$ points.

In other cases they penalise too little, which continues to give an advantage to the idle student which will be within the range $\left(0, \frac{1}{\text{number of possible answers}}\right)$, depending on the penalty used.

Finally, in some instances, incorrect answers are over-penalised in relation to that which would eliminate the role of chance. This situation shifts the penalty to the left on the real line: that of the student-player becomes negative, while that of the student who has prepared becomes lower than the numerical value that best reflects their knowledge.

Although teachers sometimes miscalculate how to penalise incorrect answers, some students employ strategies designed to score as high as possible on tests with as little study as possible (see, for example, Psiconociendo, 2022, and Sentipia, 2022). There is even a campaign for the Spanish Constitutional Court to declare the penalty for incorrect answers on tests to be unlawful (see Icaro100, 2010) based on the legal justification proposed by Muñoz Clares and Caballero Salinas (2019).

In light of this situation, this methodological note is intended to help both teachers and students approach the issue (a) knowing its technical details, and (b) being aware of the model student who is favoured by one kind of score or another, no penalty vs. a fair penalty: the student-player vs. the responsible student, respectively. The final result of a correct calibration of the score, correcting according to wrong answers, is that the final exam mark numerically reflects the student's state of knowledge.

Furthermore, and unlike some articles that deal with the same subject and that have served as inspiration for this note (see, for example, Morales, 2017; among the many resources on these topics that can be found online, of particular note are those by the American Statistical Association, 2013; Bickis, 2017 and Stanbrough, 2009), the general formula is presented here to calculate the mark for wrong answers, regardless of the number of questions in the exam and the number of response options for each. The only constant assumption is that there is a total of ten marks available on the exam, as is usual in the Spanish school and university system. (In any case, if another score were used, it would suffice to replace the number 10 with the corresponding number in the formulae below).

The result is a simple, but not trivial calculation. The calculation requires the command of some basic statistical concepts: sample space, Bernoulli and binomial discrete random variables, as well as its expected value and probability density function (pdf) also known as probability mass function (pmf). Those concepts, that are

discussed more extensively in any statistical manual, will be explained briefly and exemplified in this note (see, for example, Martín-Pliego and Ruiz-Maya, 2006).

2. The rational actor and the role of chance in tests

If the model of the student who is motivated exclusively by the aim of passing with the least effort is taken to extremes, this can be equated to not studying at all. However, even without studying, if there is no penalty for an incorrect answer, such a student *qua* rational agent answers the closed-ended questions because they can guess the correct answer from the response options by pure chance.

Randomly choosing an answer out of the m options has a probability $p = \frac{1}{m}$ of being right, and a probability $q = 1 - p = 1 - \frac{1}{m} = \frac{m-1}{m}$ of being wrong. Indeed, the probability of randomly getting all the exam questions right is lower, since, if each question is regarded as independent to the other questions, which is reasonable for the case of the student who has not studied anything. Then the probability of getting the n exam questions right is $p^n < p$.

This situation replicates the games of chance created by the Swiss mathematician Jacob Bernoulli ([1713] 1993) in the eighteenth century, thus becoming known as Bernoulli's experiments or trials. The fundamental issue is this: those students who do not study and who choose their answers at random are rewarded if an exam's marking criteria award positive points for correct answers, for example, one point, and zero points for both unanswered questions and incorrect answers. In this case, the student-player can expect to get $1 \cdot p + 0 \cdot q = 1 \cdot \frac{1}{m} + 0 \cdot \frac{m-1}{m} = \frac{1}{m} = p$ points on each exam question, a score that is by no means negligible.

The aim of this article is to explain the above calculation, as well as the marking criteria that would entirely cancel out such an a priori advantage, so that, on average, the student-player gets a zero on the exam.

3. Fundamental concepts

Answering closed-ended questions is an example of a "Bernoulli" trial or experiment because there are only two possible outcomes for the student: success or failure, which can be denoted ω_1 and ω_2 , respectively, and which make up the so-called "sample space" Ω of the test. However, it is not possible to operate mathematically with events. Therefore, the "random variable" function is introduced (hereinafter, "RV"); in this case, $Y \equiv$ "randomly guessing the answer to a question", which translates, so to speak, the two events $\Omega = \{\omega_1, \omega_2\}$ from the sample space Ω to the two numerical values of the RV. $Y: Y = \{y_1, y_2\}$. For this reason, it is common to see the following notation in statistical manuals:

$$(1) Y: \Omega \rightarrow R.$$

The expression (1) means that the RV Y is a function defined on the sample space (set of the results of a random experiment) that takes values in the body of the real numbers R . However, in Bernoulli's experiments or trials, the RV function translates the test results to the field of Z integers:

$$Y: \Omega \rightarrow Z$$

Specifically, as done previously, the integer 1 is usually reserved (for the sake of clarity and operational convenience) for the "success" of the test (answering correctly in the example given here corresponds to the value 1 of the RV: $Y = y_1 = 1$) and the integer zero as the opposite, for the "failure" or mistake ($Y = y_2 = 0$) (Baclawski, 2008, p. 48).

Each value y_1, y_2 of the RV Y has an associated probability of being verified in a given trial or experiment or, in the context of this article, in each exam question: the student answers correctly ($\omega_1 = \text{success}, y_1 = 1$) with a probability $p = \frac{1}{m}$ and the student answers incorrectly ($\omega_1 = \text{failure}, y_2 = 0$) with a probability $\frac{m-1}{m}$. In summary, the RV has a probability distribution which, here, is also called Bernoulli's distribution and which is succinctly expressed as $Y \sim \text{Bernoulli}(p)$.

"Expectation" (a mathematical operator denoted by $E[\cdot]$) of an RV Y is the name given to its "expected value": $E[Y]$, which depends on the pmf and tends towards the Y values with the highest associated probability. When there are empirical data, the equivalent is the mean: this approaches the expectation as the sample increases or repeats¹.

In the discrete case, the expectation is calculated as the sum of the product of the probability (p_i) that each value i of the variable $Y(y_i)$ has for that same value y_i (here, $i = \{1,2\}$): $E[Y] = \sum_i y_i p_i = y_1 p_1 + y_2 p_2 = y_1 \frac{1}{m} + y_2 \left(1 - \frac{1}{m}\right) = y_1 \frac{1}{m} + y_2 \frac{m-1}{m}$.

When the correct answer is marked with the integer 1 ($y_1=1$) and the incorrect answer with 0 ($y_2=0$), the expected value is p : $E[Y] = 1 \cdot \frac{1}{m} + 0 \cdot \frac{m-1}{m} = \frac{1}{m} = p$.

4. Extension to any type of score per question

Awarding the correct answer a score of 1 makes sense if: (a) the maximum mark that can be obtained is 10 points, representing a completely perfect answer, and (b) the exam consists of 10 questions of equal value; or if the exam has n questions and the final mark is not restricted to 10 points, but is $1 \cdot n = n$ points.

In the following discussion assumption (a) will be maintained, since the scale of marks from zero to ten points for evaluating exams is the most common in the Spanish educational system. However, assumption (b) is questionable as the number of questions asked varies in the tests; in fact, exams are rarely limited to only 10 questions, since they compensate for not having to reason explicitly by requiring answers to numerous questions.

The maximum exam score, 10, must be divided among the n questions, so that the value of the correct answer, u , must be $u = \frac{10}{n}$ points. For example, with $n=20$ questions, $u = \frac{10}{n} = \frac{10}{20} = \frac{1}{2} = 0.5$ points. This shows how the image or range of our Bernoulli RV (that is, the set of values it can take) corresponds to the set of rational numbers (Q) and not to that of the integers (Z). In other words, in these cases it is verified that:

$$Y : \Omega \rightarrow Q$$

As mentioned previously, this particularity is not usually taken into account in presentations on how to mark multiple-choice exams (see, for example, Morales, 2017); however, it is paramount for resolving the crux of the matter: how to score each incorrect answer. What rational number should be assigned to y_2 , the second possible value of the RV Y which represents the mistakes in the answers? This ignorance can be formally expressed in the pmf of the RV Y , that is, the function that informs the probability with which the RV Y adopts each of its y_i values, $P(Y=y_1)$ or $P(Y=y_2)$:

$$Y = \begin{cases} Y(\omega_1 = \text{success}) = y_1 = u = \frac{10}{n}, P\left(Y = y_1 = \frac{10}{n}\right) = \frac{1}{m} = p \\ Y(\omega_2 = \text{failure}) = y_2 = ?, P(Y = y_2 = ?) = \frac{m-1}{m} = q = 1 - p \end{cases}$$

A teacher who shares the value judgement that the mark of a student who has not studied must be the numerical equivalent of nothing, that is, a zero, will agree that the quantity y_2 , for now unknown, must be such as to centre the expectation of the variable Y on zero, $E[Y]=0$, and not on $p = \frac{1}{m}$ as was the case with the Bernoulli RV Y with which this explanation began, that is, that which associates the zero value with mistakes. Therefore, and since the definition of mathematical expectation is $E[Y]=\sum_i y_i p_i$, the situation is represented as follows:

$$E[Y] = y_1 \cdot p + y_2 \cdot q = \frac{10}{n} \cdot \frac{1}{m} + y_2 \frac{(m-1)}{m}$$

For the expectation to be zero, $E[Y] = \frac{10}{n} \cdot \frac{1}{m} + y_2 \cdot \frac{m-1}{m} = 0$ the mark for a wrong answer, y_2 , must adopt a precise value and, in order to determine it, the expression of the expectation equal to zero is written in terms of y_2 :

$$\begin{aligned} \frac{10}{n} \cdot \frac{1}{m} + y_2 \cdot \frac{m-1}{m} &= 0 \\ y_2 \cdot \frac{m-1}{m} &= \frac{-10}{nm} \\ y_2 &= \frac{-10m}{nm(m-1)} = \frac{-10}{n(m-1)} = \frac{10}{n} \cdot \left(\frac{-1}{m-1}\right) = u \cdot \left(\frac{-1}{m-1}\right) = \frac{-u}{m-1} \end{aligned}$$

(In the ensuing discussion it is sometimes convenient to simplify the notation by denoting with v the penalty $\frac{-1}{m-1}$ that is applied to each incorrect answer, such that $y_2 = u \cdot \left(\frac{-1}{m-1}\right) = uv$.) In other words, in a multiple-choice exam with a maximum score of 10 points and n questions, where each question has m possible answers, by scoring each incorrect answer with $y_2 = \frac{-10}{n(m-1)} = u \left(\frac{-1}{m-1}\right) = uv$, the student who guesses the answers randomly has an expected mark of zero.

Therefore, the *pmf* of the Bernoulli RV Y that takes values in the set of rational numbers Q and with expected value equal to 0:

$$Y = \begin{cases} Y(\text{success}) = y_1 = u = \frac{10}{n}, P(Y = y_1) = \frac{1}{m} \\ Y(\text{failure}) = y_2 = uv = u \cdot \left(\frac{-1}{m-1}\right) = uv, P(Y = y_2) = \frac{m-1}{m} \end{cases}$$

where we have the following: (a) the values $Y(\text{success}) = y_1 = u$ and $Y(\text{failure}) = y_2 = uv$; (b) n questions in the exam; (c) m possible answers per question.

In short, $\frac{10}{n} \cdot \left(\frac{-1}{m-1}\right)$ is the score that a wrong answer must have on a test so that, whoever randomly guesses the answer, obtains a zero on average. Note that this expression is a function of two parameters: the n questions that make up the exam and the m response options to each question. As mentioned previously, in this formulation the maximum score on the exam is 10 points. If this were not the case, there would be a third parameter k on which the correct and incorrect answer score would depend. This formula is reproduced in the conclusion in plainer language so that it transcends as the main message of this methodological note and interested teachers can easily apply it to their situation.

By way of verification, by making $y_2 = uv$, the student-player does indeed get on average a zero in each question.

$$E[Y] = y_1 \cdot p + y_2 \cdot q = \frac{10}{n} \cdot \frac{1}{m} - \frac{10}{n(m-1)} \cdot \frac{(m-1)}{m} = \frac{10}{nm} - \frac{10}{nm} = 0$$

Given this scoring scheme, the following facts are derived:

1. The maximum score on the exam with questions is effectively $n \cdot \frac{10}{n} = 10$;
2. the minimum is $n \cdot \frac{10}{n} \cdot \left(\frac{-1}{m-1}\right) = \frac{-10}{m-1}$;
3. If someone wants to adopt marking criteria that assign the value $w \neq uv$ to $Y(\text{wrong}) = y_2$, there are two possibilities:
 - if $w < uv$, the marking criteria penalise incorrect answers too severely, inhibiting the risk-taking involved in answering a question when there is the slightest doubt as to which is the correct option;
 - if $w > uv$, the marking criteria penalise incorrect answers too mildly, bringing the real student being examined closer to the ideal-typical model of the rational actor that has been dubbed here the “student-player”.

4.1. Expected exam mark

By the linearity of the expectation operator, $E[\cdot]$, and assuming that the n questions give rise to n independent and identically distributed RV Y_1, Y_2, \dots, Y_n with the pmf described above, the expected overall exam mark will be equal to zero: $E[n \cdot Y] = n \cdot E[Y] = n \cdot 0 = 0$.

4.2. Examples

Let's start by posing an example where the pmf of the R.V. $Y \sim \text{Bernoulli}\left(p = \frac{1}{5}\right)$ reflects a test with $n = 30$ questions and $m = 5$ response options:

$$Y = \begin{cases} Y(\text{success}) = y_1 = \frac{10}{30} = \frac{1}{3}, P\left(Y = y_1 = \frac{1}{3}\right) = \frac{1}{5} \\ Y(\text{failure}) = y_2 = \frac{1}{3} \left(\frac{-1}{5-1}\right) = \frac{-1}{12}, P\left(Y = y_2 = \frac{-1}{12}\right) = \frac{4}{5} \end{cases}$$

Then it can be verified that:

$$E[Y] = \frac{1}{3} \cdot \frac{1}{5} - \frac{1}{12} \cdot \frac{4}{5} = \frac{1}{15} - \frac{4}{60} = \frac{1}{15} - \frac{1}{15} = 0$$

Another example is a test with $n = 20$ questions and $m = 3$ response options per question. Thus, each correct answer is worth $u = \frac{10}{20} = \frac{1}{2}$ points, and each incorrect answer should be given

$$\frac{1}{2} \cdot \left(\frac{-1}{3-1} \right) = \frac{-1}{2} \cdot \frac{1}{2} = \frac{-1}{4} = -0.25 \text{ points}$$

With this, the expectation of the RV Y equals zero:

$$E[Y] = y_1 \cdot p + y_2 \cdot q = \frac{1}{2} \cdot \frac{1}{3} - \frac{1}{4} \cdot \frac{2}{3} = \frac{1}{6} - \frac{1}{6} = 0$$

If the same exam had questions with $m = 4$ response options, each mistake should score $\frac{1}{2} \cdot \left(\frac{-1}{4-1} \right) = \frac{-1}{2} \cdot \frac{1}{3} = \frac{-1}{6} \approx -0.17$ points. Thus, in effect, the expectation is:

$$E[Y] = \frac{1}{2} \cdot \frac{1}{4} - \frac{1}{6} \cdot \frac{3}{4} = \frac{1}{8} - \frac{1}{8} = 0$$

If, on the other hand, the exam had $n = 40$ questions with $m = 3$ response options, answering correctly would be worth $u = \frac{10}{40} = \frac{1}{4}$ points and answering incorrectly, $uv = \frac{1}{4} \cdot \left(\frac{-1}{3-1} \right) = \frac{-1}{4} \cdot \frac{1}{2} = \frac{-1}{8} = -0.125$ points. Thus, the expected value is:

$$E[Y] = \frac{1}{4} \cdot \frac{1}{3} - \frac{1}{4 \cdot 2} \cdot \frac{2}{3} = \frac{1}{4} \cdot \frac{1}{3} - \frac{1}{4} \cdot \frac{1}{3} = 0$$

Likewise, $m = 4$ response options would also result in awarding an incorrect answer $\frac{1}{4} \cdot \left(\frac{-1}{4-1} \right) = \frac{-1}{4} \cdot \frac{1}{3} = \frac{-1}{12} \approx -0.083$ points. Indeed, in such a case the expectation remains at zero:

$$E[Y] = \frac{1}{4} \cdot \frac{1}{3} - \frac{1}{8} \cdot \frac{2}{3} = \frac{1}{12} - \frac{1}{12} = 0$$

To summarise, the more response choices and questions there are in an exam, the lower the penalty for incorrect answers.

5. Number of correct answers in n questions: transition from the Bernoulli to the binomial distribution

On one occasion, a mistake was made in a step of the code used to randomly alternate the position of the correct answer in a test with $n = 20$ questions and $m = 3$ answer options. The result was that in the first exam sitting for the subject “Sociology of diversity”, of the UNED Sociology degree, the correct answer was always the third response. A student who had not studied, and who resat the exam (second exam sitting), decided to continue opting for the answer (c) in each test question, when in that exam the correct answer varied randomly from question to question. Thus, the

student randomly guessed the correct answer to 8 questions, and got 12 wrong, obtaining a score of $8 \cdot \frac{1}{2} - 12 \cdot \frac{1}{4} = 1$ “free” point, i.e., 10% of the total exam mark. However, if the incorrect answers had not been penalised as explained in the previous section, the student would have got $8 \cdot \frac{1}{2} = 4$ points by pure luck, 40% of the total mark. With this final result, the student could consider appealing the final mark for the course, arguing that it was very close to the exam pass mark, as is often the case among students whose mark is just below a five.

An interesting question is, what is the probability of obtaining 8 correct answers in 20 attempts? Obtaining x correct answers in n attempts or trials describes the data-generating process of a random variable with a binomial distribution. By way of example, this random variable is denoted $X \equiv$ “number of correct answers in n questions in a test”. In addition, this statistical model assumes that each of the n test questions is independent of the others and that, in addition, the RV associated with each question is identically distributed, i.e., it follows a Bernoulli distribution with probability p .

Under these conditions, the probability of obtaining exactly x correct answers in n questions is expressed as $P(X = x)$, and the *pmf* of the variable $X \sim B(n, p)$ is:

$$P(X = x) = \binom{n}{x} p^x q^{n-x}, \quad x = 0, 1, \dots, 20$$

Given that X is a binomial RV, its expectation is $E[X] = np$ (Martín-Pliego and Ruiz-Maya, 2006), thus, when $n = 20$, $p = \frac{1}{3}$, $E[X] = 20 \cdot \frac{1}{3} = 6.\bar{6}$. In the example cited, the result is somewhat higher than the expectation, since there were $x = 8$ correct answers. The probability of this occurring can be quantified as follows:

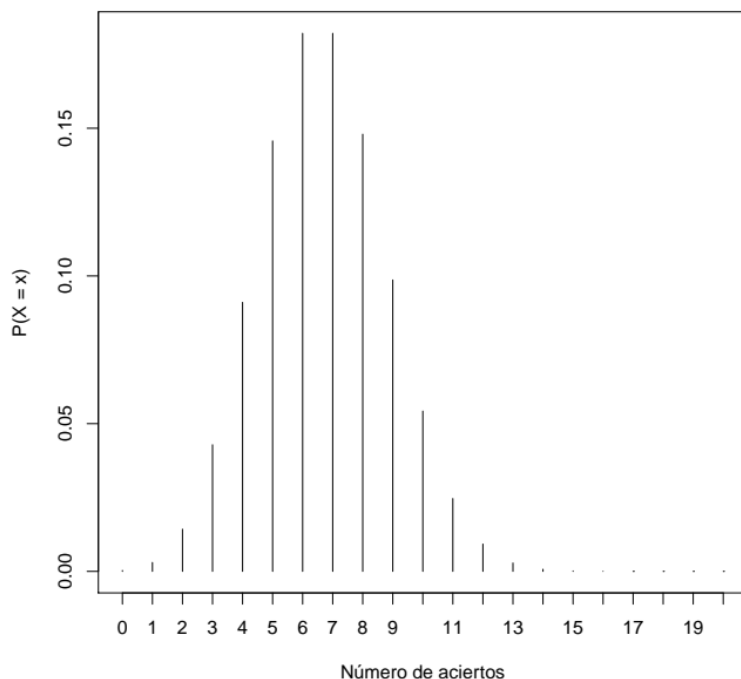
$$\begin{aligned} P(X = x = 8) &= \binom{20}{8} p^8 q^{12} = \frac{20!}{12! 8!} p^8 q^{12} = 125970 \cdot \left(\frac{1}{3}\right)^8 \cdot \left(\frac{2}{3}\right)^{12} \\ &= 125970 \cdot 0,0001524158 \cdot 0,007707347 = 0,1479797. \end{aligned}$$

In other words, around 15% of the student-players will get 8 correct by chance or, alternatively, if one of these students were to repeat the test *ad infinitum*, they would get 8 correct by chance almost 15% of the time.

What is the probability for the 20 possible outcomes, from zero to 20 correct answers obtained by chance? This is represented in Graph 1 of the *pmf* $X \sim B\left(n = 20, p = \frac{1}{3}\right)$:

Graph 1

Probability distribution of $X \sim B(n=20, p=1/3)$



Graph 1 shows that the highest probability corresponds to the sample results that coincide with the integers around the mathematical expectation of $E[X]$: 6 correct answers and 14 incorrect answers, on the one hand, and 7 right and 13 wrong on the other. Indeed, this binomial distribution has two values with maximum probability, that is, two modes M_0 , verifying the following inequality (the test is found in Arnáiz, 1986, cited in Martín-Pliego and Ruiz-Maya, 2006, p. 188):

$$np - q \leq M_0 \leq np + p$$

$$20 \cdot \frac{1}{3} - \frac{2}{3} \leq M_0 \leq 20 \cdot \frac{1}{3} + \frac{1}{3}$$

$$\frac{6}{6} \leq M_0 \leq \frac{7}{6}$$

The exact value of this, the highest probability of this pmf, is:

$$P(X = 6) = \binom{20}{6} p^6 q^{14} = 0,1821288;$$

$$P(X = 7) = \binom{20}{7} p^7 q^{13} = 0,1821288.$$

In other words, around 18% of student-players will obtain 6 correct answers and 14 incorrect answers, and the same percentage will obtain 7 right and 13 wrong answers. With these, the most common results, and there being no doubt at this point that in a test of this kind the correct answer is worth $\frac{1}{2}$ points and the incorrect answer, $\frac{-1}{4}$ points, the following final marks will be obtained, respectively:

$$\begin{aligned}\text{Score with 6 hits} &= 6 \cdot \frac{1}{2} - 14 \cdot \frac{1}{4} = -0,5 \\ \text{Score with 7 hits} &= 7 \cdot \frac{1}{2} - 13 \cdot \frac{1}{4} = 0,25\end{aligned}$$

Conversely, being so unlucky as not to randomly answer any of the 20 questions correctly is a circumstance that only afflicts the

$$P(X = 0) \cdot 100 = \binom{20}{0} p^0 q^{20} \cdot 100 = q^{20} \cdot 100 = 0.0003007287 \cdot 100 \approx 0.03\%$$

of the student-players or, alternatively, of the times when a student takes a gamble, guessing the answers. At the other extreme, getting all the questions right by sheer luck is an event that has an even smaller associated probability, of only (expressed as a percentage),

$$\begin{aligned}P(X = 20) \cdot 100 &= \binom{20}{20} p^{20} q^0 \cdot 100 = p^{20} \cdot 100 = 2.867972 \cdot 10^{-10} \cdot 100 = 2.867972 \cdot 10^{-8} = \\ &0.0000000286792\%\end{aligned}$$

in other words, it is an event that we expect to occur with a frequency of around three times every hundred million attempts.

Another relevant question concerns the minimum number of correct answers necessary to pass the test with the given characteristics ($n = 20$, $m = 3$), i.e., to obtain 5 or more points, which is the mark conventionally interpreted as a “pass” in exams with a maximum mark of 10. Thus:

$$\begin{aligned}x \cdot \frac{1}{2} - (20 - x) \cdot \frac{1}{4} &\geq 5 \\ \frac{x}{2} - \frac{20 - x}{4} &\geq 5 \\ \frac{2x - 20 + x}{4} &\geq 5 \\ 3x - 20 &\geq 20 \\ 3x &\geq 40 \\ x &\geq \frac{40}{3} \\ &\geq 13, \bar{3}\end{aligned}$$

Therefore, with a test of these characteristics, the student needs to get 14 answers right, since they will still score less than 5 with 13 correct answers:

$$\begin{aligned} \text{Score with 13 hits} &= 13 \cdot \frac{1}{2} - 7 \cdot \frac{1}{4} = 4,75 \\ \text{Score with 14 hits} &= 14 \cdot \frac{1}{2} - 6 \cdot \frac{1}{4} = 5,5 \end{aligned}$$

The probability of obtaining the 14 correct answers necessary to pass the test is

$$P(X = 14) = \binom{20}{14} p^{14} q^6 = 0.0007114406$$

In other words, 0.07%: seven out of ten thousand students or attempts will succeed.

In comparison, if there were no penalty for the wrong answer, answering half of the questions correctly would be enough to pass, with students safe in the comfort that they would be able to try their luck on all the questions. In other words, it would be possible to pass the exam even if half of the questions were answered incorrectly. The probability of this happening in an exam with 20 questions with three answer options each is

$$P(X = 10) = \binom{20}{10} p^{10} q^{10} = 0.0542592$$

Around five student-players out of a hundred would pass the test. Note that the order of magnitude of this number of passes is one hundred times higher than when incorrect answers are penalised and the student answers all the questions.

6. Conclusion

This methodological note includes a main conclusion for any teacher who uses a test to evaluate their students. Without making use of the unintuitive mathematical notation and its index or dummy variables (*m*, *n*, etc.), the conclusion can be expressed as follows: the correct answer must be worth...

$$\frac{\text{Maximum test score}}{\text{Number of test questions}} \quad \text{points}$$

The wrong answer must be worth...

$$\frac{\text{Maximum test score}}{\text{Number of test questions}} \cdot \frac{-1}{\text{Number of options per question} - 1} \quad \text{points}$$

Clearly explaining this scoring scheme to students, emphasising the low probability of passing the test by pure chance, will modify the “definition of the situation” (Thomas and Thomas, 1928) and this, in turn, will influence the student’s preparation: the test is no longer a fertile social context for the appearance of rational players who make the most of their probability of answering correctly at random.

However, it is worth concluding this article by drawing attention to the fact that, as Pes (2009) explains, the strategy of the student-player can be extended to the calculation of the optimal number of questions to answer when wrong answers are penalised. Following his advice, there are students who access repositories with all the tests taken to date in their subject (past UNED tests, for example, are available to members of its student body; see UNED, 2020). Thus, they study by memorising the questions that have historically appeared most frequently in the different exam sittings. If, on the day of the exam, enough of these memorised questions appear to make the pass mark, the best strategy is to not answer any other questions.

To avoid this subterfuge used not by the model student-player, but rather by the student-strategist who seeks to pass with the minimum effort, memorising mechanically and without mastering the content of the course, the teacher could encourage students to answer all the questions by penalising both the unanswered question and the incorrect answer equally. After all, if the assumption is made that each question has a correct answer, not answering a question is itself a wrong answer. In summary, the teacher could counteract the student-strategist by scoring a display of knowledge positively and a lack of knowledge negatively, represented by both an unanswered question and the incorrect answer. This grading scheme also addresses the concern of Muñoz Clares and Caballero Salinas (2019) regarding the differential treatment of unanswered questions and wrong answers (legal basis of the campaign to prohibit penalisation in the tests promoted by Icaro100, 2010).

In short, my proposal would establish a new definition of the situation where the student is aware of the need to study the course content seriously. Doing so will increase their probability of knowing the correct answer up to the maximum $p = 1$ (absolute certainty), or up to an amount p higher than that which corresponds to pure chance. This is because those students who live up to their name and study will be able to restrict the possible correct answers to a subset of the original options. As Dehnad, Nasser and Hosseini (2014) recall, this situation, favoured by tests with three options per question where the conjecture is restricted to two options, no longer corresponds to an act of random guessing. It is now an “informed guess” with a final degree of success in direct relation to the intensity of study and the understanding of the subject. In other words, the multiple-choice exam is close to its ideal as an instrument to numerically assess the degree of knowledge achieved by the student.

A question related to the topic of this article that remains open for future contributions is posed by the different formats of multiple-choice questions that exist in addition to those with a single correct response option. Case and Swanson (2001) offer a systematic treatment of these alternatives, among which those questions with mul-

tiple correct response options stand out (Palés-Argullós, 2010). Following Gaviria's (2020) approach to the question, consideration might be given to how to score these other alternative test formats so that the student-player's expectation remains at zero.

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8. References

- American Statistical Association (2013). *Should you guess? Interview with Rajeeva Laxman Karandikar*. Recovered on July 8, 2023 from <http://www.worldofstatistics.org/2013/03/04/should-you-guess/>.
- Andreasen, K. E., Rasmussen, A. & Ydesen, C. (2013). Standardized testing. In J. Ainsworth (Ed.), *Sociology of Education: An A-to-Z Guide* (pp. 737-739). Thousand Oaks, CA: Sage.
- Arnáiz, G. (1986). *Introducción a la estadística teórica*. Madrid: Lex Nova.
- Baclawski, K. (2008). *Introduction to probability with R*. Boca Raton, FL: Chapman & Hall/CRC. <https://doi.org/10.1201/9781420065220>
- Bennett de Marrais, K. & LeCompte, M. (1998). *The way schools work: A sociological analysis of education*. London: Longman/Addison Wesley.
- Bernoulli, J. ([1713] 1993). *Teoría de probabilidades (Ars conjectandi)*. Madrid: Sociedad Española de Historia de las Ciencias y de las Técnicas, Lluill.
- Bickis, Mikelis G. (2017). *STATS 244.3. Elementary Statistical Concepts. Scoring Multiple Choice Exams*. Acceso 8 julio 2023. From <http://math.usask.ca/~bickis/courses/stats244/marking.html>.
- Case, S. M. & Swanson, D. B. (2001). *Constructing Written Test Questions for the Basic and Clinical Sciences*. 3rd edition. Philadelphia, PA: National Board of Medical Examiners.
- Dehnad, A., Nasser, H. & Hosseini, A. F. (2014). A Comparison Between Three- and Four-Option Multiple Choice Questions. *Procedia. Social and Behavioral Sciences*, 98, 398-403. <https://doi.org/10.1016/j.sbspro.2014.03.432>
- Edwards, N. T. (2006). The historical and social foundations of standardized testing: In search of a balance between learning and evaluation. *Shiken and Shiken Research Journal: JALT Testing and Evaluations SIG Newsletter*, 10, 8-16.
- Gaviria, J. L. (2020). *Recomendaciones para la Elaboración de las Preguntas*. Vicerrectorado de Tecnología y Sostenibilidad, Universidad Complutense de Madrid. Acceso 8 julio 2023. Disponible en: https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwiBoYOztv__AhWEXcAKHf-nAICQFnoECA4QAQ&url=https%3A%2F%2Fderecho.ucm.es%2Ffile%2Frecomendaciones-para-elaborar-preguntas-a-traves-de-herramienta-cuestionario-moodle&usq=AOvVawocZadEz-i2iJ-rQwHGdZsp&opi=89978449.
- Goslin, D. A. & Glass, D. C. (1967). The social effects of standardized testing in American elementary and secondary Schools. *Sociology of Education*, 40 (2), 115-131. <https://doi.org/10.2307/2112040>
- Icaro100 (2010). Campaña de impugnación de exámenes tipo test alegando la ilegalidad de la penalización. *Tribuna del Jurista*. Recovered on July 8, 2023

from: <https://tribunadeljurista.foroes.org/t1486-campaa-de-impugnacin-de-exmenes-tipo-test-alegando-la-ilegalidad-de-la-penalizacin-adjunto-formulario-de-impugnacin>.

- Levitt, S. D. & List, J. A. (2008). Homo economicus evolves. *Science*, 319 (5865), 909-910. <https://doi.org/10.1126/science.1153640>
- Martín-Pliego, F. J. & Ruiz-Maya, L. (2006). *Fundamentos de Probabilidad*. Madrid: Ediciones Paraninfo.
- Morales, M. A. (2017). Las matemáticas de la fórmula de puntuación de exámenes test. *El País*, 22 de febrero. Recovered on July 8, 2023 from: https://elpais.com/elpais/2017/02/22/el_aleph/1487760836225306.html.
- Muñoz Clares, J. & Caballero Salinas, J. M. (2019). Problemática de los exámenes test con merma por respuesta errónea. *Revista Aranzadi Doctrinal*, 7.
- Palés-Argullós, J. (2010). ¿Cómo elaborar correctamente preguntas de elección múltiple? *Educación Médica*, 3. <https://doi.org/10.4321/S1575-18132010000300005>
- Pes, C. (2009). ¿Cómo Aprobar Un Examen Tipo Test? Recovered on July 8, 2023 from: https://www.carlospes.com/articulos/como_aprobar_un_examen_tipo_test.php.
- Psiconociendo (2022). *12 Trucos Para Aprobar Un Examen Tipo Test Sin Estudiar*. Youtube. Recovered on July 8, 2023 from: <https://www.youtube.com/watch?v=gR9yHCOW05c&list=RDLVuvohBxbx3Tk&index=6>.
- Schneid, S. D., Armour, C., Park, Y. S., Yudkowsky, R. & Bordage, G. (2014). Reducing the number of options on multiple-choice questions: Response time, psychometrics and standard Setting. *Medical Education*, 48 (10): 1020-1027. <https://doi.org/10.1111/medu.12525>
- Sentipia (2022). *Cómo Responder Exámenes Tipo Test para Aprobar*. Youtube. Recovered on July 8, 2023 from: <https://www.youtube.com/watch?v=uvohBxbx3Tk&list=RDLVuvohBxbx3Tk&index=1>.
- Stanbrough, J. L. (2009). *The guessing penalty. Let's do the math, shall we?* Batesville, IN: Batesville Community School Corporation. Recovered on July 8, 2023 from: http://www.batesville.k12.in.us/Physics/CalcNet/Intro/guessing_penalty.htm
- Thomas, W. I. y Thomas, D. S. (1928). *The Child in America: Behavior Problems and Programs*. New York, NY: Knopf.
- UNED (2020). *Acceso al Depósito de Exámenes*. Recovered on July 8, 2023 from: http://www.calatayud.uned.es/exámenes/exámenes_step_0.asp.
- Weber, Max ([1922] 1982). *Ensayos sobre metodología sociológica*. Buenos Aires: Amorrortu.

Notes

1 With this case study presented in this article, the empirical result offered by the mean of a data set approximates the value of the expectation of the probability distribution when (a) the same student-player randomly takes a gamble in the exam n times, with $n \rightarrow \infty$; or (b) there are a number k of students who answer the exam question at random, with $k \rightarrow \infty$.

2 The Bernoulli distribution is the particular case of the binomial distribution for $n = 1$ tests. Subsequently, $X \sim \text{Bernoulli}(p) = \mathbf{B}(1, p)$ and, therefore, the random variable is stated as success/correct answer (vs. failure/incorrect answer) and, implicitly, it is meant to mean “in a single trial or experiment”.

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DEBATE

DEBATE

DEBATE/DEBATE: THE QUALITY OF INSTITUTIONS. AN INTERDISCIPLINARY PERSPECTIVE /
LA CALIDAD DE LAS INSTITUCIONES. UNA PERSPECTIVA INTERDISCIPLINAR

Editorial: “Good and bad institutions”: The Issue of Institutional Quality in the Social Sciences

«Buenas y malas instituciones».

La cuestión de la calidad institucional en las ciencias sociales

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ABSTRACT

This article outlines some of the fundamental theoretical issues of research on institutional quality. It is part of the Debate section of the CENTRA Journal of Social Sciences, where the focus is on contrasting the perspectives of various social science disciplines surrounding this issue. Institutional quality is defined as the set of characteristics of institutions (cultural, regulatory and organisational) that influence their functioning and that condition the fulfillment of the missions for which they have been created. The first part of the article clarifies the terminology regarding the relevance of concepts within the study of institutions. The conceptual frameworks commonly used in Economics, Sociology, Political Science and Administration are then specified. The conclusion summarises the contributions of the articles included in the Debate section regarding institutional quality.

KEYWORDS: institutions; institutional quality; organisations; economic development; law; economics; sociology; politics.

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RESUMEN

Este artículo realiza una introducción al estado de la cuestión de la calidad de las instituciones. Se enmarca en la sección Debate de la Revista CENTRA de Ciencias Sociales, dedicada a contrastar las perspectivas de varias disciplinas de las ciencias sociales sobre este asunto. La calidad institucional se interpreta como el conjunto de rasgos de las instituciones (culturales, regulativos y organizativos) que influyen en su funcionamiento y que condicionan el cumplimiento de las misiones para las que han sido creadas. Se comienza con una aclaración terminológica acerca de la importancia de los conceptos en el estudio de las instituciones. Seguidamente se especifican las bases conceptuales empleadas habitualmente por la economía, la sociología y la ciencia política y de la administración. Se finaliza con un resumen de las contribuciones de los artículos incluidos en el debate.

PALABRAS CLAVE: instituciones; calidad institucional; organizaciones; desarrollo económico; leyes; economía; sociología; política.

1. Introduction

One of the fundamental assumptions of the social sciences is that “institutions matter”. There are solid arguments, based on considerable evidence, that the foundations of the most successful societies lie in sets of institutions in strategic sectors of the state, the economy and civil society. Numerous scholars have focused their efforts on finding those institutional arrangements (whether bureaucracies, legal frameworks, regulations, public policies or other organised aspects of economic and social life) that facilitate the provision of goods and services, coexistence, cooperation and social welfare for broad sectors of society.

Thus, the problem is as relevant as it is complex. The search for and evaluation of good institutions is one of the greatest challenges of the social sciences. It is also one of the most controversial topics. Talking about the institutional implies referring to fundamental aspects of what is considered “the social sphere”, given that institutions are a crystallisation of forms of common life that transcend people. Discussions about desirable institutions are as old and diverse as the social sciences themselves, something unattainable in any treatise or monograph¹.

In recent years, some studies have emerged concerned with identifying qualities of institutions that are susceptible to more precise observation. This article focuses on these rather than on substantive issues of a philosophical or historical nature. These characteristics, usually referring to specific contexts, are often called “institutional quality”. Although there are other similar terms referring to more specific areas (quality of government, the states, democracy, certain organisations, etc.), here the preference is to gather them under the rubric of institutions due to their affinities.

These studies seek to empirically capture those qualities of institutions that generate a “positive” result for some matters of public interest (ease of market transactions, company growth, good management of public administration, the legislative system, etc.). Conversely, they also point out the “negative” consequences of the absence of certain institutions, their lack of effectiveness and

efficiency and even the presence of institutions that prey on the common good. Moreover, they reflect the practical vocation of some branches of social sciences when, by identifying traits that can be documented and compared, they help guide decision-making.

The objective of this editorial, and of the three articles included in the monograph section, is to contribute to a better understanding of institutional quality by contrasting the points of view of different social sciences. This marks the beginning of the *Debate* section of *CENTRA Journal of Social Sciences*. This space is dedicated to relevant research problems that are of cross-disciplinary interest to a wider audience than just specialists in a particular subject. They focus on up-to-date and seek to highlight the keys to the state of knowledge and its implications for our context. They will usually consist of several texts that address different angles of the subject in a critical way.

This *Debate* on the quality of institutions consists of three studies carried out, respectively, from the perspectives of economics, sociology and political science and administration (the importance of anthropology, social psychology, geography and various branches of law is also recognised, although it hasn't been possible to deal with them in this volume). As an editorial, this article introduces the essential elements for critical reflection. Section 2 deals with the problem of defining the institutions and justifies the usefulness of turning to different disciplines. Section 3 sets out the usual conceptual foundations of the aforementioned disciplines when it comes to understanding institutions. Section 4 connects the previous discussion with studies on institutional quality and highlights the contributions of each article. The conclusions point to some evidence about what good institutions are in the light of accumulated research and how they should be understood for practical purposes.

2. What are institutions? A first-order conceptual problem in the social sciences

While the concept of institution is one of the most important in the social sciences, it is also one of the most controversial as it is used in various contexts with very different meanings. Given the number of approaches to institutions, discussing them — as well as institutional quality — without specifying what is being referred to is almost irrelevant. Despite the fact that the aim is not to resolve such a complex terminological issue, a minimum of precision is required in order to focus the discussion.

A distinction should first be made between common sense uses (in dictionaries, politics, the media, official documents, etc.) and social science uses. The *Diccionario de la Real Academia Española* (Dictionary of the Royal Spanish Academy) indicates that an institution is “an established or founded thing”. Other entries refer to “organised aspects of social life, often the fundamental organisations of a state or society”, as well as to legal issues, in the sense that “institutionalising is granting legal status”. The expression “To be an institution” is also mentioned to indicate that something

has prestige due to antiquity and consensus regarding its importance.

These commonly used meanings refer to ordered and important aspects of social life as they are lasting and legitimate, or to regulatory issues, often of a legal nature, which are related to the aforementioned aspects given that some of the most stable social entities are based on them. These are very much in line with the use made by some social scientists, although they add other layers of meaning to the concepts that must be taken into account to interpret specialised research.

The most general conceptions in some social sciences—particularly in sociology and anthropology—distinguish between the fundamental stable aspects that characterise societies. *Community institutions* are based on primary relations, such as lineage, place of birth or certain cultural traits (language, religion, etc.). In contrast, *associative institutions* bring together people who may have fewer community links and are more based on interest and the achievement of a common goal (Abrutyn, 2014). These ideal types of classic origin have been used to explain the transition from traditional to modern societies, and the various “degrees of modernity” of societies, due to the progressive predominance of associative institutions over community ones².

In keeping with this trend of historical change, much of the current thought about institutions revolves around those *associative arrangements* that characterise the contemporary world on many levels of complexity: states—possibly the most important institutions throughout history—, laws and regulatory systems, groups of formal organisations and the norms that make them possible, private corporations and organised collectives of civil society.

The most current definitions in the social sciences tend to refer to human creations designed specifically to accomplish one of these common ends. Nevertheless, it is recognised that, beyond organisational designs, all institutions are shaped by certain community aspects based on the values, practices and strategies, along with inequalities and conflicts, of the groups that participate in them (Marquis et al., 2011). For this reason, contemporary conceptions of institutions seek to highlight the participation of key actors and their ability to shape actions against this background of bonds of sociability. The following is an example of a widely accepted definition: “Institutions are sets of roles and orders of interaction for collective action, which are normatively sanctioned, and which are usually 'taken for granted' in some situations” (Ocasio et al., 2017, p. 6). This definition is consistent with more formal ones referring to rules and regulations that regulate action around an activity through incentives and restrictions (Jupille and Caporaso, 2022).

There are no more coincidences, however. Multiple conceptions of institutions have emerged from this common foundation. Every few years several institutionalists publish dozens of books and hundreds of articles. The state of knowledge on this subject is quite complex and difficult to summarise in an introduction.

However, it is possible to identify typical conceptions about institutions by turn-

ing to the traditions of thought coined by the disciplines of the social sciences. It can be said that there is a "family resemblance" that characterises economists, sociologists and political scientists (the latter partly coincide with some legal experts)³. Some currents of thought straddle these disciplines and, within them, it is common to find several competing sensitivities. Despite running the risk of simplifying, resorting to disciplinary differences is a useful decision to explain what institutions are.

Given that it is not possible to perceive the complexity of life in society, the disciplines consider some parts of reality while detaching themselves from others. In order to grasp something as complex as the social sphere, the social sciences turn to specialised concepts as their main tool. These concepts are not neutral, but rather "charged" certain assumptions about people's behaviour and how the facts they study work. In other words, they are loaded with "metatheoretical assumptions" that function as cognitive lenses through which a field of research views the world. They stand out for prioritising certain spheres of reality as worthy of research, although they cannot be falsified. They merely provide mental starting points for research that come "before theories and methodologies"⁴.

Traditional social science disciplines continue to be relevant for the production of knowledge about society precisely because they employ distinctive metatheoretical assumptions that prove fruitful for understanding the problems in which they specialise. For example, the assumptions about rationality in utilitarian behaviour common in economics have been quite useful in explaining how some markets work, while the more specific sociability assumptions of sociology, reflected, for example, in the concept of "embeddedness," show the importance of culture and bonds based on social relations.

Disciplinary differences in terms of institutions are mainly based on these assumptions to build knowledge about complex social facts, with due regard to multidisciplinary advances. The organisation of the articles in this Debate section follows this criterion.

3. The conceptual foundations of institutional quality studies

For each of the chosen disciplines, we have selected three features that stand out and help link the conceptions of institutions with studies on institutional quality. Namely, 1) the usual definitions of institutions; 2) the predominant behavioural models; and 3) the assumptions about the nature and functioning of social facts (for detailed bibliographic references, please refer to each of the articles).

3.1. Economic perspectives

In economics, institutions are typically defined as interrelated systems of rules and regulations, formal and informal, that constrain, motivate or facilitate economic action. They frequently refer to the “rules of the game”, especially regulations that affect sectors of activity, although some economists also tend to consider the bodies that implement them and some programmes as institutions, according to their significance in the functioning of some economic sectors and in growth in general. Thus, a fundamental problem of economics is conceptual dispersion due to the fact that the term institution has been used as a catch-all for numerous things, from organisations such as the World Bank to informal standards systems (Portes, 2010).

Despite the diversity, the assumptions for interpreting behaviour tend to be based to some extent on rational choice models. The understanding is that the actors participating in the economy tend to use calculation and strategy capabilities to maximise their operations in the market. At the same time, compared to the more orthodox neoclassical economics, institutional economists assume that actors have problems achieving their intentions due to the lack of symmetry in access to information, uncertainties, limitations in knowledge processing and risks of opportunistic behaviours. This often leads to irrational situations and market imbalances.

As far as assumptions about the functioning of institutions are concerned, in economics they are usually considered external to the actors. They are interpreted as a system of incentives and penalties that conditions action strategies. Informal rules are important when interacting with people’s calculations and strategies; however, due to their implicit and cultural nature, as they are difficult to capture, they are taken into account to a lesser extent. They also stem from a specific conception of the constitution of social facts. By giving greater emphasis to the aspects of the individual who adopts utilitarian behaviours to achieve their goals, the social facts to which they pay attention are usually understood as a result of the aggregates of these individual behaviours. In short, in the face of neoclassical approaches, institutional economics has progressively become one of the main currents of economic thought. Many of the economic perspectives on institutions have contributed to the adjustment to reality of the most abstract utilitarian models of economic behaviour and the functioning of markets.

3.2. Sociological perspectives

For decades, sociology, together with anthropology, has had a fairly consensual conception of the meaning of the concept “institution”, accompanied by a multitude of empirical studies (see, for example, Eisenstad, 1974). Interestingly, however, this accumulated knowledge has been largely ignored by the new institutionalisms in economics and some branches of political science since the 1980s, which have tended to use their own definitions.

Regardless of the diversity of theoretical paradigms in sociological thought during the twentieth century, for contemporary sociology, institutions are rather cultural constructs formed by values and networks of meanings. They are sets of rules, roles and orders of interaction for collective action, based on values, which are normatively sanctioned and culturally assimilated. Institutions appear as organised and complex areas of social life that articulate the realisation of collective purposes, or as “assemblages” between symbolic and material aspects—or planes of culture and social structure⁵. Institutions and organisations are frequently seen as faces of the same reality. This is why many institutionalisms of a sociological nature deal with organisations—with the internal dynamics of organisations or with organisational fields or sectors—, although some focus on their symbolic aspects in particular.

As far as behavioural models are concerned, “culturalists” models are more frequent in sociology. The assumption is that the actors, who are rational and act normally in this way, may be motivated by assimilated norms and shared beliefs. Due to the processes of socialisation and the existence of primary social bonds, non-rational elements are commonplace. These elements are mixed with others of a “conflictivist” nature that take into account different degrees of wealth, power and domination. In other words, people actively work on processes of social construction to bring values, norms and interests to collective forms, which endure and end up crystallising in institutions. Institutions, however, are also constructed from positions of interest and distribution of resources that give rise to divisions in primary groups or social classes, and to behaviours that respond to assemblages of unequal identities and positions (these ideas are shared with some political perspectives that are discussed later).

Thirdly, sociological perspectives focus more on some mechanisms when explaining the functioning of institutions. Some institutions may be merely *regulatory* and are designed to impose very specific behaviours. The participants perceive them as external and decide to comply with them to a greater or lesser degree, or are forced to do so. Other institutions may be *generative* or internal to the actors. People acquire them through socialisation mechanisms and make them inherent in a repetitive action that is learned with skills and routines. When internalised and taken for granted, they appear embedded in some behaviours that become the frequent pattern in a situation. Consequently, some successful institutions manifest as supra-individual social realities that reproduce by their ability to influence people through socialisation, distribution of resources and livelihoods, persuasion or coercion.

3.3. Political and legal perspectives

The definitions are more varied in political science and in the disciplines related to administration. When talking about institutions, many political scientists refer to state organisations, whose main foundation are legal matters, where social groups and competing political actors participate. Nevertheless, according to the schools of thought, they also refer to laws that are fundamental to the constitution and

functioning of the public sector. This gives rise to different conceptualisations that vary depending on the preferred objects of study, being these the bureaucracies, laws and regulations that underpin the public sector or the interaction between them.

Assumptions about behaviour also vary depending on the schools of thought. In general, however, there are more overlaps with the versions that favour the rational behaviour of actors over those that focus on cultural issues, although the more strategic behavioural models are applied to already constituted situations from which power and authority are exercised. In the explanations related to the formation of institutions, long-term historical processes acquire importance, where more attention is paid to cultural influences and critical junctures. An important concept is “path dependence”. This highlights how political institutions depend on the structures of power and legitimacy that are implemented in each historical and geographical context (as “critical crossroads”), giving rise to stable situations that condition the subsequent scope for action and that are difficult to reverse once they have been consolidated.

Finally, as regards the types of explanation, those that are *regulatory* or *normative* in nature predominate. A feature shared by some branches of political institutionalism is their more marked differentiation between institutions and organisations, tending to see them separately. For some authors, institutions are strictly rules and regulations, whether formal or informal. Organisations are either the means established to implement such rules (usually public bureaucracies, parties, trade unions, lobbies or other political actors), or the targets of the objectives (companies, interest groups or organised groups of people) to be influenced.

The aforementioned assumptions represent models of thought that have a greater presence in some specialised groups when addressing research problems of interest. At times they are identified with schools, networks of authors or emblematic places. However, it should be remembered that it is not currently possible to speak of radical divisions between disciplines, nor are there better or worse points of view. The usefulness of each variant depends on its suitability for the problems being studied. Here, it is important that the ways in which institutions are conceptualised are significant in studies on institutional quality. Nevertheless, it is necessary to recognise that the nature of the conceptual problem surrounding institutions is major, especially the selective forgetting of some disciplines or schools of thought with respect to the contributions of others, and the fact that it represents one of the most important barriers to advancing knowledge.

The articles in this *Debate* section bring together a series of relevant contributions to understand which characteristics are favoured in institutions, what is meant by institutional quality and how it is studied empirically. Furthermore, they are also relevant when designing institutions or acting on existing ones.

4. What do we know about institutional quality? A summary of the Debate articles

The article "The Quality of Institutions and their Relationship with the Economy: A Review of the Conceptual Foundations and Empirical Studies" (Pedraza Rodríguez, 2023) shows how the institutional approach has become one of the most relevant in economic science. The author identifies the ideas that underpin this conception, from the theory of transaction costs to the latest advances in historical institutionalism and the theories of organisations and innovation.

He points out how economists often use the concept of institutional quality to assess the effects of certain institutions on the economic performance of countries. They use it to inform reforms through laws or regulations, and bodies that affect investors, businesses and consumers. Empirical studies at country or region analysis levels draw on available official indicators, surveys and expert assessments. These methods have given rise to sources that enable research into the explanatory variables that influence aspects such as growth, employment and equity in the distribution of wealth.

The results of the review highlight the importance of several dimensions that define the quality of institutions: first, those dimensions related to transparency, the absence of corruption and conditions of legal certainty in general; second, the effectiveness of regulations, together with an adequate balance between bureaucratic burdens, controls to ensure good practices and freedom of action; and third, measures to promote equity and prevent the existence of clientelistic networks in private or public corporations.

Together, these studies provide good examples of how quality institutions are integral to the proper functioning of the economy in terms of its growth and equity. Attention is also drawn to the advantages of multidisciplinary collaboration for observing dimensions that are not captured with the usual methodologies of economics (particularly social ties and cultural norms). The point is made that taking into account other levels of analysis—organisational fields and complex strategic institutions, systems of laws and cultural norms—can help identify internal situations of regions or countries that provide greater precision about what happens within them and avoid problems of circularity in the analyses.

The article "Institutional quality from a sociological perspective: Contributions and challenges" (Espinosa Soriano, 2023) begins by describing the usual meanings of institutions as symbolic elements of culture, linked to relationships of sociability, which appear assembled in groups of organisations that produce goods and services, along with many other elements of social life, such as roles, social classes and identities.

The author turns to two emblematic working groups that have shown the importance of institutional quality at different levels of analysis; first, studies between the meso—groups of organisations—and macro-social—regimes or states—level, mainly in sociol-

ogy of development. Findings on the *capacity of the state* are highlighted. This capacity is due to the combination of characteristics of traditional Weberian bureaucracies: the presence of qualified professionals, political independence and predictability. Furthermore, however, they find that the *proactivity* and *social embeddedness* of institutions are essential for explaining their ability to influence socio-economic development and welfare.

The author then turns to the level of analysis of the organisations. Although this field of research is very diverse, it makes less use of the institutional quality label. Based on some emblematic empirical works that observe the influence of culture on the results of organisations, the article highlights the complementary role of studies at the micro or meso level in real organisations as culture and other informal elements influence what companies and other public or private organisations produce and, therefore, can be considered aspects of organisational quality.

Finally, the article “The quality of public sector institutions: A critical review of studies on ‘good governance’ and ‘institutional weakness’” (Martínez-Sánchez and Gosálbez Pequeño, 2023) offers an overview of the highly complex governmental sphere and its relations with the law. After delineating the conceptual aspects of institutions at the interface between public bureaucracies and legal norms, the most emblematic works that have sought to make the concept of institutional quality operational are reviewed. On the one hand, those studies on the “quality of government” that focus on the conditions that favour effective and efficient policies and bureaucracies, where the dimensions of quality are related to *impartiality*, *the quality of public services* and *the absence of corruption*. On the other hand, he also looks at those studies on “institutional weakness and strength” that focus on the problems of law implementation, where dimensions of institutional weakness (as opposed to strength) are *the non-compliance*, *instability* and *insignificance* of laws. Due to the confluences of this speciality with law, the article includes a brief counterpoint from the legal perspective that deals with the conditions for “good legislators” to exist.

5. Conclusion

Together, the articles in this Debate section provide an overview of how institutions are considered by academic research, and of the efforts made by some schools of thought to identify the nature and effects of key institutions on democratic societies.

There is always a risk when answering the question, “What are the good and bad institutions?”, that heads this article, especially in a limited space. Any response requires the collaboration of a multitude of efforts from various perspectives, carried out in a sustained manner over time, to reach an empirically based agreement, founded on consensual values. However, a significant contribution of these articles is that they make it possible to identify what much of the accumulated research has pointed to as a “catalogue of traits” of good institutions in the economy, in the organisations of social life and in the public sphere.

The reviews of the three groups of studies suggest that some characteristics of institutions function as causes that, when present, generate positive effects. In addition,

they suggest that they are not universal in scope, nor does their existence operate in a linear or mechanical fashion; rather, they are a configurational phenomenon. Different combinations of institutional traits have diverse effects in distinct contexts and historical moments as they interact with the characteristics of each country, region or place in the world.

They also reveal some challenges of current research. The first is finding the combinations of characteristics—or essential qualities—that are necessary, sufficient or both in institutions that affect the economy, politics and sectors of society, in addition to empirically confirming the extent to which those configurations are specific to each environment. Then, the challenge of identifying the socio-economic conditions—or background—that contribute to the emergence and consolidation of these institutions. Last but not least, it is essential to think about institutions through precise concepts, which allow their complexity to be comprehensively captured, and which help to advance knowledge in a cumulative way. This requires a multidisciplinary collaboration that recognises the efforts made by the various disciplines and specialities of the social sciences.

6. Bibliography

- Abrutyn, S. (2014). *Revisiting institutionalism in sociology: putting the "institution" back in institutional analysis*. London: Routledge. <https://doi.org/10.4324/9780203795354>
- Coleman, J. (1991). *Foundations of Social Theory*. Cambridge, MA: Harvard University Press.
- Eisenstad, S. (1974). Voz 'Instituciones'. In *Enciclopedia Internacional de las Ciencias Sociales*. Madrid: Editorial Aguilar.
- Espinosa Soriano, P. (2023). La calidad institucional desde la perspectiva sociológica: contribuciones y retos al estado de la cuestión. *Revista Centra de Ciencias Sociales*, 2(2), 149-166. <https://doi.org/10.54790/rccs.74>
- Jupille, J. & Caporaso, J. A. (2022). *Theories of Institutions*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/9781139034142>
- Marquis, C., Lounsbury, M. & Greenwood, R. (Eds.) (2011). *Communities and organizations* (Series: Research in the Sociology of Organizations, vol. 33). Bradford: Emerald Publishers. [https://doi.org/10.1108/S0733-558X\(2011\)33](https://doi.org/10.1108/S0733-558X(2011)33)
- Martínez-Sánchez, W. & Gosálbez Pequeño, H. (2023). La calidad de las instituciones del sector público: una revisión crítica de los estudios sobre el «buen gobierno» y la «debilidad institucional». *Revista Centra de Ciencias Sociales*, 2(2), 167-186. <https://doi.org/10.54790/rccs.3>
- Merton, R. K. (1968). *Teoría y estructura sociales*. México, D.F.: Fondo de Cultura Económica.
- Ocasio, W. & Gai, S. L. (2020). Institutions: Everywhere But Not Everything. *Journal of Management Inquiry*, 29(3), 262-271. <https://doi.org/10.1177/1056492619899331>

- Pedraza Rodríguez, J. A. (2023). La calidad de las instituciones y su relación con la economía: una revisión de las bases conceptuales y estudios empíricos. *Revista Centra de Ciencias Sociales*, 2(2), 129-148. <https://doi.org/10.54790/rccs.38>
- Portes, A. (2010). *Economic Sociology: A Systematic Inquiry*. Princeton: Princeton University Press. <https://doi.org/10.1515/9781400835171>
- Scott, R. (1996). *Institutions and Organizations*. London: SAGE.
- Velasco Maíllo, H. M., Díaz de Rada Brun, A., Cruces Villalobos, F., Fernández Suárez, R., Jiménez de Madariaga, C. & Sánchez Molina, R. (2006). *La sonrisa de la institución. Confianza y riesgo en sistemas expertos*. Madrid: Editorial Universitaria Ramón Areces.

Notes

- 1 Some authors argue that institutions should be the preferred object of study of some social sciences, especially sociology. Among the classic authors, for example, this was the stance of Émile Durkheim, also shared in more recent times by James Coleman (1991), among others.
- 2 The fundamental notions of these kinds of institutions have their roots in classical thinkers, such as Ferdinand Tönnies' dichotomy of *community vs. society* and Émile Durkheim's dichotomy of *mechanical vs. organic solidarity*.
- 3 Other disciplines have specific conceptions about institutions tailored to their study problems. For example, cultural anthropology, social psychology and human geography, as well as various branches of philosophy. These conceptions cannot be dealt with in the current Debate due to space constraints; however, they have common ground with those discussed. See, for example, Jupille and Caporaso (2022), Abrutyn (2014), Scott (1996), Velasco et al. (2006).
- 4 In this article, the term "metatheoretical assumptions" is employed in the manner used by Alejandro Portes (2010) in his work on economic sociology.
- 5 The division of the components of institutions into the planes of culture and social structure (as an analytical tool to capture the complexity of real institutions) can be considered the "main current" of sociological thought about institutions, exemplified by Robert Merton (1968), and elaborated more recently by Portes et al. (2010).

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DEBATE/DEBATE: THE QUALITY OF INSTITUTIONS. AN INTERDISCIPLINARY PERSPECTIVE /
LA CALIDAD DE LAS INSTITUCIONES. UNA PERSPECTIVA INTERDISCIPLINAR

The Quality of Institutions and its Relationship with the Economy: A Review of the Conceptual Foundations and Empirical Studies

La calidad de las instituciones y su relación con la economía: una revisión de las bases conceptuales y estudios empíricos

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ABSTRACT

The fragility or strength of some economies in facing economic crises can largely be explained by the quality of their institutions. Institutions play a fundamental role in shaping society and the economy. Through political and social actors, economic agents and judicial bodies, among others, a regulatory and institutional framework is built with the capacity to shape the economic system in matters such as stability, equity and protection of individual rights. This article addresses the current state of institutional quality studies in the field of economic sciences. It presents the theoretical foundations and methodologies that underpin the main approaches, as well as the results from several relevant empirical studies, along with specific studies for the Spanish context and their implications. The conclusions highlight the contributions, strengths and weaknesses, and suggest possibilities for improvement by drawing on the integration of concepts and methods from various disciplines.

KEYWORDS: institutional quality; economy; organisations; institutions; economic development; organisational culture.

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RESUMEN

La fragilidad o fortaleza de algunas economías para afrontar las crisis económicas puede ser explicada en gran medida por la calidad de las instituciones. Las instituciones desempeñan un papel fundamental en la configuración de la sociedad y la economía. A través de los actores políticos y sociales, los agentes económicos y los órganos judiciales, entre otros, se construye un marco regulatorio e institucional con capacidad para moldear el sistema económico en cuestiones como la estabilidad, la equidad y la protección de los derechos individuales. Este artículo aborda la situación actual de los estudios sobre calidad institucional en el campo de las ciencias económicas. Se presentan los fundamentos teóricos y las metodologías que respaldan los principales enfoques, así como resultados de varios estudios empíricos relevantes, junto a estudios específicos para el entorno español y sus implicaciones. En las conclusiones se destacan las contribuciones, fortalezas y debilidades, y se sugieren posibilidades de mejora acudiendo a la integración de conceptos y métodos procedentes de varias disciplinas.

PALABRAS CLAVE: calidad institucional; economía; organizaciones; instituciones; desarrollo económico; cultura organizacional.

1. Introduction

This article examines the importance of institutional quality in the economy based on research that has addressed the impact of institutions on fundamental aspects of growth, the efficiency of economic processes and socio-economic development in general. It describes how the literature on institutional quality has evolved and how indicators have been developed to measure the quality of institutions and their impact, primarily taking the country or nation-state as the unit of analysis.

The idea that institutions are the key to the development or stagnation of countries is part of the foundations of contemporary economic thought (Acemoglu and Robinson, 2012). The main argument of economic institutionalism is that the fundamental aspects of the economy and, therefore, economic and social development, are conditioned by a set of attributes of the institutions that give them the capacity to promote a series of basic behaviours and processes. These include the stability of the actions on the economic system, the compliance with contractual agreements, the protection of property rights, the impartial enforcement of the law, transparency in economic relations, reduction of corruption and promotion of trust in the system, among others.

A group of studies within this current of thought use the label “quality of institutions”. The main feature they have in common is their attempt to empirically capture the essential elements of institutions from a practical perspective. They search for those aspects of public policies, regulations and facets of social organisation that can be subject to intervention. To stimulate innovation in this field, institutionalist economists seek to explore the quantitative and qualitative aspects of the transparency and impartiality of the legal system, the action of governments in a responsible manner and the effectiveness of bureaucracies, among other attributes, to analyse how they shape high or low levels of institutional quality and, consequently, how such factors promote social and economic development.

This article offers a critical review of studies on institutional quality from the field of economic sciences, drawing on intellectual currents and emblematic empirical works. Following this introduction, Section 2 outlines some conceptual clarifications on the usual institutions in the economy and summarises the most important contributions of the key schools of thought in this field. Section 3 deals specifically with studies on institutional quality. The main dimensions, groups of indicators and methodologies of empirical studies are discussed. Section 4 provides a summary of the issue surrounding institutional quality in Spain by drawing on the reference studies on the subject. The conclusions take stock of strengths and weaknesses of these studies aimed at generating new questions in future research.

2. What are institutions and why are they important? Common assumptions in economics

Economic thought has always paid certain attention to institutions. Classic currents of economic thought emphasised that institutions are the normative and legal framework (private property, rule of law, competition rules) that allows voluntary exchange in transactions. On the other hand, for the neoclassicists, although they recognised the fundamental importance of institutions, they took on a more secondary role as they did not consider them decisive for understanding and explaining economic results. They tended to interpret them in a dichotomous way: the rules of the game are “good” or “bad” for boosting or limiting market performance, although they do not go into explaining individual behaviour or interactions in the market. The foundations lie rather in the microeconomic analysis of prices and production. Both function as adjustment mechanisms in the markets between supply and demand. Consequently, the study of the behaviour of individuals, companies and markets from this point of view has been based on the principles of utility, consumer maximisation and marginal analysis.

Criticisms of the limits of neoclassical assumptions focus on the fact that their proposals did not remedy the shortcomings of the free market, nor did they address the problems of economic developmentalism that were evident in the maintenance of inequality between countries, in the deterioration of labour rights and equity and in the environmental consequences. Likewise, the emergence of new economic approaches such as the theories of endogenous growth (Romer, 1990) gave increasing relevance to institutions as an alternative to explain the problems of economic development. This has stimulated the emergence of new explanatory perspectives of the socio-economic reality that try to incorporate cultural, social, political and environmental aspects into their analyses.

In the 1980s and afterwards, the new institutional currents began to play a prominent role in contemporary economic thought, particularly since the Nobel Prize was awarded to authors such as Oliver Williamson, Douglass North, Elinor Ostrom and

Joseph Stiglitz. Interest has continued to grow after it was repeatedly proven that the redistributive capacity of the capitalist economic system between capital and labour is deficient without the interaction of useful institutions to cushion the negative effects of economic crises, regulate commercial and financial relations in the liberalised market or safeguard private property rights.

As a consequence, institutionalism is currently a fundamental line of research for investigating the determinants for the development of countries. The unique case of the European institutions is a good example to explain how from 1950 to 2020 the expansion of GDP has affected all European economies, simultaneously and with similar intensity. This has been attributed to the existence of a single market driven by the European institutions and a set of common laws rather than to the functioning of monetary policy, especially in recent decades (Álvarez-Gonzalez, Gadea and Gómez-Lozcos, 2021). In the European case, institutionalism is a relevant theoretical framework for understanding the causes and consequences of development. The integration of European countries into a common political, social and economic space entails specific challenges for research because each country has its own institutional idiosyncrasies¹.

Institutional economics has resulted in an increasingly common understanding of institutions among economists. It is characterised by a series of assumptions about what institutions are and how to define them, the preferred problems of study, the assumptions of the behaviour of economic actors and, ultimately, the way to understand economic facts. Neoinstitutional economists adapt the neoclassical approach to accommodate a wide range of social phenomena within the canon of economic thought. They recognise that institutions play a fundamental role in shaping human behaviour and in the functioning of different sectors of society (a description of the usual meta-theoretical principles of economics compared to those of other social sciences is included in the introductory article to this Debate) (Fernández Esquinas, 2023).

An especially influential definition is provided by North (1990). He considers institutions to be “the humanly devised constraints that shape human interaction” (*ibid.*: p. 3). Institutions are creations that determine the rules of the game, encompassing both formal written rules and informal social norms that condition or generate opportunities in the economic system.

In current economic thought, it is considered that rules, whether formal or informal, can restrict the set of options faced by the actors of the economic system and change their benefits (Hodgson, 2006). Furthermore, actors in interdependent situations operating under a common set of rules form shared mental models in the situation of choice that determines the benefits of the interaction (Aoki, 2007). When this happens, cooperation between market players can become a dominant strategy that tends to drive and foster efficient institutional frameworks.

A set of contributions to academic thought with heterodox origins have emerged from this conceptualisation. The main influences come from the theories of organisations and from various currents of political economy. In the rest of this section, the main ideas of institutional thought that are relevant for explaining empirical research on the quality of institutions are selected. The information is ordered chronologically, highlighting schools of thought and sometimes theories, which are exemplified through reference to their emblematic authors and the most influential concepts.

The classical (or post-Keynesian) school of institutional economics is among the first to postulate that institutions are fundamental to understanding economic phenomena. It is known for its critical stance towards the assumptions of neoclassical theory, questioning the idea that markets are efficient and achieve optimal equilibrium by themselves, and it is inspired by classical authors such as Veblen ([1899] 2004) and Commons (1934). They believe that institutions, understood as social norms, legal frameworks, business organisations and forms of governance, have the ability to shape the behaviour of economic agents through incentives or barriers to production and consumption. They also argued that institutions can either perpetuate or put an end to imbalances and inefficient practices in the distribution of wealth, the reduction of uncertainty and the promotion of cooperation between economic agents.

In the wake of this classical school, transaction cost theory is one of the most influential as it shows the importance of institutions in the costs associated with carrying out commercial transactions. Although it does not explicitly focus on the analysis of institutions, it highlights that rules, regulations, contracts and organisations influence the way in which economic transactions are carried out. During business operations, expenses and difficulties associated with the coordination and negotiation of agreements arise that affect the exchange process and that institutions can help reduce. Coase (1937) referred to the time and resources for finding information and reaching a satisfactory agreement, together with the costs of formalisation and contractual compliance. On the basis of this author's contribution, the importance of the interaction between economic institutions (political transaction costs) and policies (economic transaction costs) as key elements for economic progress has been established (Acemoglu and Robinson, 2012; Caballero and Lago, 2021).

On the other hand, the so-called Carnegie School, represented by the works of Simon and March in the fifties and sixties, is another important reference from the context of organisations, particularly the idea of limited rationality. They recognise cognitive constraints, capabilities to process information in complex environments and the asymmetric information flow in the market. These elements magnify uncertainty and prevent individuals from making fully rational decisions (Simon, 1991). In contrast to the neoclassical paradigm of rational choice, which assumed that market performance is automatically regulated through the conduct and individual capacities of buyers and sellers, they at-

tribute the role of providing rules and regulations that help avoid conflicts in decision-making and organisational behaviour to institutions.

Another important approach is that of the school of public choice, headed by Buchanan and Tullock (1962). They transfer the interest to the application of economic principles in politics and collective decision-making. They argue that political actors and bureaucrats act in their own interests and seek to maximise their personal utility. The indicators used by followers of this school are based on how institutions shape the incentives of political actors, including the configuration of governance systems, electoral rules and decision-making mechanisms. It also examines how institutional restrictions (through constitutions, laws and judicial systems) affect collective decisions and the protection of individual rights. In addition, the implications of economic institutions, tax systems, regulatory policies and resource-allocation mechanisms on a society's economic incentives and efficiency are explored.

The school related to the theory of regulation, promoted by George Stigler (1971), Laffont and Tirole (1993) and Baldwin and Cave (2012), among others, studies the economic effects and implications of government regulation in different sectors of the economy. Based on the aforementioned theory of public choice, they analyse how, from the political sphere, government intervention and regulation affect business behaviour and economic results. They examine how regulations affect relationships between the state, businesses and consumers in areas such as industry, utilities, finance and the environment. The indicators used assess the market power of companies, competition, economic efficiency, service quality, access to services, compliance with regulations and penalties for non-compliance.

The school of historical institutionalism (also called new institutional economics), represented by authors such as Ostrom (1990) and North (1990), deserves special mention. Building on the foundations of limited rationality, North argues that advanced societies require an economic system supported by formal and informal rules and mechanisms for their enforcement. The contributions on the influence of institutions underscore the behaviour of economic agents in order to limit uncertainty, address market failures and contribute to a more efficient allocation of resources to a heterogeneous literature with multiple ramifications.

A prominent author is Stiglitz (1994). His research in this field emphasises how economic institutions, regulatory frameworks, legal and judicial systems and public policies affect the economy. His research on information asymmetries and the information economy has been fundamental to understanding how institutions can address market failures and improve economic outcomes, as well as his contributions to the design of appropriate institutional frameworks to promote efficiency and equity in the allocation of resources and studies that evaluate the influence of political and economic powers in economic decision-making.

The studies in this school have analysed the impact of institutions on development, evaluating indicators of economic efficiency, political stability and wel-

fare. They consider how formal and informal rules, social norms and traditions influence economic and social patterns over time. Retrospective analyses have studied how organisations evolve, adapt and persist. Examining the norms, values and impact of individual and collective decisions, they have observed how their institutional structures and practices change in terms of governance, decision-making and regulations, and how transformations affect economic and social development.

A complementary perspective stems from evolutionary economics (Hodgson, 1993; Nelson, 1995). It deals with how business sectors, understood as the fundamental elements of economic structures, and institutions co-evolve and change over time, using similarities with the evolution of biological organisms. The distinctive element is the role of knowledge and innovation in the performance of companies and their ability to survive in complex economic systems. They examine how institutions shape the absorptive capacity, the interaction between economic agents and other organisations in the environment. The aspects observed include formal and informal rules; shared norms and values, together with the history and roots of institutions; governance structures; decision-making processes and their influence on organisational changes; and the capacity of companies to learn and adapt (Aghion, 2019).

Finally, it is worth highlighting some more recent variations that specialise in some aspects of the institutions. For example, the so-called feminist institutionalism uses a gender perspective and considers the power relations between men and women (Folbre, 1994; Nelson, 2015). Legal institutionalism focuses on the study of legality and its impact on the economy (Posner, 1973; Ellickson, 1998; Williamson, 2005), while political institutionalism examines how political actors regulate economic activity and affect institutional design, policy implementation and power relations with economic actors (Lindblom, 1965; Ostrom, 2005; North, 2005; Schmidt, 2008).

The contributions described do not exhaust the variety of institutionalism in the economy, although they do represent valuable ideas for understanding how institutions influence the economic behaviour and development of societies. It can be argued that institutional capital already constitutes a value in the measures that are prescribed to regulate factor and product markets, in the way in which certain regulatory mechanisms intervene in economic life, and in how the rules for the application of property rights and the allocation of resources are defined.

This way of thinking assumes that institutions have the power to project a flow of norms to regulate the behaviour of economic actors under a utilitarian principle of social interest. They configure a system of incentives and penalties that condition the interaction between the different economic and social actors. They function as a mediating “external agent” with the ability to reduce uncertainty in interactions by dictating formal rules. By means of these formal written rules and informal social norms they have the power to limit or release consumers, companies and legislators from obligations, and induce positive effects on the stability of the economic

system, while also having the ability to establish informal conventions, such as the patterns of behaviour used by institutions to impose specific behaviours (Acemoglu and Robinson, 2012).

In short, the institutionalist approach, through its various schools of thought, has enriched the understanding of economic behaviour. Institutions are recognised as having the capacity to shape the conditions in which interactions occur, and even the nature of these. However, there are also challenges, such as the need to conceptualise and analytically order the different elements that make up institutions, accurately measure the impact of institutions and establish the direction of the causal relationships between institutional quality and economic and social outcomes. In addition, studies should also refine models to predict solutions to the problems arising from the evolutionary changes of institutions, namely, their capacity for innovation, the convergence of political interests, the distribution of power or technological changes.

3. From institutions to “institutional quality”

This heterogeneous group of contributions constitutes the theoretical and empirical basis of studies on institutional quality. The concept of quality has gained a certain degree of popularity among economists as it is useful for evaluating the effectiveness and adequacy of some institutions, the fulfilment of their objectives and the functions for which they were created. This section presents some fundamental issues of these studies, taking into account two aspects: first, the explanatory mechanisms that underlie them; and second, the methodological features and findings of some of the most emblematic empirical works.

3.1. Predominant explanatory mechanisms related to institutional quality

Much of economic neo-institutionalism has focused on the study of regulatory and coercive aspects of institutions, since they consider them a mixture of both. Above all, they observe the effect of the rules of the game as catalysts for economic development. They focus on formal rules regarding laws and regulations and, to a lesser extent, informal rules. The latter are more difficult to incorporate into the models and study empirically, as it will be seen later.

They also consider institutions in the form of public bureaucracies and other organisations central to the economy, with the intention of observing the extent to which they meet their objectives. They consider these institutions from their role as efficient structures. Consequently, they understand them as organisations with the authority to establish the rules of the game and capable of reducing transaction costs, fostering the confidence of agents, guiding the process of exchanging goods and services and reducing uncertainty.

Research on institutional quality has typically focused on studying aspects of the politics and organisation of states that affect the economy. For example, some studies have observed the influence of institutions on the structure of property rights and legal certainty (Hall and Jones, 1999; Acemoglu, Johnson and Robinson, 2001). Others have preferred to study the impact of institutions on economic growth, arguing that the qualities of institutions are more important than territorial or commercial elements (Rodrik, Subramanian and Trebbi, 2004) and that their effects on the economy last in the long term (Ogilvie and Carus, 2014). They have also shown that the administrative decentralisation of the state and economic growth are correlated with the quality of governance (Muringani, Dahl Fitjar and Rodríguez-Pose, 2019).

Some international organisations are also interested in these issues. For example, the World Trade Organization has studied the influence on the dynamism of international trade (Wilkinson, 2013). The World Bank has conducted research on governance, public management and the rule of law (World Bank Group, 2016). The Inter-American Development Bank has dealt with governance, transparency and the fight against corruption². The Organisation for Economic Co-operation and Development has examined aspects such as transparency, accountability and citizen participation (OECD, 2016) and has carried out periodic studies and indicators, which have been used by national bodies to prepare their position papers, such as the Bank of Spain (Mora-Sanguinetti, 2010).

Finally, the most recent works look into the coercive and regulatory mechanisms that affect markets, companies and transactions (Rothstein and Stolle, 2008; Risse and Draude, 2018). They point out that companies have to deal with the new institutional reality, for example, with environmental regulations. At the micro level, the mechanisms designed to impose mandatory behaviours for the actors of the system are indicated. Of particular importance are those that try to solve problems of coordination or conflict in economic transactions—market regulation, concurrence of interests, etc. (Marinescu, 2013). At the macro level, focus is placed on transactions between countries and global areas and to situations of balance (Hayat, 2019).

3.2. Characteristics of empirical studies on institutional quality

Studies on institutional quality have overcome the limitations of the neoclassical approach by adopting a more pragmatic, comparative and less orthodox view, moving away from the explanation focused exclusively on individual behaviour. These approaches incorporate a different tradition, based at the macro level on comparative political economy and international political economy, and at the meso level on the analysis of sectors of institutions and organisations as the object of study, instead of focusing exclusively on countries.

The analysis is broadened through the comparison of different institutional systems and enables an understanding of how they influence the interaction of economic, political and social actors within the framework of a globalised and complex economy. By studying institutional quality from this broader perspective, a more complete and contextualised vision is obtained, which provides a solid basis for designing more effective public policies and development strategies appropriate to the particularities of each context.

From this perspective, the specific characteristics of institutions are usually observed through variables that reflect economic and social dimensions. Quantitative and qualitative approaches seek to measure and evaluate institutional quality in different countries, regions and economic sectors in order to provide information for designing effective public policies, promoting institutional reforms and fostering an appropriate socio-economic environment for sustainable development and equity.

As regards units of analysis, it is common to consider countries and regions (Acemoglu, Johnson and Robinson, 2001; Rodrik, Subramanian and Trebbi, 2004; Goel, Saunoris and Zhang, 2016). Other times, sectors or industries are used to investigate how institutional quality affects performance and results (Hall and Gingerich, 2009; Claessens and Laeven, 2003; Houston et al., 2014; OECD, 2012; Faccio and Zingales, 2022). In some cases, specific organisations are also studied to examine their capabilities or performance.

As for the dimensions of analysis, those macrosocial aspects with economic implications are considered. A number of investigations establish causal relationships to examine the connections between institutional quality and GDP, economic and population growth, the education level of the population, the average of exports or other economic, geographical and demographic variables. Social dimensions related to political stability, absence of violence, control of corruption, transparency in accountability, effectiveness in governance, regulatory burden, trust in the rule of law and quality of the judicial system are also used.

In relation to the logic of analysis, it is most common to consider the traits of institutions as the main explanatory or independent variable (Acemoglu, Johnson and Robinson, 2002; Kaufmann, Kraay and Mastruzzi, 2007). In recent years, studies have emerged that consider how certain economic processes or outcomes—for example, the appearance of new products, services or production processes—can influence institutions or cause new ones to emerge to regulate new situations. Thus, in some instances, institutional quality constructs have been found to function as a dependent variable (Hall and Jones, 1999; Acemoglu, Johnson and Robinson, 2001; Kaufmann, Kraay and Mastruzzi, 2009) and in others, as a moderating variable (Rodrik, Subramanian and Trebbi, 2004; Fisman and Svensson, 2007; Schneider, Buehn and Montenegro, 2010).

In terms of specific studies that relate institutional quality and economic variables, the reports by the International Country Risk Guide stand out³. They assess the political, financial and economic risk of countries, measuring institutional commitment to contract compliance, the risk of expropriation, the quality of bureaucracy, corruption and the rule of law (Burki and Perry, 1998; Islam and Montenegro, 2002). Other studies incorporate governance considerations of institutions in economic development and the decrease of the gap between countries (Stiglitz, 2019).

For its part, the annual *Doing Business* report (World Bank Group, 2016), prepared by the World Bank, assesses the ease with which institutions make it possible to do business in different countries, considering indicators such as the creation of companies, obtaining of licences and enforcement of contracts. Other studies by international organisations associate institutional quality with other socio-economic variables. The Worldwide Governance Indicators project (Kraay, Kaufmann and Mastruzzi, 2010) collects information on governance indicators in six dimensions, such as regulatory quality, control of corruption, political stability, government effectiveness, accountability to citizens and the government's ability to create policies and regulations beneficial to the private sector. The World Economic Forum's *Global Competitiveness Report* also assesses the institutional quality and competitiveness of countries, including Spain in its analyses.

It is also worth mentioning the studies promoted by other bodies that encompass a variety of political dimensions, with similar methodologies. *Regional Governance Matters*, promoted by the Quality of Government Institute and the Directorate-General for Regional Policy of the European Commission, uses the "European Quality of Government Index" to investigate the influence of institutions in areas such as the economic and social development of regions, innovation networks, environmental sustainability and political and administrative systems (Charron, Lapuente and Dijkstra, 2012). The "Effectiveness Index" prepared by the Institute of Management Development (2022) evaluates quantitative and qualitative data on a range of indicators related to the economic situation and efficiency of government, infrastructure, education and health. The "Corruption Perceptions Index", published by the non-governmental organisation Transparency International (2022), is used to measure the transparency and accountability of governments in areas such as regulation, access to information, the fight against corruption and transparency in the management of public resources (the exercises carried out with "good governance" are included in the article in this section by [Author1 and Author5], 2023).

A wealth of specialist literature has emerged from these data sources. For example, Lucio and Mora-Sanguinetti (2021) use the quantity and linguistic ambiguity of norms to relate them to productivity growth and work efficiency. Petersen (2013) and Buccirosi et al. (2013) relate GDP per capita to indicators of democratic improvement (civic education, inclusive democracy, socio-economic justice, dialogue between civil society and the government, civil society

networking or the democratic culture dimension). Houston et al. (2014) focus on the relationship between politics and the financial sector. The report published by the OECD (2012) and the work of Faccio and Zingales (2022) address the impact of policy and the regulatory framework on the telecommunications sector.

The latter group of studies has connections with the exercises for measuring the quality of institutions in the field of policy that are detailed in the specific article of this monograph section ([Author1 and Author5], 2023). In fact, there are overlaps between economic and political science approaches in the methodology used for measuring aspects of institutions and in analysis strategies, which has to do with fundamental coincidences in the assumptions for interpreting the functioning of some sectors. A common feature is that their units of analysis are typically country-based and focus on how institutional traits and economic development reinforce each other in the long run, and seek to find “virtuous circles” that underpin policy and regulatory reforms.

4. The implications of institutional quality for the Spanish context

The international comparative studies that include Spain in their analyses provide a descriptive basis for evaluating the country's position and, above all, provide a source of data for more in-depth studies by Spanish authors interested in this subject. This section includes a brief summary of empirical research based on international reference sources.

Spain occupies an intermediate relative position both in the European Union and in international ratings, mainly due to governance-related institutional weaknesses. Some dimensions stand out from the political instability, violence and corruption, and others of an economic nature, such as obtaining credit and building permits, according to data from the *Worldwide Governance Indicators* and *Doing Business*. The time series of these long-term studies indicate some significant setbacks, partially softened in recent years, but which continue to affect productivity and economic convergence with the most advanced countries (Arias, 2021).

If we are to look at the specific studies on Spain based on these sources, they reveal that the problems of low structural productivity are usually related to indicators of transparency and corruption, conditions of legal certainty, efficiency of the judicial system, quality of regulation, presence of political client networks or corporate governance from the private sector.

Of particular note is the work of Borrell, García and Jiménez (2021) who, using data from the Institute for Management Development (2022) and the World Economic Forum (2020), quantify the impact of institutional reforms on the advocacy of competition, as well as economic efficiency based on the study of the institutional design of the Spanish autonomous state, the power structure and transparency. Another good example is the work by Martínez-Vázquez, Tránchez-Martín and Sanz-Arce-

ga (2019). Drawing on the theory of fiscal federalism, they analyse dimensions such as the distribution of competences, the distribution of fiscal power, the relations of cooperation between levels of government and conflict resolution mechanisms to identify institutional weaknesses and propose reforms in the design of the autonomous state.

Nonell and Medina (2021) investigate the constraints arising from the legal framework of the labour market. In particular, they analyse the ideological component as a determinant for reforming contracting systems and participation in collective bargaining. Other recent studies of interest include the work by Parrado (2021), which focused on the study of institutions in the field of equity, efficiency and autonomy in education and health, and by Caballero and Lago (2021), who have examined transaction costs in political action, electoral rules and political institutions and their effects on the economy.

In summary, these studies highlight that the situation in Spain, according to the conceptualisation of institutions and the methodology for measuring their quality features, is fundamentally due to certain groups of key factors of governance: citizens' trust in institutions, the quality of the judicial system, the fight against corruption and efficiency in the functioning of public institutions. As main implications, they suggest the need for legal reforms in order to have transparent and efficient institutions that stimulate trust in the public sphere. It is argued that institutions must establish rules that have positive effects on the confidence, productivity and competitive capacity of the Spanish economy. The convergence of the rules of the different political, economic and judicial systems must contribute to an "infrastructure of institutions" that promotes security and efficiency, without over-regulation, through a coordinated governance between the different government structures that enables accountability.

5. Conclusions

In the literature on economic institutionalism, the idea prevails that the role of institutions needs to be addressed by examining the rules, organisations and behaviours of the various actors involved in the economic system. Constructs such as institutions and transaction costs have become common concepts to explain problems of an economic, political and social nature already identified by the neoclassical paradigm. Much of the economic research on institutions has sought to identify empirical solutions to respond to market failures or to the behaviour of economic and social actors.

The studies that fall under the rubric of institutional quality are one of the best examples for observing the character of the institutions of countries, regions or sectors of activity, and linking them to other fundamental dimensions of the economy, politics or society. These conclusions briefly highlight the contributions of these stud-

ies, their methodological strengths and weaknesses, and offer some keys for their improvement, especially regarding their openness to collaboration with other disciplines.

In terms of strengths, these studies have provided the empirical basis for advancing institutional economics and testing some of its assumptions. They have made it possible to provide more precise knowledge on how aspects of politics, the legal framework, regulatory arrangements, the formation of business corporations and the structure of the productive sectors shape economic performance in its fundamental aspects. Comparison between different institutions or countries has made it easier to identify patterns and significant differences in long-term economic growth, or in specific aspects such as, for example, the causal relationship between institutional quality and the attraction of foreign investors (Ren, Hao and Wu, 2022).

Another advancement of knowledge is the contribution to the understanding of complexity. The suggestion is that the characteristics of institutions are not only an independent variable, but that they co-evolve with other social sectors, and even some aspects of institutions function as a dependent variable that depends on the make-up of the economy, which has led to one of the most promising frontiers in institutional thought.

Regarding the weaknesses, those related to the conception of institutions, methodological problems and data sources are highlighted. First, the concepts employed often focus on formal and structural aspects of institutions, such as rules, formal aspects of organisations and formal governance mechanisms. However, the informal dimensions related to culture and power, including social norms, beliefs, values and influences exerted by some actors, are addressed to a lesser extent, which is crucial for understanding how institutions work.

Other problems are operational in nature when it comes to measuring quality. Designs for country and regional levels of analysis combine official statistical data, qualitative reports, based mostly on expert opinion, and proxy indicators from user surveys and other sources to capture key aspects of institutions. However, the institutional quality is influenced by specific and concrete historical, cultural, political and economic factors of each territory. It is difficult to codify these aspects as indicators, which leaves many relevant institutional elements unexplained. In addition, obtaining macro-level data makes it difficult to find influences stemming from the internal configuration of key sectors or institutions of countries, which may differ significantly from one another and give rise to different combinations of causes depending on the context.

Finally, obtaining reliable and complete data on institutions is always a challenge due to the difficulty of measurement. This has led to the use of proxy indicators on corruption, regulations, administrative efficiency, law enforcement and organisational culture, among others, which are based on user perceptions or on results produced by the institutions to be studied. Thus, analyses that relate these indicators to traditional economic ones, such as GDP per capita, growth rates or other aggregated indicators, can give rise to circular reasoning because they are interrelated. It is not

surprising that in the comparative exercises high levels of economic development and institutional quality systematically coincide and vice versa. Such sources show the bidirectional relationship of factors that influence each other, which makes it difficult to identify causality and can lead to misinterpretations about the institutional reforms that can generate a cause-effect relationship in the economy.

Despite the difficulties observed, studying institutions continues to attract the interest of key economic currents. Contributions in this field have provided explanations to economic problems for which neoclassical approaches offered limited solutions. Currently, the challenges lie in deepening the observation of complex factors: the influence of culture, power relations, citizen participation, accountability mechanisms and technological advances are some aspects that can continue to enrich the understanding of institutional quality and its effects on social and economic development.

6. Bibliography

- Acemoglu, D., Johnson, S. & Robinson, J. A. (2001). The Colonial Origins of Comparative Development: An Empirical Investigation. *American Economic Review*, 91(5), 1369-1401. <https://doi.org/10.1257/aer.91.5.1369>
- Acemoglu, D., Johnson, S. & Robinson, J. A. (2002). Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution. *The Quarterly Journal of Economics*, 117(4), 1231-1294. <https://doi.org/10.1162/003355302320935025>
- Acemoglu, D. & Robinson, J. (2012). *Why nations fail. The origins of power, prosperity and poverty*. New York: Crown Business. <https://doi.org/10.1355/ae29-2j>
- Álvarez González, L. J., Gadea Rivas, M. D. & Gómez Loscos, A. (2021). *La evolución cíclica de la economía española en el contexto europeo*. Madrid: Banco de España. Documentos Ocasionales, 2103. <https://repositorio.bde.es/bitstream/123456789/14752/1/do2103.pdf>
- Aoki, M. (2007). Endogenizing institutions and institutional change. *Journal of Institutional Economics*, 3(1), 1-31. <https://doi.org/10.1017/S1744137406000531>
- Arias, X. C. (2021). Economía española: Las instituciones importan. *Papeles de Economía Española*, 168, 2-189.
- Baldwin, R. & Cave, M. (2012). *Understanding regulation: Theory, strategy, and practice*. Oxford: Oxford University Press. <https://doi.org/10.1093/acprof:oso/bl/9780199576081.001.0001>
- Borrell, J. R., García Galindo, C. & Jiménez, J. L. (2021). La cara amable y el lado oscuro de las reformas de las autoridades de competencia. *Papeles de Economía Española*, 168, 78-87.
- Buccirossi, P., Ciari, L., Duso, T., Spagnolo, G. & Vitale, C. (2013). Competition policy and productivity growth: An empirical assessment. *Review of Economics and Statistics*, 95(4), 1324-1336. https://doi.org/10.1162/REST_a_00304

- Buchanan, J. M. & Tullock, G. (1962). *The Calculus of Consent: Logical Foundations of Constitutional Democracy*. Ann Harbor: University of Michigan Press.
- Burkí, S. J. & Perry, G. (1998). *Más allá del Consenso de Washington: la hora de la reforma institucional*. Washington, DC: The World Bank. <https://doi.org/10.18356/dfcf16ff-es>
- Caballero, G. & Lago, I. (2021). Persistencia institucional y costes de transacción en la política electoral española. *Papeles de Economía Española*, 168, 144-190.
- Charron, N., Lapuente V. & Dijkstra L. (2012). Regional governance matters: A study on regional variation in Quality of Government within the EU. Directorate-General for Regional Policy, European Commission, Working Paper 01/2012, January.
- Claessens, S. & Laeven, L. (2003). Financial development, property rights, and growth. *The Journal of Finance*, 58(6), 2401-2436. <https://doi.org/10.1046/j.1540-6261.2003.00610.x>
- Coase, Ronald H. (1937). The Nature of the Firm. *Economica*, 4(16), 386-405. <https://doi.org/10.1111/j.1468-0335.1937.tb00002.x>
- Commons, J. R. (1934). *Institutional economics: Its place in political economy*. Macmillan.
- De Lucio, J. & Mora-Sanguinetti, J. S. (2021). *New dimensions of regulatory complexity and their economic cost. An analysis using text mining*. Documento de trabajo 2107. Madrid: Banco de España. <https://doi.org/10.2139/ssrn.3782403>
- Ellickson, R. C. (1998). New institutions for old neighborhoods. *Duke LJ*, 48, 75. <https://doi.org/10.2307/1373008>
- Faccio, M. & Zingales, L. (2022). Political determinants of competition in the mobile telecommunication industry. *The Review of Financial Studies*, 35(4), 1983-2018. <https://doi.org/10.1093/rfs/hhab074>
- Fernández Esquinas, M. (2023). Editorial: «Buenas y malas instituciones». La cuestión de la calidad institucional en las ciencias sociales. *Revista Centra de Ciencias Sociales*, 2(2), 117-128. <https://doi.org/10.54790/rccs.70>
- Fisman, R. & Svensson, J. (2007). Are Corruption and Taxation Really Harmful to Growth? Firm-Level Evidence. *Journal of Development Economics*, 83(1), 63-75. <https://doi.org/10.1016/j.jdeveco.2005.09.009>
- Folbre, N. (1994). *Who pays for the kids?: Gender and the structures of constraint*. London: Routledge, Taylor & Francis Group. <https://doi.org/10.4324/9780203168295>
- Goel, R. K., Saunoris, J. W. & Zhang, X. (2016). Intranational and international knowledge flows: Effects on the formal and informal sectors. *Contemporary Economic Policy*, 34(2), 297-311. <https://doi.org/10.1111/coep.12112>
- Hall, P. A. & Gingerich, D. W. (2009). Varieties of capitalism and institutional complementarities in the political economy: An empirical analysis. *British Journal of Political Science*, 39(3), 449-482. <https://doi.org/10.1017/S0007123409000672>
- Hall, R. E. & Jones, C. I. (1999). Why Do Some Countries Produce So Much More Output per Worker than Others? *Quarterly Journal of Economics*, 114(1), 83-116. <https://doi.org/10.1162/003355399555954>

- Hayat, A. (2019). Foreign direct investments, institutional quality, and economic growth. *The Journal of International Trade & Economic Development*, 28(5), 561–579. <https://doi.org/10.1080/09638199.2018.1564064>
- Hodgson, G. M. (1993). *Economics and evolution: Bringing life back into economics*. Ann Harbor: University of Michigan Press. <https://doi.org/10.3998/mpub.14010>
- Hodgson, G. M. (2006). What are institutions? *Journal of Economic Issues*, 40(1), 1–25. <https://doi.org/10.1080/00213624.2006.11506879>
- Houston, J. F., Jiang, L., Lin, C. & Ma, Y. (2014). Political connections and the cost of bank loans. *Journal of Accounting Research*, 52(1), 193–243. <https://doi.org/10.1111/1475-679X.12038>
- Institute for Management Development (2022). *The IMD World Competitiveness Yearbook*. <https://imd.cld.bz/IMD-World-Competitiveness-Booklet-2022/4/>
- Islam, R. & Montenegro, C. E. (2002). What determines the quality of institutions? *Policy Research Working Paper*, 2764. <https://openknowledge.worldbank.org/entities/publication/d2b35aae-71b2-5371-8df2-353c77f050d8>
- Kaufmann, D., Kraay, A. & Mastruzzi, M. (2007). *Governance Matters VI: Governance Indicators for 1996–2006*. The World Bank Policy Research Working Paper Series, 4280. <https://doi.org/10.1596/1813-9450-3630>
- Kaufmann, D., Kraay, A. & Mastruzzi, M. (2009). *Governance Matters VIII: Aggregate and Individual Governance Indicators 1996–2008*. The World Bank Policy Research Working Paper Series, 4978. <https://doi.org/10.1596/1813-9450-4978>
- Kraay, A., Kaufmann, D. & Mastruzzi, M. (2010). *The worldwide governance indicators: methodology and analytical issues*. Policy Research Working Paper, 5430. <https://doi.org/10.1596/1813-9450-5430>
- Laffont, J. J. & Tirole, J. (1993). Cartelization by Regulation. *Journal of Regulatory Economics*, 5, 111–130. <https://doi.org/10.1007/BF01065361>
- Lindblom, C. E. (1965). *The intelligence of democracy: Decision making through mutual adjustment*. New York: The Free Press.
- Marinescu, C. (2013). Institutional quality of the business environment: Some European practices in a comparative analysis. *Amfiteatru Economic Journal*, 15(33), 270–287.
- Martínez-Vázquez, J., Tránchez Martín, J. M. & Sanz-Arcega, E. (2019). A propósito del Informe de la Comisión de Expertos para la revisión del modelo de financiación autonómica: oportunidades para un sistema más eficiente. *Presupuesto y Gasto Público*, 96, 89–106.
- Mora-Sanguinetti, J. S. (2010). *The effect of institutions on the European housing markets: an economic analysis*. Estudios Económicos, 77. Madrid: Banco de España.
- Muringani, J., Dahl Fitjar, R. & Rodríguez-Pose, A. (2019). Decentralisation, quality of government and economic growth in the regions of the EU. *Revista de economía mundial*, 51, 25–50. <https://doi.org/10.33776/rem.voi51.3903>

- Nelson, J. A. (2015). Gender in Economic Research. In J. Backhouse & B. Bateman (Eds.), *The Cambridge Companion to Keynes* (pp. 288–314). Cambridge: Cambridge University Press.
- Nelson, R. R. (1995). Recent evolutionary theorizing about economic change. *Journal of Economic Literature*, 33(1), 48–90.
- Nonell, R. & Medina, I. (2021). Buen gobierno e instituciones del mercado de trabajo. *Papeles de Economía Española*, 168, 106–126.
- North, D.C. (1990). *Institutions, Institutional Change and Economic Performance*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9780511808678>
- North, D. C. (2005). *Understanding the process of economic change*. Princeton: Princeton University Press. <https://doi.org/10.1515/9781400829484>
- OCDE (2012). *Review of Telecommunication Policy and Regulation in Mexico*. OECD Publishing. <https://doi.org/10.1787/9789264060111-en>
- OCDE (2016). *Open Government: The Global Context and the Way Forward*. Paris. <https://doi.org/10.1787/9789264268104-en>
- Ogilvie, S. & Carus, A. W. (2014). Institutions and economic growth in historical perspective. *Handbook of economic growth*, 2, 403–513. <https://doi.org/10.1016/B978-0-444-53538-2.00008-3>
- Ostrom, E. (1990). *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9780511807763>
- Ostrom, E. (2005). *Understanding institutional diversity*. Princeton: Princeton University Press.
- Parrado, S. (2021). Administraciones públicas: Calidad institucional y adecuación entre fines y medios. *Papeles de Economía Española*, 168, 127–190.
- Petersen, N. (2013). Antitrust law and the promotion of democracy and economic growth. *Journal of competition law and economics*, 9(3), 593–636. <https://doi.org/10.1093/joclec/nht003>
- Posner, R. A. (1973). An economic approach to legal procedure and judicial administration. *The Journal of Legal Studies*, 2(2), 399–458. <https://doi.org/10.1086/467503>
- Ren, S., Hao, Y. & Wu, H. (2022). The role of outward foreign direct investment (OFDI) on green total factor energy efficiency: Does institutional quality matters? Evidence from China. *Resources Policy*, 76, 102587. <https://doi.org/10.1016/j.resourpol.2022.102587>
- Risse, T., Börzel, T. A. & Draude, A. (Eds.) (2018). *The Oxford handbook of governance and limited statehood*. Oxford: Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780198797203.013.1>
- Rodrik, D., Subramanian, A. & Trebbi, F. (2004). Institutions Rule: The Primacy of Institutions over Geography and Integration in Economic Development.

- Journal of Economic Growth*, 9(2), 131-165. <https://doi.org/10.1023/B:JOEG.0000031425.72248.85>
- Romer, P. M. (1990). Endogenous Technological Change. *Journal of Political Economy*, 98(5), S71-S102. <https://doi.org/10.1086/261725>
- Rothstein, B. & Stolle, D. (2008). The state and social capital: an institutional theory of generalized trust. *Comparative Politics*, 40, 441-459. <https://doi.org/10.5129/01041508X12911362383354>
- Schmidt, V. A. (2008). Discursive institutionalism: The explanatory power of ideas and discourse. *Annual Review of Political Science*, 11, 303-326. <https://doi.org/10.1146/annurev.polisci.11.060606.135342>
- Schneider, F., Buehn, A. & Montenegro, C. E. (2010). New Estimates for the Shadow Economies all over the World. *International Economic Journal*, 24(4), 443-461. <https://doi.org/10.1080/10168737.2010.525974>
- Simon, H. A. (1991). Bounded Rationality and Organizational Learning. *Organization Science*, 2(1), 125-134. <https://doi.org/10.1287/orsc.2.1.125>
- Stigler, G. J. (1971). The theory of economic regulation. *The Bell Journal of Economics and Management Science*, 2(1), 3-21. <https://doi.org/10.2307/3003160>
- Stiglitz, J. E. (1994). *Whither Socialism?* Cambridge, Mass.: MIT Press.
- Stiglitz, J. E. (2019). Mis-measurement of inequality: a critical reflection and new insights. *Journal of Economic Interaction and Coordination*, 14 (4), pp. 891-921. <https://doi.org/10.1007/s11403-019-00257-2>
- Transparency International (2022). *Transparency International. Perceptions Index*. <https://www.transparency.org/en/>
- Veblen, T. ([1899] 2004). *Teoría de la clase ociosa* (V. Herrero, Trad.). México: Fondo de Cultura Económica.
- Wilkinson, R. (2013). *The WTO: Crisis and the governance of global trade*. London: Routledge. <https://doi.org/10.4324/9780203607725>
- Williamson, O. E. (2005). Why law, economics, and organization? *Annual Review of Law and Social Science*, 1, 369-396. <https://doi.org/10.1146/annurev.lawsocsci.1.031805.111122>
- World Bank Group (2016). *Doing Business 2016. Measuring Regulatory Quality and Efficiency*. Washington D.C.: World Bank Group. <https://www.doingbusiness.org/content/dam/doingBusiness/media/Annual-Reports/English/DB16-Full-Report.pdf>
- World Economic Forum (2005-2020). *The Global Competitiveness Report*. Ginebra. <https://www.weforum.org/reports/>

Notes

- 1 For example, Eastern European countries with centralised economies have transitioned to economic and legal institutions that guarantee property rights, competition and market rules. Southern European countries have advanced to overcome the obstacles in the governance and corruption of the past, taking on the particular challenge of integrating social actors into the institutions to strengthen legitimacy through their greater participation and dialogue.
- 2 The Inter-American Development Bank's documents on institutional quality can be accessed via its official website: <https://publications.iadb.org/>
- 3 The methodology and dimensions used by Political Risk Services to classify the political, financial and economic risk of countries can be consulted at: <https://www.prsgroup.com/explore-our-products/icrg/>

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DEBATE/DEBATE: THE QUALITY OF INSTITUTIONS. AN INTERDISCIPLINARY PERSPECTIVE /
LA CALIDAD DE LAS INSTITUCIONES. UNA PERSPECTIVA INTERDISCIPLINAR

Institutional Quality from a Sociological Perspective: Contributions and Challenges

La calidad institucional desde la perspectiva sociológica:
contribuciones y retos al estado de la cuestión

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ABSTRACT

This article provides a brief overview of the question of research on institutional quality from sociological perspectives. Drawing on the conception of institution inherent to this discipline, two groups of studies have been selected that are useful for understanding how institutional features influence certain aspects of organisations or their aggregates. The first group of studies deal with the overlap of elements of social structure and culture in sectors of activity of countries or territorial areas, particularly in the sociology of development, while the second group of studies focus more on the cultural side of organisations. Although both currents share theoretical assumptions and research interests, they are poorly connected in the literature that studies institutions from the point of view of their social performance. They do, however, offer complementary empirical results. Their comparison provides an approximation of the contributions of sociology to the study of institutional quality, which in turn enables challenges for future research and collaborations with other disciplines to be identified.

KEYWORDS: institutional quality; sociology; organisations; institutions; sociology of development; organisational culture.

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RESUMEN

Este artículo realiza un breve estado de la cuestión de la investigación sobre la calidad institucional desde perspectivas sociológicas. Partiendo de la concepción de institución propia de esta disciplina, se han seleccionado dos grupos de trabajos que son útiles para conocer cómo los rasgos institucionales influyen en algunos aspectos de las organizaciones o agregados de ellas. En primer lugar, los estudios que se ocupan de la confluencia de elementos de la estructura social y la cultura en sectores de actividad de países o áreas territoriales, particularmente presente en la sociología del desarrollo. En segundo lugar, los trabajos que se centran más en la faceta cultural de las organizaciones. Aunque ambas corrientes comparten asunciones teóricas e intereses de investigación, están poco conectadas en la literatura que estudia las instituciones desde el punto de vista de su rendimiento social. Sin embargo, ofrecen resultados empíricos complementarios. A partir de su comparación se obtiene una aproximación de las aportaciones de la sociología al estudio de la calidad institucional, lo que a su vez facilita identificar retos para futuras investigaciones y colaboraciones con otras disciplinas.

PALABRAS CLAVE: calidad institucional; sociología; organizaciones; instituciones; sociología del desarrollo; cultura organizacional.

1. Introduction

Institutions have been the subject of interest in the social sciences since classical authors. In the specific case of sociology, the dominant theories in the first half of the twentieth century, especially functionalism and structuralist approaches of Marxist origin, revolved around institutions. Although interest has partially decreased since the 1970s following the decline of major theories and the rise of microsociology, institutional aspects have maintained their relevance at the core of specialised fields of sociology that have dealt with work, religion, social welfare, education, science and many other aspects of social life.

Recently, interest in institutions has experienced a renewed impetus following the emergence of various kinds of institutionalism in related disciplines. Since the 1980s, several branches of the social sciences have undergone the so-called “institutional turn”; this is especially the case in economics, which becomes highly influential due to the prestige of authors such as D. C. North, E. Ostrom and O. E. Williamson and their contributions to the study of institutions in social and economic development. This awareness is transferred to other disciplines, such as political science and certain specialised fields such as economic policy, economic geography or area studies. Although they have many points of connection with sociology, all these currents have developed in parallel, at times poorly connected to one another, which has led to a diversity of approaches for studying institutions.

Institutions currently play a key role in the research agendas of sociology, Above all because of their importance in two areas of study: first, in the explanation of certain fundamental aspects of social welfare and economic development; and second, in the analysis of central organisations in contemporary societies and their complex “organisational fields”. In the scientific literature, a key question lies in knowing in what specific aspects and to what extent institutions are relevant in the understanding of different areas of social and economic life.

This interest has also been transferred to the so-called “institutional quality”, or the characteristics of the institutions that influence their social and economic results and condition the missions for which they have been created. Some studies try to empirically identify what this quality is, although, due to the different conceptions about the nature and functioning of institutions, there is usually considerable diversity and even conceptual dispersion.

The aim of this article is to review the main studies related to institutional quality, taking into account the contributions in the context of sociology. Two complementary emblematic groups are analysed. Although not all studies use the label of institutional quality, their input is essential to contribute to the topic at hand. The first group is more interested in macro- and meso-level structural questions and is present in the sociology of development. Other currents of more constructivist awareness are in the context of cultural studies on organisations. As an example, those studies that prove strategic for identifying each group’s contributions of interest have been selected.

It should be noted that some of these works transcend the limits of the disciplines. There is reference to the sociological perspective understood as a set of assumptions with which to situate oneself in the face of social reality and ask questions about it (Cardús et al., 2004). To this end, it uses concepts and notions specific to the discipline that function as a “toolbox” for studying social phenomena, although these concepts are also used by other specialised fields (for the explanation of the role of concepts and disciplinary assumptions in the social sciences, refer to the introduction to this *Debate*) (Fernández Esquinas, 2023).

Following on from this introduction, Section 2 provides a brief definition of the term institution from a sociological perspective and describes how it is embodied in the concept of institutional quality. Section 3 deals with the current that emphasises aspects between the meso- and macro-sociological levels in development studies. Section 4 looks at those studies on organisational culture that are developed in contexts between the meso- and micro-levels of organisations. In both, works of empirical relevance are selected that illustrate the characteristics of each current that are aligned with the aspects of institutional quality discussed in other articles of this Debate. Finally, the conclusions address the challenges and implications of the sociological perspective for the multidisciplinary study of institutional quality.

2. Institutions from a sociological perspective

In contemporary sociology, the role of institutions is of great significance in the studies on organisations that emerged after the Second World War. Thanks to the influence of Robert Merton around the so-called Columbia School, focus begins to turn to the distinctive aspects of certain organisations that transcend the formal character as entities designed to produce some type of good or service. They study informal issues related to power, conflict, culture, primary groups, networks and other aspects beyond design. It documents how these processes

are worked into the reality of organisations, together with their impact on formal objectives, the course of action and the effects of large sectors of organisations on society¹.

Much of this work addresses the communities in which these organisations operate. One of the most influential works is that by Philip Selznick (1957)², one of the first to start conceptually distinguishing between organisations and institutions. He considers that the latter acquire a distinctive status because they are infused with values. Thanks to institutionalisation processes, they obtain stability and are given a special meaning that transcends their merely technical activities.

Criticisms of functionalism, due to their preferences for stability and the structural explanation of behaviour, and the growing interest in cultural aspects, result in these studies being sidelined—some authors unfairly start to call them “old institutionalisms” (Selznick, 1996)—, in the face of new perspectives that favour cognitive and identity aspects. From the 1980s onwards, this cultural shift began to be transferred to the world of organisations. The most relevant authors are Meyer and Rowan (1977), Zucker (1977) and DiMaggio and Powell (1983), among others. These new works incorporate the importance of cognition and social construction processes based on the meaning in the creation and reproduction of institutions. Their contributions include the creation of other concepts that highlight the question of legitimacy and reproduction, such as “organisational fields” and “institutional isomorphism” (Powell, 1996; Ocasio and Gai, 2020).

This group of works is identified as a new sociological institutionalism. They conceive organisations as formal structures that are “densely institutionalised”, or marked by cultural and cognitive characteristics that confer legitimacy. The main focus is to understand why organisations in the same field acquire similar practices and forms. The justification lies in the processes of institutional mimicry in which the models of those that are considered socially legitimate or successful are adopted. Through these mechanisms, the formal structure of organisations reflects the myths and routine procedures of their context and integrates them as rationalised rituals (Meyer and Rowan, 1977).

This new current gives rise to a variety of approaches that start to emerge as variants of sociological institutionalism, at times poorly connected to one another and to other institutionalisms of related disciplines. The main ones include the so-called concepts of institutional work (Lawrence et al., 2011), institutional entrepreneurship (DiMaggio, 1988; Eisenstadt, 1980) and institutional logics (Thornton and Ocasio, 1999). A common element, in addition to the cited intellectual origin, is that they question the classic problems about institutional determinism, together with the excessive importance given to formal designs and structural issues that characterised the old institutionalisms. They focus their efforts on learning about the practices and processes that lead organisations to reproduce or change, or for new ones to be created. Depending on the emphasis used by each of the aforementioned approaches, institutional change or permanence is

brought about respectively by: a) actors who intentionally act on institutions with the aim of creating, maintaining or modifying them; b) organised actors with resources who see the opportunity to create new institutions or transform institutional arrangements; c) change, and subsequent situations, which may arise from the contradiction of coexisting institutional logics.

Although there are some common conceptual foundations, such as those mentioned, the new sociological institutionalisms have become a very complex field of study, with several versions in competition with one another, which cannot be dealt with here. In this article, only those studies have been selected that, under the sociological vision, have looked into the institutional characteristics that affect performance or outcome and that have connections with other studies on institutional quality developed by other disciplines. First, however, there is a brief section dedicated to specifying the meaning of the term.

2.1. The problem of defining institutions in contemporary sociology

Within sociology itself, the term institution has undergone modifications as knowledge has been accumulated and new currents of thought have emerged (Ocasio and Gai, 2020). Although it is difficult to agree on a definition, it is possible to point out shared aspects that can be considered metatheoretical assumptions. When sociology speaks of institutions, it usually refers to the set of socially validated expectations that enable individual action and organise collective life (Ocasio, Thornton and Lounsbury, 2017). Through them, actors (individuals or organisations) produce and reproduce social life (Friedland and Alford, 1991; Thornton and Ocasio, 1999).

From this point of view, it is assumed that “institutions are in a multitude of places”. Any minimally organised entity of social life is based on these sets of expectations to which meanings are attributed and which, at times, crystallise into stable entities. Institutional aspects are necessarily present in any organisation and in many other places. Attention, however, is also drawn to the fact that institutions “are not just anything” (Ocasio and Gai, 2020). Unlike many formal organisations common today (such as small or medium-sized enterprises) and groups with a certain degree of organisation (the diversity of civil society associations, together with collectives that act as “quasi-organisations”), institutions are socially legitimised, acquire social relevance, are “taken for granted” and tend to self-reproduce, although they undergo changes. In addition, the absence of certain important institutions has consequences for the social order of countries or territories.

To adequately complement this dominant view in contemporary sociology, it is important to clarify other assumptions regarding the behaviour of actors, the nature of social facts and the processes or mechanisms to which they pay particular attention.

First of all, in terms of behaviour, people follow motivations that depend on values, shared beliefs and interests, where non-rational action gains importance. Individuals act in accordance with institutions not only because this is the most rational option for avoiding sanctions, but also because they internalise them as patterns of behaviour. People acquire them through socialisation and make them inherent in a repetitive action that is learned with skills and routines.

Second, this idea is related to how the nature of institutions is interpreted. Institutions are supra-individual realities that are mediated by actors who perceive, evaluate and constitute social reality. Thanks to conventions and routines (Powell and DiMaggio, 1991), institutions become constitutive or internal to the actors. Although social facts are always based on people and do not exist without them, they are imposed as cultural constructs when people incorporate them into their way of thinking and behaving.

Third, with regard to the mechanisms to which attention is paid, those of a *cognitive* and *regulatory* nature predominate. Institutions are mixtures of both. On one hand, they are conceived as rules that are internalised and “taken for granted”. In other words, they end up being used routinely and become frequent patterns of behaviour. On the other hand, they are conceived as configurations that take the form of systems of norms or behavioural expectations for the participants in a situation.

Finally, a common feature of the sociological perspective compared to others that should be highlighted is that aspects of the “social structure” and the “culture” and the components of each of them are analytically differentiated between. The separation is conceptual as, in reality, all these social aspects are mixed, although the distinction helps to identify their parts and functioning. Institutions are “assemblages” of both aspects; they are made up of a set of values and, in turn, rules, regulations and a repertoire of socially acquired skills. At times, institutions crystallise into social forms that are visible and identifiable as an organisation. Institutions and organisations are often conceived as two sides of the same coin. For this reason, a large part of institutional studies in sociology deal with organisations as a visible place from which to analyse structural and cultural aspects.

2.2. The concept of institutional quality

Institutional quality is a concept used above all by those studies that are interested in determining the features of institutions that favour their fulfilment of the objectives for which they have been created, as well as their importance in general aspects of societies, be it the economy, politics, social welfare or certain aspects of social relations or culture.

It should be noted that this concept, and some of its variants, is more widely used in certain branches of economic sciences and political sciences—as can be seen in the other two articles of this monographic Debate (Pedraza Rodríguez, 2023; Martínez-Sánchez and Gosálbez Pequeño, 2023). In the main repositories

of scientific publications there are hardly any studies in the context of sociology that use the label of “institutional quality” in the title or keywords. However, despite using other terminology, there are studies that have points in common with those mentioned previously in their explanation of certain social phenomena. They are characterised by: a) a concern for the “social or socio-economic performance” of institutions; b) a preference for empirical observation of institutional processes and their outcomes; and c) an interest in comparison, whether between groups of specific institutions, sectors or territorial areas.

In sociology, two currents coexist that have a number of connections with this conception of institutional quality. On the one hand, one of the currents focuses more on structural and cultural aspects in sectors of importance for development (they could be said to focus on the meso-macro level). On the other hand, the other current is more focused on organisations, on the construction, reproduction and change of cultural elements and their influence on organisational results (more focused on the meso-micro level). Despite being poorly connected academic communities in the literature, both share common epistemological bases in the way of understanding the institutions described above (Nebojša, 2015). The following sections cover the definitions, dimensions of institutional quality, research interests and levels of analysis of the most emblematic studies³.

3. The quality of institutions and socio-economic development

A first approach is found in the sociology of development. The review by Viterna and Robertson (2015) shows how sociology has made important theoretical contributions on the influence of institutions⁴ as an explanatory factor for the difference in development between countries or regions. It is characterised by a vision of development rooted in the elements of social structure and culture. Among the authors are Evans (2004), Portes (2010), Chibber (2003) and Nee and Oppen (2012).

3.1. General characteristics

Institutional quality is understood as those configurations of institutions that are considered desirable or beneficial due to the effects they have on the social progress of countries or regions. It refers to aspects such as the fulfilment of objectives and contributions to development understood in a broad sense, beyond macroeconomic indicators. Development is considered equivalent to sustained improvements in the welfare of the population, in line with modern development theories that consider the combination of multiple elements necessary (Viterna and Robertson, 2015; Sen, 1985).

Focal institutions are generally formal organisations that are key to development. The dimensions that define institutional quality are related to aspects

of social structure and culture. They include both internal aspects of the institution and its relationship with the environment. The internal elements are related to the Weberian idea of bureaucratic organisation. That is, protection against other interests that divert resources and may disrupt the achievement of the institutions' official objectives; for example, interests when recruiting or promoting personnel, accessing information or managing economic resources. External elements are related to the degree of openness, flexibility and relationships with other actors.

A reference work is that by Peter Evans (1995), *Embedded Autonomy*, on the role of states in the new information technology industries of emerging economies such as Korea, India and Brazil in the last years of the twentieth century⁵. The author finds out that institutions in these countries have difficulty meeting their objectives if they are not open to the outside world and collaborate with actors in their organisational field. Although they can obey the formal characteristics of Weberian bureaucracies (independence from political power, presence of qualified professionals, stability, predictability and immunity to particularist networks, among others), the key factor that leads them to be "developers" is their links with social collectives and political elites that help them direct their actions, and that at the same time oblige them and give them legitimacy.

The work on this current is characterised by placing interest on the organisational fields related to the development of several countries or geographical areas⁶. For this purpose, groups of mid-range institutions, usually those that lie at the heart of a country's development, tend to be selected. By means of case studies, the research strategy aims to observe the social mechanisms through which specific institutions shape different aspects of development. In larger geographical areas they are also related to work on the varieties of capitalism, which identify in the configuration of political and economic institutions the foundations that give rise to the production regimes that determine the development of groups of countries (Hall and Soskice, 2001; Hall and Gingerich, 2009; Campbell and Pedersen, 2007).

3.2. Contributions of interest

A group of reference works in the economic sociology of development are those by Portes and Smith (2012) and the subsequent expansion in Portes and Marques (2015). They make systematic comparisons of countries drawing on groups of strategic institutions for various facets of development. The authors' interest resides in determining how institutional quality influences the social and economic progress of Latin American countries and Portugal.

Institutional quality is interpreted as elements that facilitate a combination of institutional adequacy, that is, the fulfilment of the objectives or mission for which it was created, and contributions to development, understood in its broadest sense. To observe how institutions contribute to these results, they use a group of factors as internal and external dimensions: 1) the meritocratic re-

cruitment and promotion of workers; 2) immunity to corruption; 3) the absence of internal islands of power that can be an obstacle to the fulfilment of general objectives; 4) the ability to efficiently connect with their clients or users; 5) the openness to innovations and technological flexibility; 6) the existence of external alliances that help survival and prevent institutions from being dominated by outside interests.

The institutions selected have a systemic character in the situation that countries have achieved according to the history of their development processes: the stock exchange, tax collection agencies, the postal system, civil aviation and social service providers such as hospitals and universities. These institutions are studied in depth by means of triangulation that includes qualitative and quantitative observations. A relevant characteristic of the methodology used, compared to the works that are based on historical analyses and narrative assessments of complex evidence, is that it opts for a systematic comparison that enables causal analysis. To this end, it uses qualitative comparative analysis (QCA) (Ragin, 2008) based on a configurational logic that, through the combination of dimensions, makes it possible to explore the different ways in which institutions are socio-economically beneficial.

The results show how, in certain institutions, influences from globalisation intervene that not only have negative consequences, but also positive aspects, such as the adoption of technical and meritocratic criteria in daily functioning. External influences represent an advance with respect to the dependence of political or particularist interests on the classes that have historically dominated certain institutions in each country. It also shows the existence of structural factors that constrict the effects of institutions and prevent change, as well as the risks of certain institutions becoming islands of excellence or efficiency disconnected from their environment.

Comparative analyses using QCA make it possible to observe those combinations of factors that offer better performance. An important finding is that the causes that contribute to an institution achieving its goals are different from those that contribute to an institution aiding development. On the other hand, the most recent study by Portes and Navas (2017) suggests that the combination of the factors “immunity to corruption” and “proactivity” is usually the most effective for the observed institutions to perform well. This also means that the absence of some characteristics, which in principle are considered fundamental (for example, meritocracy in the selection of public employees), can be compensated by the presence of others that, beyond their adaptation to the formal bureaucratic model, enable barriers to be overcome. This shows that the existence of development institutions does not have to respond to a unique combination of characteristics, but rather that different configurations that are contextual to each country can also generate beneficial results.

4. Characteristics of the culture of organisations and its connection with institutional quality

In the 1980s, theories of organisations began to include the cultural dimension in their analyses. Empirical studies seek to operationalise the concept of culture. The main influences come from phenomenology and social constructivism, represented by the well-known work of Berger and Luckmann (1967), and its subsequent applications to the world of organisations. Afterwards, it has been complemented by research from the management, anthropology and psychology of organisations (Barney, 1986). Today, organisational culture has become one of the fundamental topics in this interdisciplinary field, and has resulted in a large number of conceptual and empirical publications. Some reference works include works on the construction of meaning in organisations led by Schein (1985), the quantified study of values presented by Hosftede et al. (1990), and works on organisational culture as a comparative advantage (Barney, 1986). Other more recent works that summarise the state of knowledge in this field are those of Alvesson (2002), Giorgi, Lockwood and Glynn (2015) and Haveman (2022). From them, a selection is made that helps illustrate the contributions to the empirical study of institutional quality.

4.1. General characteristics

Although they are not usually framed in the aforementioned institutionalist theories, similar epistemological foundations are found in the usual conceptions of organisational culture (Nebojša, 2015). Organisational culture is defined as those cognitive schemes, values, norms and symbols, which may or may not have explicit representation, that are shared and adopted by the members of an organisation (Schein, 1996; Haveman, 2022).

Some study the components of organisational culture and their influence on the performance of organisations. Barney (1985), for example, defines culture as “a complex set of values, beliefs, assumptions, and symbols that define the way in which a firm conducts its business” (1985, p. 656). From this point of view, the aspects that should be highlighted in connection with the quality of the institutions indicated above are the effects on the results of companies or other organisations. The vast majority of studies that analyse performance do so in economic terms of effectiveness and efficiency (the term *effectiveness* particularly stands out as the ability to achieve the desired results).

This approach received deep criticism due to the resistance of some constructivist authors to consider that culture can be conceived as an instrumental means to achieve desirable objectives, in a measurable and comparable way (Denison and Mishra, 1995), and even be classified as “good” or “bad” for the fulfilment of such aims (Alvesson, 2002). However, due to the accumulated evidence that shows the influence of cultural aspects on multiple processes and results of organisations, and the possibilities of shaping some cultural aspects, they are increasingly accepted as a tool that can be used for multiple management purposes.

The explanations used usually focus on cognitive and symbolic mechanisms specific to each organisational culture. The components of the culture that tend to be analysed are synthesised in a limited set of values and other underlying characteristics related to the degree of employee integration with the organisation's values (Denison and Mishra, 1995). For example, it is assumed that a company with a "strong and widely shared organisational culture promotes behavioural coherence and thus may improve organisational performance" (Haveman, 2022, p. 137). However, it can also hinder the introduction of innovations or modifications in changing environments, which can also be detrimental to its organisational results (Sørensen, 2002).

One of the differences between the studies on organisational culture and the new sociological institutionalism lies in the level of analysis. The former are interested in more micro aspects (values, references of meaning, narratives that are institutionalised, etc.), interactions between their members mediated by these aspects, and by the interrelationship with interest groups and relations of influence. They tend to see the organisation as a more closed social system, but do not tend to observe the links with the environment. The focus is directed at identifying the set of values and underlying cultural characteristics of the individuals and groups that make up an organisation, and observing the extent to which they influence its economic or other performance. Places of interest are very varied, although studies on organisations dedicated to specific sectors of activity such as health (Scott et al., 2003; Scott and Estabrooks, 2006) or higher education (Coman and Bonciu, 2016) stand out. In the following section, some studies have been selected that illustrate this current merging with aspects of institutional quality.

4.2. Contributions of interest

There are numerous studies on the effects of organisational culture on the results of organisations. Its importance is reflected in the gradual increase of publications (Ocasio and Gai, 2020), as shown by some reviews on the topic (Giorgi, Lockwood and Glynn, 2015; Hartnell, Yi Ou and Kinicho, 2011). In this paper a group of emblematic contributions have been selected due to their influence on subsequent studies. They serve as an example for determining the general characteristics of this trend. On the other hand, studies on the new sociological institutionalism mentioned previously, for which there are several treatises and compilations, are not dealt with; it is difficult to locate practical work in them to study characteristics of the organisations that intervene in their performance, equivalent to what has previously been defined as institutional quality. Nevertheless, the approaches that observe the relationship between organisations and their community logics have quite a few similarities and progressively highlight the implications for the results of the organisations (see, for example, Georgiou and Arenas, 2023).

This article will first look at the work of Denison and Mishra (1995). This is among the precursors of models for analysing the impact of the characteristics of organisational culture on organisational performance. One of its influences is observed in the Denison Organi-

zational Culture Survey (DOCS) measurement model, widely used in this field (Denison, Nieminen and Kotrba, 2011). It is based on senior executives' perceptions of aspects such as profitability, quality, sales growth, satisfaction and overall performance. The traits of institutional quality are measured through the contrast or dichotomy between two dimensions, which gives rise to various types of organisational culture. On the one hand, there is the contrast between "internal integration in the organisation" and "external adaptation", in other words, between organisations with inward dynamics that seek to strengthen the links and participation of their members compared to open organisations with outward dynamics. On the other hand, there is the contrast between "change" and "stability", that is, flexible organisations with the capacity to include changes, as opposed to rigid and stable organisations. These two contrasts intersect to form four features of organisational culture: implication, coherence, adaptability and mission.

The methodology is based on two observation procedures: in-depth case studies of several companies to identify the four aforementioned characteristics of organisational culture, and surveys of senior executives where they are asked about their perception of these four cultural characteristics and about objective and subjective measures of performance.

These studies are recognised as important contributions. On the one hand, they empirically capture how organisational culture influences the performance of organisations, in particular, how certain characteristics of the culture are more likely to favour one type of performance over another. On the other hand, they show how the adaptable institutions involved are flexible and open to the outside world, allowing them to respond to changes in the environment. These characteristics influence their performance. For example, they are strong predictors of sales growth in companies. On the contrary, coherence and involvement are indicators of integration of workers and the organisation management, which favours profitability. Today, these characteristics have become common aspects in the study of the performance of organisations, which provides an empirical reference for connecting more general work on institutional quality with currents of management.

5. Conclusions

This work has presented some conceptual contributions that, from a sociological perspective, can be fruitful for the multidisciplinary study of institutional quality. For this purpose, a summary has been offered of the definitions of the concept of institution. It has been shown how this concept has been the subject of various formulations that, both inside and outside the discipline, and due to its complexity, have been a barrier to its understanding and linkage with other approaches. For sociology, institutions go beyond the formal or informal norms that govern behaviour both in the context of formal organisations and in other social aggregates. In contrast to other disciplines, it interprets them as assemblages of socially validated elements of social structure and culture that acquire representation in individuals, enable individual action and organise collective life. Individual or collective actors produce and reproduce institutions through their actions and interactions.

The studies on institutional quality that deal with this conception reveal certain fundamental aspects that may go unnoticed if conceptual foundations and methodologies that cause them to emerge are not used. Nevertheless, in addition to the heterogeneity in defining and capturing the quality of institutions, there is a problem facing this field, and that is how in the sociological discipline there are not many practical-oriented studies and, moreover, the term institutional quality is not widespread.

To illustrate this perspective, two groups of studies have been selected that address the components of institutional quality from two levels of analysis: a group interested in more structural and macro-sociological issues, close to the sociology of development; and another group with a more constructivist orientation, at a more micro level, linked to cultural studies on organisations. For each group, contributions have been used that illustrate the influence of aspects of the institutions that can be considered characteristics of their quality, insofar as they contribute to the fulfilment of their objectives.

In the review carried out, some strengths or contributions of interest can be highlighted. Organisations are strategic places of observation that reflect institutional aspects. This is an advantage for empirical analysis, as it makes them accessible and defines them in a specific space. They also focus on dimensions that are useful for operationalising elements of social life related to social structure and culture. The external and internal dimensions of the organisation that can be highlighted include the typical characteristics of Weberian bureaucracies (meritocracy and independence from outside interests), openness to the outside (flexibility, proactivity and formation of alliances with external actors), and the underlying values and characteristics of the personnel related to the degree of integration or adaptation and change or stability.

It is also possible to highlight certain weaknesses. They are poorly connected in the literature and present an important division between levels of analysis. Studies on the culture of organisations pay more attention to the underlying traits of people. It is less common to observe dimensions related to the distribution of power and hierarchies that can mediate the interaction between workers or with their managers. In studies dealing with structural elements the opposite occurs: hardly any attention is paid to shared meanings. Furthermore, neither do they pay much attention to dimensions of institutional quality related to regulatory aspects that shape interaction, such as those covered in other articles in this *Debate* section.

Another weakness lies in the division between levels of analysis. Organisations are known not to be closed units, but rather are part of aggregates such as organisational fields or sectors of activity. At the same time, internally there are sets of values and meanings of individuals that have a logic of their own. In short, the difficulties in empirically investigating institutional quality are due more to the practical possibilities for integrating both groups of work than to the advances made in the state of knowledge.

In essence, the summary in this article shows how institutions are complex entities that must be looked at beyond their formal and economic aspects or their designs. On the contrary, they are populated by people with values, norms and social bonds who ultimately determine what they produce, in positive or negative terms. The map of

the studies that analyse their quality identifies some aspects that must be taken into account in empirical studies and in action on institutions. It also points to the need for greater collaboration between streams of sociology and between sociology and other disciplines.

6. Bibliography

- Alvesson, M. (2002). Organizational Culture and Performance. In *Understanding Organizational Culture* (pp. 42-70). London: SAGE Publications. <https://doi.org/10.4135/9781446280072.n3>
- Barney, J. B. (1986). Organizational Culture: Can It Be a Source of Sustained Competitive Advantage? *Academy of Management Review*, 11(3), 656-665. <https://doi.org/10.5465/amr.1986.4306261>
- Berger, P. & Luckmann, T. (1967). *The Social Construction of Reality: A Treatise on the Sociology of Knowledge*. Garden City, NY: Doubleday.
- Block, F. & Keller, M. R. (2011). *State of Innovation. The U.S. Government's Role in Technology Development*. London: Routledge.
- Campbell J. (2004). *Institutional Change and Globalization*. Princeton, NJ: Princeton University Press. <https://doi.org/10.1515/9780691216348>
- Campbell, J. L. & Pedersen, O. K. (2007). The Varieties of Capitalism and Hybrid Success: Denmark in the Global Economy. *Comparative Political Studies*, 40, 307-332. <https://doi.org/10.1177/0010414006286542>
- Cardús, S. et al. (2004). *La mirada del sociólogo*. Barcelona: Editorial UOC.
- Cavaliere, M. (2016). Inside Institutions of Progressive-Era Social Sciences: The Interdisciplinarity of Economics and Sociology. *Journal of Economic Issues*, 50(2), 345-361. <https://doi.org/10.1080/00213624.2016.1176476>
- Chibber, V. (2003). *Locked in Place: State-Building and Late Industrialization in India*. Princeton, NJ: Princeton University Press.
- Coman, A. & Bonciu, C. (2016). Organizational Culture in Higher Education: Learning from the Best. *European Journal of Social Science Education and Research*, 3(1), 135-145. <https://doi.org/10.26417/ejser.v6i1.p135-145>
- Denison, D. R. & Mishra, A. K. (1995). Toward a Theory of Organizational Culture and Effectiveness. *Organization Science*, 6(2), 204-223. <https://doi.org/10.1287/orsc.6.2.204>
- Denison, D., Nieminen, L. & Kotrba, L. (2011). Diagnosing organizational cultures: A conceptual and empirical review of culture effectiveness surveys. *European Journal of Work and Organizational Psychology*, 23(1), 145-161. <https://doi.org/10.1080/1359432X.2012.713173>
- DiMaggio, P. J. (1988). Interest and agency in institutional theory. In L. Zucker (Ed.), *Institutional patterns and culture* (pp. 3-22). Cambridge, MA: Ballinger.

- DiMaggio, P. J. & Powell, W. W. (1983). The Iron Cage Revisited: Institutional Isomorphism in Organizational Fields. *American Sociological Review*, 48, 147-160. <https://doi.org/10.2307/2095101>
- Eisenstadt, S. N. (1980). Cultural orientations, institutional entrepreneurs, and social change: comparative analysis of traditional civilizations. *American Journal of Sociology*, 85, 840-869. <https://doi.org/10.1086/227091>
- Evans, P. B. (1995). *Embedded Autonomy: States and Industrial Transformation*. Princeton, NJ: Princeton University Press. <https://doi.org/10.1515/9781400821723>
- Evans, P. B. (2004). Development and institutional change: the pitfalls of monocropping and the potentials of deliberation. *Studies in Comparative International Development*, 38(4), 30-52. <https://doi.org/10.1007/BF02686327>
- Fernández Esquinas, M. (2023). Editorial: «Buenas y malas instituciones». La cuestión de la calidad institucional en las ciencias sociales. *Revista Centra de Ciencias Sociales*, 2(2), 117-128. <https://doi.org/10.54790/rccs.70>
- Friedland, R. & Alford, R. R. (1991). Bringing society back in: symbols, practice, and institutional contradictions. In W. Powell & P. DiMaggio (Eds.), *The New Institutionalism in Organizational Analysis* (pp. 232-263). Chicago: University of Chicago Press.
- Georgiou, A. & Arenas, D. (2023). Community in organizational research: a review and an institutional logics perspective. *Organization Theory*, 4, 1-22. <https://doi.org/10.1177/26317877231153189>
- Giorgi, S., Lockwood, C. & Glynn, M. A. (2015). The Many Faces of Culture: Making Sense of 30 Years of Research on Culture in Organization Studies. *The Academy of Management Annals*, 9(1), 1-54. <https://doi.org/10.5465/19416520.2015.1007645>
- Hall, P. A. & Gingerich, D. W. (2009). Varieties of Capitalism and Institutional Complementarities in the Political Economy: An Empirical Analysis. *British Journal of Political Science*, 39, 449-482. <https://doi.org/10.1017/S0007123409000672>
- Hall, P. A. & Soskice, D. (2001). An Introduction to Varieties of Capitalism. In P. A. Hall & D. Soskice (Eds.), *Varieties of Capitalism. The Institutional Foundations of Comparative Advantage* (pp. 1-68). Oxford: Oxford University Press. <https://doi.org/10.1093/0199247757.001.0001>
- Hartnell, C. A., Yi Ou, A. & Kinichi, A. (2011). Organizational Culture and Organizational Effectiveness: A Meta-Analytic Investigation of the Competing Values Framework's Theoretical Suppositions. *Journal of Applied Psychology*, 96(4), 677-694. <https://doi.org/10.1037/a0021987>
- Haveman, H. A. (2022). *The Power of Organizations: A New Approach to Organizational Theory*. Princeton, NJ: Princeton University Press. <https://doi.org/10.23943/princeton/9780691241807.001.0001>

- Hosftede, G. et al. (1990). Measuring Organizational Cultures: A Qualitative and Quantitative Study Across Twenty Cases. *Administrative Science Quarterly*, 35, 2, 286-316. <https://doi.org/10.2307/2393392>
- Lapueute, V. & Van de Walle, S. (2020). The effects of new public management on the quality of public services. *Governance*, 33(3), 461-475. <https://doi.org/10.1111/gove.12502>
- Lawrence, T., Suddaby, R. & Leca, B. (2011). Institutional Work: Refocusing Institutional Studies of Organization. *Journal of Management Inquiry*, 20(1), 52-58. <https://doi.org/10.1177/1056492610387222>
- Martínez-Sánchez, W. & Gosálbez Pequeño, H. (2023). La calidad de las instituciones del sector público: una revisión crítica de los estudios sobre el «buen gobierno» y la «debilidad institucional». *Revista Centra de Ciencias Sociales*, 2(2), 167-186. <https://doi.org/10.54790/rccs.3>
- Merton, R. K. (1968). *Social Theory and Social Structure*. New York: The Free Press.
- Meyer, J. W. & Rowan, B. (1977). Institutionalized Organizations: Formal Structure as Myth and Ceremony. *American Journal of Sociology*, 83, 340-363. <https://doi.org/10.1086/226550>
- Nebojša, J. (2015). Interplay of Institutional and Cultural Theories of Organization. *Originalni naučni članak*. <https://doi.org/10.2298/SOC1503438J>
- Nee, V. & Opper S. (2012). *Capitalism from Below*. Cambridge, MA: Harvard University Press. <https://doi.org/10.4159/harvard.9780674065390>
- Ocasio, W., Thornton, P. H. & Lounsbury, M. (2017). The institutional logics perspective. In R. C. Greenwood, C. Oliver, T. B. Lawrence y R. E. Meyer (Eds.), *The SAGE Handbook of Organizational Institutionalism* (pp. 531-599). London: SAGE Publications.
- Ocasio, W. & Gai, S. L. (2020). Institutions: Everywhere But Not Everything. *Journal of Management Inquiry*, 29(3), 262-271. <https://doi.org/10.1177/1056492619899331>
- Parhizgari, A.M. & Ronald Gilbert, G. (2004). Measures of organizational effectiveness: private and public sector performance. *Omega*, 32(3), 221-229. <https://doi.org/10.1016/j.omega.2003.11.002>
- Pedraza Rodríguez, J. A. (2023). La calidad de las instituciones y su relación con la economía: una revisión de las bases conceptuales y estudios empíricos. *Revista Centra de Ciencias Sociales*, 2(2), 129-148. <https://doi.org/10.54790/rccs.38>
- Portes, A. (2010). *Economic Sociology: A Systematic Inquiry*. Princeton: Princeton University Press. <https://doi.org/10.1515/9781400835171>
- Portes, A. & Marques, M. M. (Dirs.) (2015). *Valores, Qualidade Institucional e Desenvolvimento em Portugal*. Lisboa: Fundação Francisco Manuel dos Santos.
- Portes, A. & Navas, J. C. (2017). Instituciones y desarrollo: Un estudio comparativo de casos. *Revista Española de Sociología*, 26(1), 9-31. <https://doi.org/10.22325/fes/res.2016.1>

- Portes, A. & Smith, L. D. (2012). *Institutions Count: Their Role and Significance in Latin American Development*. Berkeley: University of California Press. <https://doi.org/10.1525/california/9780520273535.001.0001>
- Powell, W. W. & DiMaggio, P. J. (Eds.) (1991). *The New Institutionalism in Organizational Analysis*. Chicago: University of Chicago Press. <https://doi.org/10.7208/chicago/9780226185941.001.0001>
- Ragin, C. C. (2008). *Redesigning Social Inquiry: Fuzzy Sets and Beyond*. Chicago: University of Chicago Press. <https://doi.org/10.7208/chicago/9780226702797.001.0001>
- Saxenian, A. L. (2007). *The New Argonauts: Regional Advantage in a Global Economy*. Cambridge, MA: Harvard University Press. <https://doi.org/10.2307/j.ctv1dpottd>
- Schein, E. H. (1985). *Organizational Culture and Leadership*. San Francisco, CA: Jossey-Bass.
- Schein, E. H. (1996). Culture: The missing concept in organization studies. *Administrative Science Quarterly*, 41(2), 229-240. <https://doi.org/10.2307/2393715>
- Scott, S.-F. & Estabrooks, C. A. (2006). Mapping the organizational culture research in nursing: a literature review. *J. Adv. Nurs*, 56(5), 498-513. <https://doi.org/10.1111/j.1365-2648.2006.04044.x>
- Scott, T., Mannion, R., Davies, H. & Marshall, M. (2006). The quantitative measurement of organizational culture in health care: A review of the available instruments. *Health Services Research*, 38, 923-945. <https://doi.org/10.1111/1475-6773.00154>
- Scott, W. R. (1995). *Institutions and Organizations*. Thousand Oaks, CA: Sage.
- Selznick, P. (1957). *Leadership in Administration*. New York: Harper and Row.
- Selznick, P. (1996). Institutionalism «Old» and «New». *Administrative Science Quarterly*, 41(2), 270-277. <https://doi.org/10.2307/2393719>
- Sen, A. (1985). *Commodities and Capabilities*. Oxford, UK: Oxford University Press.
- Sørensen, J. B. (2002). The strength of corporate culture and the reliability of firm performance. *Administrative Science Quarterly*, 47(1), 70-91. <https://doi.org/10.2307/3094891>
- Thornton, P. & Ocasio, W. (1999). Institutional Logics and the Historical Contingency of Power in Organizations: Executive Succession in the Higher Education Publishing Industry, 1958-1990. *American Journal of Sociology*, 105, 801-843. <https://doi.org/10.1086/210361>
- Van Helden, J. & Reichard, C. (2016). Commonalities and Differences in Public and Private Sector Performance Management Practices: A Literature Review. In M. J. Epstein, F. Verbeeten y S. K. Widener (Eds.), *Performance Measurement and Management Control: Contemporary Issues (Studies in Managerial and Financial Accounting, Vol. 31)* (pp. 309-351). Bingley: Emerald Group Publishing Limited. <https://doi.org/10.1108/S1479-351220160000031010>

Viterna, J. & Robertson, C. (2015). New Directions for the Sociology of Development. *Annual Review of Sociology*, 41, 243-269. <https://doi.org/10.1146/annurev-soc-071913-043426>

Zucker, L. G. (1977). The Role of Institutionalization in Cultural Persistence. *American Sociological Review*, 45(5), 726-743. <https://doi.org/10.2307/2094862>

Notes

1 The Columbia School of Sociology emerged in the 1940s thanks to F. H. Giddings and became extremely important in the understanding of social reality between 1950 and 1970. Robert K. Merton was one of the leading authors. Other authors identified with this school who took an interest in institutions, focusing on the study of organisations, include P. Blau, A. W. Gouldner, S. M. Lipset, J. Coleman and P. Selznick, among others. See Cavalieri (2016).

2 Other seminal works by Selznick include *TVA and the Grass Roots* (1949) and *The Organizational Weapon* (1952).

3 It should be clarified that, within studies on institutional quality, a source of internal difference is the diversity in performance measurement based on the public, private or mixed nature of the institutions. This is partly due to the difficulty of specifying and quantifying the quality in the provision of public services. This article does not address this difference due to space constraints, although the literature review by Van Helden and Reichard (2016) exposes important performance measurement differences between them. Some of these may be applicable in public and private institutions; others, however, may be inappropriate to use in both spheres, even if they share a sector of activity (Parhizgari and Ronald Gilbert, 2004). This poses both an academic and professional debate, especially in the field of new public management, on the suitability of transferring performance models related to private management practices to public organisations (Lapuente and Van de Walle, 2020).

4 Also on the importance of social mobilisations, culture, inequality and programme evaluation (Viterna and Robertson, 2015).

5 The concept of embeddedness is one of the keys to explaining the contribution of the institutions in this sector, although it is convenient to differentiate the meaning of the term embeddedness from that used by Mark Granovetter to refer to the insertion of economic action in networks of sociability. Rather, Evans refers to proactivity in several aspects regarding the need for the institution to be in contact with the actors in its environment. An additional interpretation of the concept of embeddedness applied to public bureaucracies and laws is included in the article by Martínez Sánchez and Gosálbez Pequeño (2023) in this *Debate* section.

6 Some relevant studies are Campbell (2004), Saxenian (2017) and Block and Keller (2011).

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DEBATE/DEBATE: THE QUALITY OF INSTITUTIONS. AN INTERDISCIPLINARY PERSPECTIVE /
LA CALIDAD DE LAS INSTITUCIONES. UNA PERSPECTIVA INTERDISCIPLINAR

The Quality of Public Sector Institutions: A Critical Review of Studies on “Good Governance” and “Institutional Weakness”

La calidad de las instituciones del sector público: una
revisión crítica de los estudios sobre el «buen gobierno» y la
«debilidad institucional»

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ABSTRACT

This article performs a comparative analysis of different approaches to the quality of institutions in the public sector, drawing on contributions from political science and some specialisations in the legal sciences. After reviewing the assumptions of the concept of institution in this sector, two groups of emblematic works are selected. The first group focuses on the performance of bureaucracies and the provision of public services, which is summarised under the label “quality of government”, while the second group is concerned with the achievement of objectives set out in laws and the bureaucracies that implement them, referred to as “institutional weakness vs. institutional strength”. Finally, convergences and divergences are discussed, along with the determinants of social embeddedness identified by some empirical research.

KEYWORDS: institutions; public sector; government; laws; institutional quality; institutional weakness.

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RESUMEN

Este artículo realiza un análisis comparado de varios enfoques que tratan la calidad de las instituciones en el sector público desde aportaciones de la ciencia política y algunas especialidades de las ciencias jurídicas. Después de revisar las asunciones del concepto de institución en este sector, se seleccionan dos grupos de trabajos emblemáticos: uno se centra en el desempeño de las burocracias y la provisión de servicios públicos, lo que se resume en la etiqueta de «calidad del gobierno». El otro se ocupa del cumplimiento de los objetivos enmarcados en las leyes y las burocracias que las implementan, a lo que se refieren como «debilidad vs fortaleza institucional». En último lugar se discuten los puntos convergentes y divergentes junto a los condicionantes del enraizamiento social identificados por algunas investigaciones empíricas.

PALABRAS CLAVE: instituciones; sector público; gobierno; leyes; calidad institucional; debilidad institucional.

1. Introduction

This article reviews studies on institutional quality applied to public bureaucracies and laws. The focus is on the assumptions from which these institutions are understood, the way in which they are defined as “quality institutions”, the most significant characteristics of said institutions and the contributions of interest about their constraints.

The discussion is in the context of the importance of the so-called “institutional turn” in these matters. Disciplines interested in the issues of state organisation and its fundamental laws interpret institutions as important in the development of public bureaucracy. There is a long tradition that focuses on formal state structures and laws as determinants of public sector outcomes. Recently, more attention has been paid to the influences of the behaviour of actors, socio-cultural conditions and how these interact with the formal characteristics of institutions.

This interest is reflected in the works related to the “quality of institutions”. Quality in this area usually refers to certain essential elements of good governance and good government, although there are complementary approaches that are still poorly connected due to the use of different methodologies. In order to offer a more integrated vision, this article aims to contribute to the knowledge of the matter by analysing emblematic works dealing with the public sector.

In this concise text, it is not possible to address the various schools of thought that have tackled these issues. This article focuses on two lines of work that address the concept through empirical studies. The first one focuses on the performance of bureaucracies and the provision of public services, for which the label “quality of government” is often used. The second deals with compliance with laws from the point of view of their relationship with political actors and the bureaucracies that implement them. The reference authors in this group use the rubric of “institutional weakness”. Due to the convergence of interests with

certain branches of law, a section has been included on the characteristics of the "good legislator" in representative democracies. This serves to connect the discussion with the approach that legal sciences take to the quality of laws.

The article consists of the following parts. First, the terminological problems and theoretical assumptions about the most common institutions in this field of study are described. Second, the two aforementioned approaches are set out as strategic studies to assess the state of knowledge about the quality of institutions. The third section uses the case of Spain to illustrate the constraints that affect legislators. The conclusions point out some keys to interdisciplinary collaboration and provide an overview of the problem of embeddedness in bureaucracies and laws.

2. The problem of defining "essential institutions": state institutions and laws

For much of the twentieth century, studies on the qualities of the public sector were dominated by the "Weberian bureaucracy model" (Weber, 1947), which became the benchmark of the legal-rational legitimacy that underpins contemporary states. Correspondingly, the interpretation of public institutions emphasised legality, formality and rationality in the organisation (Du Gay, 2000) to guarantee efficiency and protection against private interests. In contrast, the research that emerges in public administrations (Mayntz, 1994), associated with modern visions of the philosophy and sociology of law applied to organisations (Edelman and Suchman, 1997), introduced a more complex way of thinking about public institutions, which pays greater attention to the effects of political and informal characteristics (March and Olsen, 2006).

This does not imply pushing formal bureaucracies and laws into the background (Hood et al., 2001), but it does introduce a number of criteria that paint a much more complex picture. A diversity of approaches emerge that have implications for assessing what "good" institutions are in each context. Before reviewing the empirical research on the quality of institutions, it is worth focusing on the meanings and assumptions common in the disciplines that deal with fundamental aspects of the State and the public sector¹.

Definitions. The most common definition accepted by the literature considers that institutions are arrangements or sets of formal and informal socially organised rules that shape and guide the behaviours, roles and expectations of the actors who implement them and that are sometimes shaped by them (Hall and Taylor, 1996; March and Olsen, 1989). When the definition is applied to the public sector, a large part of the currents of political science and law converge in their observation of two aspects of the institutions that refer to the structure of the state and the law. In short, some pay more attention to state bureaucracies (government bodies, agencies and departments) and their characteristics as administrative organisations. Others pay more attention to the laws that support and regulate public sector activity.

They are two sides of the same coin. There are no modern state bureaucracies without laws, and there are no effective laws without bureaucracies to implement them. Reality is an assemblage of both sides of institutions, although in analytical terms the different currents of thought emphasise one or the other. At times, this results in studies dealing with similar problems using somewhat different language or assigning different meanings to the same terms. This article will discuss institutions in their two variants—public bureaucracies and legal regulations—while elucidating the prevalent use among the different authors².

Assumptions about behaviour. Beyond the nomenclature, there is an important aspect in the assumptions about the behaviour of the actors. It can be said that the so-called approaches of “limited rationality” have prevailed more in political science and administration (March, 1978). Faced with more deterministic or cultural views, it is assumed that political actors use rational behaviours to maximise their objectives, in accordance with the position they occupy in the power structure. Nevertheless, it is recognised that actors’ strategies are conditioned by problems of asymmetric information, lack of capacity to process information and biases (Jones, 2003).

There are also other versions that understand the importance in politics of identity issues, the influence of culture and the presence of irrational behaviours, although these matters are usually abstracted when focusing on the strategy of the participants. Utilitarian behaviour is interpreted as guiding the construction of ideological frameworks and scenarios favourable to the interests of the actors, and it predominates once the structure of political positions is constituted (Hall and Taylor, 1996). In some currents of political science there is considerable overlap with the assumptions of institutional economics (Caballero-Míguez, 2007). A more detailed description of the assumptions can be found in this *Debate* section in the article on economics (Pedraza Rodríguez, 2023) and in the Editorial (Fernández Esquinas, 2023).

Likewise, at the macro level, explanations based on history are frequent, where behaviour is understood as the result of long-term processes. These base the explanation on the notion of “path dependence”. They understand that institutions are conditioned by inertias that accumulate as a result of previous trajectories (Steinmo, 2008). More recently alternatives have been formulated that include endogenous change (Hall and Soskice, 2010). It is conceived as gradual increments through processes such as superposition, conversion and drift (Mahoney and Thelen, 2010), combining normative elements and the actors’ criteria of rational choice in the explanation (Fioretos et al., 2016).

The role of institutions in society. Continuing with the main assumptions of the institutions, some refer to how they are inserted into public life. Institutions are considered to draw the boundaries of acceptable behaviour through defined legal structures and socially organised settings (Immergut, 1998). They filter the frameworks of action, informing about what can be done and what is reasonable (Portes, 2013).

Institutions can also mitigate the complexity of government operations and bureaucracies (Rhodes, 2006). They provide symbolic frameworks and values referenced in the forms of existing social structures; that is, institutions contribute to segmenting power through rules, roles and routines between intra- and intergovernmental levels (Goodsell, 2011; Pierson, 2000). They also act as filters in political pressures, accentuating some and deterring others (Tsebelis, 2000). Consequently, their resilient and relatively autonomous nature is assumed, as it functions as necessary conditions for the stability of political regimes (Steinmo, 2008).

Explanatory mechanisms that are usually favoured. According to the aforementioned assumptions, they are more often normative and regulatory than cognitive or cultural³. This set of assumptions plays a prominent role in the empirical study of state institutions and laws, including those related to institutional quality. The concept of quality aims to empirically capture some of the attributes that condition their performance and try to identify areas for improvement in institutions, although the way of understanding their nature permeates the main studies.

The rest of the text deals with works that study the qualities of institutions and it also outlines the way in which institutions are conceptualised, the methodologies and the contributions. For each, an interpretation is made based on the idea of social embeddedness, which highlights how formal institutions are intertwined with the social values, norms and expectations of the people who design them and who participate in bureaucracies.

3. Approaches and elements of institutional quality

3.1. Institutions and quality of government

Quality of Government (QoG) is a multi-dimensional concept that several international organisations (World Bank, International Transparency, OECD, EU, etc.) and research institutes (Institute of Quality of Government, etc.) regularly use in comparative studies. It refers to the model of decision-making, policy implementation and provision of services in public bureaucracies (Rothstein and Teorell, 2008). To identify the characteristics and effects of their performance, they tend to use primarily three dimensions for which, in turn, they use indicators that function as proxies that reflect the qualities of the public sector: the impartial exercise of authority, the quality of public services and the degree of corruption (Charron et al., 2012; Dahlström et al., 2012).

The ways of studying these characteristics and effects have similarities and certain differences based on empirical analyses. Comparative methods based on quantitative sources predominate. Bureaucracies of territorial areas or specific sectors that have a political entity are mainly used as units of analysis. The levels of analysis also vary: the most common are comparisons between states (Kaufman et al., 2011), although

sub-state regional units and, at times, supranational areas or bodies are also used (Charron et al., 2022). As for the sources of information, they are mainly obtained from structural data from the units of analysis, official statistics and public opinion surveys. They are combined with expert panel studies that issue summary assessments on aspects that are difficult to observe from statistical data (Charron et al., 2019).

Multiple research proposals combines descriptive and correlational analysis strategies. Reports from international agencies and reference projects tend to use descriptive analyses, at times rankings or ordination of the units of analysis according to relevant dimensions or synthetic indicators. These studies have resulted in data sources suitable for correlational analyses that are used by numerous researchers in the academic sector interested in these topics, as well as by *think tanks*, government agencies and political analysts.

Correlational studies suggest that the three aforementioned groups of proxies reflect a set of underlying factors on the quality of public sector institutions (Charron et al., 2019; Kaufmann et al., 2010). In turn, they can be interpreted as specific regulatory principles from which the analyses are assessed. Namely, the exercise of government power is associated with the assumption of *impartiality*, and public services are connected with *quality*, nevertheless, the management of public resources is observed from the point of view of the *absence of corruption* and, in general, *transparency*.

More recently, these dimensions have been related to the performance and results of public bureaucracies, along with other aspects related to development studies and the functioning of democracies. A fruitful line of research is studies on socio-economic development. These sources provide an empirical foundation to investigate the growth, performance of companies and the proper functioning of the market, in correspondence with the creation of public values and social welfare. These contributions are dealt with by the articles in this monographic section dedicated specifically to contributions from economics (Pedraza Rodríguez, 2023) and from the sociology of development (Espinosa Soriano, 2023). For this reason, here the focus is on the analyses that deal with the functioning of bureaucracies and the effects on democratic systems according to the aforementioned dimensions.

Impartiality. The impartial exercise of authority in the performance of public bureaucracies is identified as a characteristic that fosters the socially valued results of institutions (Rothstein and Teorell, 2008). This characteristic emphasises the implementation of regulations, laws or policies by public officials (Ackerman, 1999; Uslander, 2008; Rothstein and Teorell, 2008) in accordance with this regulatory principle. The actions of bureaucracies are conceptualised as impartial the more they conform to established regulations and policies. The problems that are highlighted concern the action of the main political agents in the processes of formulating laws and their implementation through the state apparatus. The following problems are noted: political interference—or intervention by actors with political interests in matters of general interest—and

the existence of prejudices or personal interests in daily operation and decision-making. A significant part of the analyses suggest that these aspects affect the legitimacy and performance of public service delivery (Bågenholm et al., 2021).

Quality of public services. This refers to the efficiency and fairness of bureaucracies in providing goods or services to relevant sectors of the citizenry (Rothstein, 2011). Several measures are used that account for aspects such as accessibility, citizen participation, responsiveness, reliability and transparency in services, among others (Agnafors, 2013). The aspects included in this dimension have also been identified as good indicators of the legitimacy of public sector institutions by citizens (Holmberg et al., 2009; Rothstein et al., 2011) and, conversely, trust in the government has been found to be negatively related to high levels of corruption, inefficiency and discrimination (Grindle, 2007).

Corruption. The dimension related to corruption addresses the ability of bureaucracies to control and sanction illegal activities. These include unethical practices, clientelism, nepotism, disrespect for the rule of law and the capture of administrative agencies by interest groups (Rothstein and Teorell, 2008), along with other aspects related to the violation of laws. One of the problems of interest in this dimension is the balance of forces between elites inside and outside public bureaucracies and relations with other social sectors, referred to by some studies as "embedded autonomy" (Evans, 1995). There is evidence that bureaucracies require sufficient autonomy to carry out their work with a certain degree of independence from political power and autonomous decision-making capacity. At the same time, they must resist the arbitrary use of administrative resources that may turn into corruption and institutional capture for the benefit of a few. Comparative analyses show that there is no single solution, but rather several ways to reach balance that combine elements of autonomy, responsibility, legality and management (Dahlström and Lapuente, 2022). The sociological approaches discussed in another article in this section (Espinosa Soriano, 2023) offer a useful complement by pointing out that social embeddedness explains a good part of these balances beyond legal and administrative designs.

In short, these studies suggest that in order to establish good governments and, moreover, democratic practices, it is necessary to consider state capacity in the implementation of public services and observe how the quality characteristics of the institutions are installed in the states (Bågenholm et al., 2021). Characteristics that promote quality include: 1) impartiality in the exercise of public power; 2) professionalism in the provision of public services; 3) effective measures against corruption; and 4) the establishment of merit criteria for work in the public sphere, in the face of clientelism and nepotism. In particular, the work of The QoG Institute has shown that constructs for measuring quality aid understanding of how they affect the qualities of institutions in two fundamental aspects of democratic societies: the functioning of bureaucracies and their contributions to environmental, social, economic and democratic welfare. These characteristics emphasise that one of the fundamental problems lies in

the “social filtering” of institutions, or how institutions are shaped by actors who participate in or relate to them, although the methods employed have more difficulties in capturing social processes and dynamics of institutions, as shall be seen in the conclusions.

3.2. Strengths versus weaknesses of institutions

A complementary approach is that of studies on institutional strength and weakness, which deal above all with the results and performance of the basic laws of states. The empirical references largely come from developing countries and states that have experienced unequal processes in the consolidation of democratic regimes, especially in Latin America, although the assumptions can be applied to other environments (Levitsky and Ziblatt, 2018).

These studies examine the processes by which the objectives laid down in basic laws are not met, which is often referred to as “institutional weakness”. They explicitly separate formal and informal rules (Brinks et al., 2019). Formal rules refer to the sets of basic laws and legal procedures that define the roles, rights and duties of the actors involved in the policy. Informal rules define them broadly as socially valued and accepted values, ideas and rules that have not been formally codified, although they may be incorporated into laws.

They make an analytical distinction between institutions, a concept that they reserve for sets of formal rules and regulations (although for strategic reasons they focus on certain laws) and formal organisations. The latter are specified in the state administrative apparatuses (legislative, executive and judicial). As far as laws are concerned, at times they target these organisations, while also requiring these specialised administrative structures to make their implementation possible. In this way, for the purpose of the analysis, they try to differentiate two constitutively assembled realities.

Research in this line of investigation looks at how these elements constitute types of institutional strengths or weaknesses. It is operationalised by comparing the changes produced by the laws in accordance with the formal objectives. Thus, they are established when the laws are enacted and at later times when it is possible to appreciate the changes that are the result of said objectives (Levitsky and Murillo, 2009; Brinks et al., 2019).

The empirical studies mainly look at comparative cases of political systems or sectors of activity. To that end, they identify groups of laws, informal rules, organisations and participating collective actors (political parties, interest groups, economic agents, etc.), together with the departments of the public bureaucracies involved. They seek to understand how the characteristics and capacity of public bureaucracies and other social dynamics impact institutional weakness or strength.

In terms of dimensions, it is also possible to distinguish empirical proxies that enable complex realities to be captured. The main dimensions are *non-compliance*, *instability* and *insignificance* (Brinks et al., 2019). They are interpreted as ideal types of "institutional weakness" (or its opposite, "institutional strength", although they tend to emphasise "negative" governance problems). Proxies refer to sources of weakness: state capacity, legal designs and social dynamics that influence outcomes. Below, as in the previous section, are the keys to understanding each dimension or type of weakness and the processes that are interpreted as sources of weakness.

Non-compliance. It is the process by which formal rules are ignored; in other words, laws that are enacted but not enforced. The main reason for this non-compliance is the determination of political actors for the law not to be applied, which would give rise to "ceremonialist" formulations. Prominent examples are environmental laws and the regulation of public services in Latin America (Brinks et al., 2020) or insufficient sanctions, which make implementation impractical, such as the Parity Law in France (Murray, 2007). Other possible reasons include social resistance, even in situations where there are good legal designs, coexisting with the lack of appropriate incentives or sanctions. A number of empirical examples that study non-compliance due to social resistance point to the unwillingness of managers and workers in bureaucracies (Soifer, 2015) or the resistance of social sectors opposed to some policies (Amengual and Dargent, 2018).

Instability. It is defined as the frequency with which laws and regulations are replaced (Levitsky and Murillo, 2014). One problem with high turnover is the difficulty in setting expectations and goals, and their implementation through the plans and programmes that carry forward the legislative measures (Brinks et al., 2019). Another consequence of instability lies in the barriers to acquiring legitimacy. These processes negatively affect governance, trust in governments and, ultimately, the stability of democracies. They are usually related to inequalities in rights, corruption and crises of political regimes (Brinks et al., 2019; Levitsky and Murillo, 2005). The main examples come from Latin America, due to the instability of constitutions and electoral laws (Remmer, 2008).

Insignificance. It is defined as the existence of unambitious laws, designed to have no impact on behaviour. An example is the so-called "Potemkin Courts"⁴ (Brinks and Blass, 2013), or designs made to satisfy the public, but with an insufficient background of measures or infrastructures that have effective consequences on specifically targeted sectors of the population. This category includes the scarce provision of resources to public bureaucracies or legal and organisational configurations that prevent the implementation of the laws and policies that have been established. Other examples are found in international agreements to mitigate climate change or prevent nature conservation due to the weak implementation capacity of countries (Brinks et al., 2019).

From this scheme, sources of institutional weakness have been identified. Although not all of them can be elaborated on here, the four most relevant are indicated. The first source is found in the judiciary system. Judicial interpretations, in particular,

can be a mechanism of instability and non-compliance through political interference (so-called “lawfare”) (Elkinks et al., 2009). A second source is the existence of weak designs in bureaucracies and groups of officials; it is especially observed in the capacity to transfer public policies from international organisations to states or public authorities that have the administrative capacities to act in a territory (Brinks et al., 2019).

A third source is political interference that affects the capacity of states (Soifer, 2015), for example, strategic abstentions or selective applications that prevent a government from acting and that can contribute to both non-compliance and insignificance (Holland, 2017). Another source of weakness may be the lack of cooperation of certain groups or social sectors due to the resistance of said groups to adopting or conforming to the values or rules that institutions try to establish (Falleti, 2021).

In summary, this approach focuses on the relationships between the formal and informal faces of institutions—focusing on laws—and studies how the power relations, interests and capacities of the participating actors play relevant roles that give rise to real results beyond designs. The challenges lie in systematising indicators that account for institutional weakness and that allow for systematic comparisons, although this brings with it the challenge of qualifying with data the relationship between the intentions of the designs and the social dynamics that influence the mismatch—between the real outcome and the expectation—of the results of implementing regulations and laws.

4. A note on the quality of democracy and the requirements of the “good legislator”

This section focuses on an important aspect of representative democracy in which the high bureaucracies of the state and the laws converge: the characteristics of the “good legislator”. It serves as a strategic example to observe how the quality of institutions is interpreted from some legal perspectives that are concerned with technical aspects and the principles of representativeness in the bodies responsible for drafting laws.

Every representative democracy requires a careful selection of representatives. The more representative the democratic regime, the more the election of the legislator must be preserved⁵. The less relevance the instruments of direct democracy have, the more necessary it will be to demand appropriate qualities and virtues from those who exercise legislative power. This leads to the question about the general requirements that legislators must meet and, conversely, about the conditions that must be avoided.

An essential element of democracy is that the body of political representatives is “wise and just”, and that, in addition, they are not “false representatives” (Mannin, 1998) or demagogues and populist politicians whose main quality is to deceive the electorate to achieve power. In other words, democracy itself does not work if it “does not allow the identification of the best, the most virtuous” (Ovejero, 2008).

Legislation is the most important primary function of the rule of law as the law is the expression of popular will. It is therefore necessary to select a body of "good legislators", who duly fulfil the constitutional mission assigned to them, as well as excluding "bad legislators".

The first requirement for those who legislate is to have the appropriate training. Certainly, one of the criticisms of direct democracy has been the lack of knowledge of citizens who, consequently, directly decide public affairs (Sartori, 2005). *Mutatis mutandis*, on the same basis, it must be accepted that the body of elected representatives has the capacity and sufficient knowledge to deliberate the matters within their competence; this is why "adequacy" has been demanded of representatives and ministers, even describing them as inconceivable without current and real adequacy (Rubio, 2008).

Transferring this discussion to the situation in Spain, the Spanish Constitution of 1978 establishes a regime of representative or indirect democracy in the exercise of the legislative function of the state. The Legislative Power of the Spanish State—public power emanating from the Spanish people (Section 1.2 of the Spanish Constitution)—is entrusted to a body representing popular will and elected by universal suffrage: the Spanish Parliament, called "*Cortes Generales*" (Section 66.1 of the Spanish Constitution)⁶.

In the constitutional framework, the Legislative Power is required to have a certain capacity to be able to faithfully carry out its main mission: to present legislative proposals (the so-called "legislative initiative" that the Government also has under Section 87.1 of the Constitution) and to deliberate on them (and on the bills presented by the Government), introducing, where appropriate, the necessary amendments and approving them as laws. Those who assume the legislative function—representatives and state senators, parliamentarians of the autonomous communities—thus approve the laws, in addition to exercising other typical functions of Parliament—authorisations or approvals of certain acts or regulations, control of the executive branch, etc.—

Considering that laws are professional work requiring legal knowledge, legal training is only provided through a specific university degree. It is worth remembering that all the laws that are passed: a) cannot contradict the Spanish Constitution; therefore, legislation requires knowledge of sufficient notions of constitutional law; b) cannot be inconsistent with the rest of the laws (or incidents) relating to the same matter or related matters (tax laws, labour laws, criminal laws, etc.); therefore, the legislative proposal demands fundamental knowledge of the sector of the legal system referred to by the bill or proposal of law.

The legal services of the respective parliaments cannot (nor should they) supplement the minimum legal training that each representative must possess in the legislative chambers. The role of the chambers' legal body should focus on providing the best legislative technique and on providing expert advice on *complex* legal matters. This official body has not been created to prepare and draft the legislative proposals presented by the different parliamentary groups, nor should it replace the minimum legal knowledge of Members of Parliament.

Even if these specialists were to assume the “real legislative function” by preparing the draft laws, the members of the legislative chambers must have knowledge on the matter in accordance with their constitutional function. They must have a minimal understanding of the purpose of each proposal to be able to deliberate with justification and judgement, propose amendments and vote for or against. This knowledge inherent to the legislative function is that of legal science. However, in many laws the regulated matter requires knowledge from other sciences, displacing legal science in some cases to a complementary function. For example, the economy occupies an essential place in the legislation of the 21st century and, therefore, economists should also involve parliaments in proportion to the economic laws that are passed. The members of the chambers (medicine, pedagogy, social work, etc.) should also be required to have scientific or technical training, insofar as they are necessary for the knowledge and deliberation of laws on these matters. All groups of the legislative chambers must therefore have a sufficient number of parliamentarians with indispensable skills to exercise the legislative power of the state, with legal training predominating in the terms specified.

However, the internal organisation of each Parliament in plenary and in the specific committees often means that representatives of the parliamentary groups do not know the law or the subject under debate. To vote, they assume the “dictates” of their representative in a committee (provided that it is endorsed by the party leadership). This practice turns the Parliament *de facto* into a Parliament of group “spokespersons” (who transmit the decisions taken by the party leadership). The Parliament ceases to be composed of all the representation elected by the people, distorting the legislative function and the very essence of the political representation of democracy.

In the legislative reality, there is a risk that parliamentarians will uncritically assume the dictates of their group. Therefore, they are not authentic representatives of popular will, but *representatives of their parliamentary group* or political party. The training of each elected representative—with the exception of those who make up the parliamentary committees and the Board of Spokespersons—is of no effective relevance in the drafting of laws. This is an anomalous democratic functioning of Parliament that restricts its members from expressing their individual will, a faculty that, incidentally, is required normatively by the condition of an elected representative by direct universal suffrage.

The reduction of Parliament to a mere chamber composed of a minority elected by parliamentary groups, with the votes of the other members of their groups, does not justify the same structure and composition of the current Parliament. A “dozen” elected representatives in Parliament, with a number of delegated votes depending on the seats obtained in the elections, would suffice to deliberate and vote legislatively. Therefore, from a regulatory point of view in accordance with constitutional principles, Parliament is required to recover its democratic identity and legislative functionality that justifies its very existence. This is only possible if the possibilities for participation are increased and the inclusion of qualified people in the electoral processes is encouraged, for example, through open lists

and with appropriate incentives for a range of professionals. If the current *fraudulent* functioning of parliamentary democracy persists, one could even argue for the case of constitutional reforms to substantially reduce the number of elected representatives.

This example highlights the importance of embedding state institutions with groups and social networks with different interests, so that they condition their qualities and even determine the quality of democracy. Despite the basic laws (in particular the Constitution) and the parliamentary bureaucracy having the formal objective of facilitating democratic participation based on principles of merit and capacity, the Spanish political system has been constructed through an "assemblage" of practices led by professional politicians that gives rise to deviations from what can be considered the quality of institutions in this area.

This is because bureaucracies are always populated by people, and they are the ones who design the laws. These designs are mixed and interact with the way of thinking and with the social relationships of the actors involved in politics, which is currently largely monopolised by the elite members of the parties. The real organisation of parties, electoral processes and parliaments causes a social filtering of parliamentary bureaucracies and therefore of laws, which turns them into something other than those foreseen in their design. Consequently, continued attention must be paid to how these processes unfold so that the necessary reforms can be based on evidence.

5. Conclusions

The quality of institutions in the public sector is fundamental to the performance of states. This article has offered a discussion on the quality of institutions through empirical research in the public sector. To this end, the main assumptions about institutions have been addressed and two emblematic approaches have been reviewed, labelled as quality of government and institutional weakness. It has discussed how they define institutions, how they try to implement operational designs and what their strengths and weaknesses are.

Despite their differences, the approaches have several aspects in common. First, they recognise the importance of institutions in the implementation and performance of public policies. Second, although they use divergent methods, the interest in empirically capturing aspects that may be comparable and that offer practical implications for performance stands out. Third, they recognise that impartiality and low levels of corruption are essential to the legitimacy and efficiency of institutions. They also underline the conditioning role of the actors and the combination of formally and informally organised social elements in public bureaucracies.

There are also differences. Those concerned with the quality of government emphasise the experience of citizens and the results of institutions, while those concerned with institutional weakness place greater emphasis on the level of compliance and stability. In addition, they differ in the scale and scope of observation. The quality of

government is more general in scope, through survey studies or expert panels that collect data on states or regions as a whole. For its part, institutional weakness is more concerned with the context, political systems and some sectors of activity of public bureaucracies.

Likewise, they differ in concepts, assumptions about behaviour and the interaction between formal and informal aspects. The quality of government approach proposes that institutions can be measured according to three dimensions: the impartiality in the execution of policies, the quality of services and the degree of corruption in the sectors of public bureaucracies. Works on institutional weakness study how formal institutions, understood as sets of laws, achieve or fail to achieve the expected formal outcomes. These mismatches between the expected and real outcomes are explained according to the capacity of the state and the socially organised sources of power. Thus, they identify elements that affect weakness from ideal types according to three dimensions: the level of insignificance, non-compliance and instability.

As an explanatory resource it is useful to resort to the concept of “embeddedness” (Granovetter, 1985). Applied to the realm of public bureaucracies, the concept can aid understanding of how laws and formal structures are always populated with people and mixed with “bonds of sociability” (Zucker, 1987). That is, the concept can aid understanding of the way in which formal aspects interact with the relational, cognitive and normative characteristics of the people and groups that participate in the bureaucracies and implement the laws.

Going beyond the dimensions and proxies identified in approaches to institutional weakness and quality of government can complement the understanding of institutions. Studies on institutional quality in the public sector could benefit from a multi-disciplinary collaboration that pays more attention to the embeddedness of socially organised informal aspects that affect formal structures and rules. That is, attending to the people and groups that acquire positions of influence in state organisations, the value systems, as well as the informal expectations and rules that guide behaviours, the interests that motivate them and the degree of openness to the participation and influence of external actors.

The example of the good legislator applied to the case of Spain shows the possibilities of finding points of intersection to integrate the variety of factors that make up the institutions and make them operational. This observation addresses the importance of understanding the way in which the institutions of the legislative system are socially filtered by political groups and the social networks of legislators. Despite the impersonal and formal structure, the embeddedness of the informal aspects conditions the characteristics of the quality of institutions. They may even divert them from their fundamental principles.

Ultimately, politics are fundamental in the formal and organisational structures of states. Although neither work in isolation, but feed off values and social ties inside and outside bureaucracies, generating a complex network that filters and modulates the performance of institutions. The challenges of this field of research

lie in the collaboration between theoretical and empirical perspectives that enable an understanding of the real dynamics of institutions and their impact on society, and, at the same time, that offer thorough evidence-based knowledge to act in them.

6. Bibliography

- Agnafors, M. (2013). Quality of government: Toward a more complex definition. *American Political Science Review*, 107(3), 433-445. <https://doi.org/10.1017/S0003055413000191>
- Bågenholm, A., Bauhr, M., Grimes, M. & Rothstein, B. (2021). Introduction: Quality of Government: Why-What-How. In A: Bågenholm, M. Bauhr, M. Grimes & B. Rothstein (Eds.), *The Oxford Handbook of the Quality of Government*. Oxford: Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780198858218.001.0001>
- Brinks, D. & Blass, A. (2013). *Beyond the Façade: Institutional Engineering and Potemkin Courts in Latin America, 1975-2009*. University of Texas at Austin.
- Brinks, D. M., Levitsky, S. & Murillo, M. V. (2019). *Understanding institutional weakness: power and design in Latin American Institutions*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/9781108772211>
- Brinks, D., Levitsky, S. & Murillo, M. (2020). *The Political Origins of Institutional Weakness*. En D. Brinks, S. Levitsky y M. Murillo (Eds.), *The Politics of Institutional Weakness in Latin America* (pp. 1-40). Cambridge: Cambridge University Press. <https://doi.org/10.1017/9781108776608.001>
- Charron, N., Lapuente, V. & Annoni, P. (2019). Measuring quality of government in EU regions across space and time. *Papers in Regional Science*, 98(5), 1925-1953. <https://doi.org/10.1111/pirs.12437>
- Charron, N., Lapuente, V., Bauhr, M. & Annoni, P. (2022). Change and Continuity in Quality of Government: Trends in subnational quality of government in EU member states. *Investigaciones Regionales-Journal of Regional Research*, 2022(53), 5-23. <https://doi.org/10.38191/iirr-jorr.22.008>
- Charron, N., Lapuente, V. & Dijkstra, L. (2012). Regional governance matters: A study on regional variation in quality of government within the EU. *Regional Studies*, 48(1), 68-90. <https://doi.org/10.1080/00343404.2013.770141>
- Dahlström, C., Lapuente, V. & Teorell, J. (2012). The merit of meritocratization: Politics, bureaucracy, and the institutional deterrents of corruption. *Political Research Quarterly*, 65(3), 656-668. <https://doi.org/10.1177/1065912911408109>
- Dahlström, C. & Lapuente, V. (2022). Comparative bureaucratic politics. *Annual Review of Political Science*, 25, 43-63. <https://doi.org/10.1146/annurev-polisci-051120-102543>
- Du Gay, P. (2000). *In praise of bureaucracy: Weber-organization-ethics*. Sage Publications Ltd. <https://doi.org/10.4135/9781446217580>

- Edelman, L. B. & Suchman, M. C. (1997). The legal environments of organizations. *Annual Review of Sociology*, 23(1), 479-515. <https://doi.org/10.1146/annurev.soc.23.1.479>
- Elkins, Z., Ginsburg, T. & Melton, J. (2009). *The endurance of national constitutions*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9780511817595>
- Espinosa Soriano, P. (2023). La calidad institucional desde la perspectiva sociológica: contribuciones y retos al estado de la cuestión. *Revista Centra de Ciencias Sociales*, 2(2), 149-166. <https://doi.org/10.54790/rccs.74>
- Evans, P. B. (1995). *Embedded autonomy: States and industrial transformation*. Princeton: Princeton University Press. <https://doi.org/10.1515/9781400821723>
- Falleti, T. G. (2020). Social Origins of Institutional Strength. En D. Brinks, S. Levitsky y M. Murillo (Eds.), *The Political Origins of Institutional Weakness* (pp. 253-276). Cambridge: Cambridge University Press. <https://doi.org/10.1017/9781108776608.011>
- Fernández Esquinas, M. (2023). Editorial: «Buenas y malas instituciones». La cuestión de la calidad institucional en las ciencias sociales. *Revista Centra de Ciencias Sociales*, 2(2), 117-128. <https://doi.org/10.54790/rccs.70>
- Fioretos, O., Falleti, T. G. & Sheingate, A. (2016). Historical institutionalism in political science. In O. Fioretos, T. G. Falleti & A. Sheingate (Eds.), *The Oxford Handbook of Historical Institutionalism* (pp. 3-28). Oxford: Oxford University Press <https://doi.org/10.1093/oxfordhb/9780199662814.013.1>
- Goodsell, C. T. (2011). Mission mystique: Strength at the institutional center. *The American Review of Public Administration*, 41(5), 475-494. <https://doi.org/10.1177/0275074011409566>
- Gosálbez Pequeño, H. (2021). En busca del «buen gobierno». La capacidad y la honorabilidad del gobernante. *Revista "Cuadernos Manuel Giménez Abad"*, 22, 205-228. <https://doi.org/10.47919/FMGA.CM21.0205>
- Granovetter, M. (1985). Economic action and social structure: The problem of embeddedness. *American Journal of Sociology*, 91(3), 481-510. <https://doi.org/10.1086/228311>
- Grindle, M. S. (2007). Good enough governance revisited. *Development Policy Review*, 25(5), 533-574. <https://doi.org/10.1111/j.1467-7679.2007.00385.x>
- Hall, P. A. & Taylor, R. C. (1996). Political science and the three new institutionalisms. *Political studies*, 44(5), 936-957. <https://doi.org/10.1111/j.1467-9248.1996.tb00343.x>
- Holland, A. C. (2017). *Forbearance as redistribution: The politics of informal welfare in Latin America*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/9781316795613>

- Holmberg, S., Rothstein, B. & Nasiritousi, N. (2009). Quality of government: What you get. *Annual Review of Political Science*, 12, 135-161. <https://doi.org/10.1146/annurev-polisci-100608-104510>
- Immergut, E. M. (1998). The theoretical core of the new institutionalism. *Politics & Society*, 26(1), 5-34. <https://doi.org/10.1177/0032329298026001002>
- Jones, B. D. (2003). Bounded rationality and political science: Lessons from public administration and public policy. *Journal of Public Administration Research and Theory*, 13(4), 395-412. <https://doi.org/10.1093/jopart/mug028>
- Kaufmann, D., Kraay, A. & Mastruzzi, M. (2010). Response to «What do the worldwide governance indicators measure?». *The European Journal of Development Research*, 22, 55-58. <https://doi.org/10.1057/ejdr.2009.49>
- Levitsky, S. & Murillo, M. V. (2009). Variation in institutional strength. *Annual Review of Political Science*, 12, 115-133. <https://doi.org/10.1146/annurev.polisci.11.091106.121756>
- Levitsky, S. & Ziblatt, D. (2018). *Cómo mueren las democracias*. Barcelona: Ariel.
- Mahoney, J. & Thelen, K. (2010). A theory of gradual institutional change. In J. Mahoney y K. Thelen (Eds.), *Explaining institutional change: Ambiguity, agency, and power*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9780511806414>
- Manin, B. (1998). *Los principios del gobierno representativo, versión de Fernando Vallespín*. Madrid: Alianza Editorial.
- March, J. G. (1978). Bounded rationality, ambiguity, and the engineering of choice. *The Bell Journal of Economics*, 587-608. <https://doi.org/10.2307/3003600>
- March, J. G. & Olsen, J. P. (2006). *Elaborating the «New Institutionalism»*. In R. A. W. Rhodes, S. A. Binder & B. A. Rockman (Eds.), *The Oxford Handbook of Political Institutions* (pp. 3-20). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199548460.001.0001>
- Mayntz, R. (1994). *Sociología de la administración pública*. Madrid: Alianza Editorial.
- Míguez, G. C. (2007). Nuevo institucionalismo en ciencia política, institucionalismo de elección racional y análisis político de costes de transacción: una primera aproximación. *RIPS. Revista de Investigaciones Políticas y Sociológicas*, 6(2), 9-27.
- Ovejero Lucas, F. (2008). ¿Idiotas o ciudadanos? *Claves de razón práctica*, 184, 22-32.
- Pedraza Rodríguez, J. A. (2023). La calidad de las instituciones y su relación con la economía: una revisión de las bases conceptuales y estudios empíricos. *Revista Centra de Ciencias Sociales*, 2(2), 129-148. <https://doi.org/10.54790/rccs.38>
- Peters, B. G. (2011). *Institutional theory in political science: The new institutionalism*. London: Bloomsbury Publishing. <https://doi.org/10.5040/9781501397813>
- Pierson, P. (2000). The limits of design: Explaining institutional origins and change. *Governance*, 13(4), 475-499. <https://doi.org/10.1111/0952-1895.00142>

- Portes, A. (2006). Institutions and development: A conceptual reanalysis. *Population and development review*, 32(2), 233-262. <https://doi.org/10.1111/j.1728-4457.2006.00117.x>
- Remmer, K. L. (2008). The politics of institutional change: Electoral reform in Latin America, 1978-2002. *Party Politics*, 14(1), 5-30. <https://doi.org/10.1177/1354068807083821>
- Rhodes, S. A. (2006). Old institutionalisms. In R. A. W. Rhodes, S. A. Binder & B. A. Rockman (Eds.), *The Oxford Handbook of Political Institutions* (pp. 3-20). Oxford: Oxford University Press.
- Rose-Ackerman, S. (1999). Political corruption and democracy. *Journal of Political Law*, 14(2), 363-378.
- Rothstein, B. O. & Teorell, J. A. (2008). What is quality of government? A theory of impartial government institutions. *Governance*, 21(2), 165-190. <https://doi.org/10.1111/j.1468-0491.2008.00391.x>
- Rothstein, B. (2011). *The quality of government: Corruption, social trust, and inequality in international perspective*. Chicago: University of Chicago Press. <https://doi.org/10.7208/chicago/9780226729589.001.0001>
- Rubio Carracedo, J. (2008). La fuente de la corrupción política: la teoría de Rousseau sobre las tres voluntades del ciudadano. *Revista de Estudios Políticos (nueva época)*, 141, 105-132.
- Sartori, G. (2005). En defensa de la representación política. In M. Carbonell (Comp.), *Democracia y representación: un debate contemporáneo* (pp. 21-35). Tribunal Electoral del Poder Judicial de la Federación.
- Steinmo, S. (2008). Historical institutionalism. In D. Della Porta & M. Keating (Eds.), *Approaches and methodologies in the social sciences: A pluralist perspective* (pp. 118-138). Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9780511801938.008>
- Tsebelis, G. (2000). Veto players and institutional analysis. *Governance*, 13(4), 441-474. <https://doi.org/10.1111/0952-1895.00141>
- Uslaner, E. M. (2008). *Corruption, inequality, and the rule of law*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9780511510410>
- Weber, M. (1947). *The Theory of Social and Economic Organization* (A. M. Henderson & Talcott Parsons, trad.; Talcott Parsons, ed.). Oxford: Oxford University Press.
- Zucker, L. G. (1987). Institutional theories of organization. *Annual Review of Sociology*, 13(1), 443-464. <https://doi.org/10.1146/annurev.so.13.080187.002303>

Notes

1 In the *Editorial* of this *Debate* section, the general theoretical assumptions of institutional thought on behaviour and the nature of social facts are described (Fernández Esquinas, 2023).

2 For jurists, institutions are essentially bureaucracies as they employ more precise language to refer to laws, while some political scientists sometimes speak of institutions to refer to laws and regulations, and analytically distinguish them from public bureaucracies and other organisations. It is a common terminological barrier in the social sciences due to the specialised definitions of the disciplines and the conventions of the common use of the terms.

3 Cognitive and cultural mechanisms are discussed in this same debate in the article on the sociological approach of institutions (Espinosa Soriano, 2023).

4 The expression "Potemkin village" comes from Russian popular culture. In politics and economics, it refers to a construction of formal rules and regulations designed to give a real situation a more favourable external appearance, making it appear better than it really is.

5 Moreover, the election of the ruler must be preserved, which, incidentally, falls to the Legislative Power, thus being an executive branch of *indirectly* democratic origin, as it is elected by parliament (Section 99 of the Spanish Constitution) and not by universal suffrage.

6 The democratic state established by the Spanish Constitution is thus a representative democracy, with exceptional and residual institutions of direct democracy (the "popular legislative initiative" and the "referendum"). In addition, not only is Parliament the representative body of popular will, but the Constitution (Section 140) also requires that certain bodies of the executive powers be composed of representatives of the people: local administrations (city councils, provincial councils).

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REVIEWS/

RESEÑAS

REVIEW/RESEÑA

C. Tobío Soler, M. Alcañiz Moscardó y M. T. Martín Palomo. *La mirada de género en Sociología*. Madrid: Editorial Síntesis, 2021

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Diciembre de 2022 será recordado como uno de los meses más cruentos en los registros de asesinatos por violencia de género. En 2023, no parece que estas cifras vayan a ser muy distintas si observamos su progreso en lo que va de año, lo que evidencia la vigencia de este fenómeno.

Comenzar con este párrafo, casi a modo de titular, parece dar a entender que vamos a encontrarnos ante un libro en el que la violencia de género va a ser el eje principal o el sujeto del texto. Un libro para tratar únicamente este tema, definido recurrentemente como «una de las lacras más persistentes de la sociedad».

Sin embargo, en esta obra la violencia no es el eje vertebrador, ni tan siquiera la protagonista de un par de capítulos. Ahora bien, en este manual vamos a encontrar una radiografía bastante completa de lo que supone ser mujer (y también ser hombre), de la dominación de los hombres sobre las mujeres, de las estructuras que mantienen este sistema de desigualdad... y de todas las cuestiones que se ven atravesadas por el género.

Y es que, para entender de dónde proviene la violencia contra las mujeres, primero tenemos que ahondar en sus causas. Para poder comprender cómo y hacia dónde se extienden las ramas del árbol, hay que fijarse primero en las raíces y el tronco. Y para ello, se produce aquí una búsqueda de las raíces que se extiende incluso a la propia disciplina (la Sociología). Encontraremos causas sistémicas y senderos abiertos para que se sigan caminando, tomando en consideración que, como las propias autoras del libro que nos ocupa resaltan, «la desigualdad de los géneros está enraizada en los rasgos más profundos de la organización social, presentes desde tiempos remotos y, en mayor o menor grado, en casi todas las culturas y sociedades» (p. 17).

A través de trece capítulos divididos en tres partes, Constanza Tobío Soler, Mercedes Alcañiz Moscardó y María Teresa Martín Palomo recorren temas que han ocupado y

preocupado a la sociología tradicionalmente, pero lo hacen desde otra de las aristas del prisma, otorgando una visión de la que el título ya hace *spoiler*, la mirada de género. Y podríamos preguntarnos, ¿por qué esa necesidad de hacerlo explícito desde el principio? ¿Por qué no titularlo *Manual de Sociología* o *Sociología* a secas, como ocurre en otros tantos manuales? Porque, a veces, es necesario evidenciar que se va a tratar lo que no ha sido ampliamente tratado, dejar constancia de la importancia de aplicar este enfoque, alejarse de ser otro manual más, lo que no le permite pasar desapercibido.

Y el resultado, el que ahora es aquí reseñado, mantiene un enfoque muy pertinente en esta disciplina si tenemos en cuenta que la sociología, a pesar de ser una ciencia crítica que pone en entredicho los procesos y estructuras sociales, cuenta con unos inicios androcéntricos y patriarcales y, por lo tanto, no está exenta de formar parte y de conformar esa realidad desigual.

La sociología ha ido con el paso de los años posando su interés en diferentes cuestiones en función del contexto económico, político, histórico... pero no será hasta muy recientemente cuando se acerque a los feminismos y a las problemáticas de género. En esta obra nos encontramos con un manual de sociología que pretende ser al mismo tiempo un manual de sociología del género y que va abriendo camino, pues continúa sembrando líneas de investigación, planteamientos y genealogías en las que el género ocupa un lugar central. Y lo hace con una mirada que se evidencia en todos los capítulos y que puede observarse rápidamente ojeando tan solo el índice.

Ocurre, por ejemplo, cuando analizan la familia y se detienen en las implicaciones que el patriarcado tiene desde sus orígenes o en la persistencia de los roles tradicionales de género (capítulo 1). Parece aún más claro cuando se pone de relevancia la importancia para nuestras sociedades del trabajo no remunerado, que ha recaído mayoritariamente en manos femeninas (capítulo 2). Se torna entonces inevitable hablar de los cuidados, ese gran olvidado en las ecuaciones económicas, considerado inherente a las mujeres solo por el hecho de serlo (capítulo 3). Hay un refrán popular que dice: «Lo olvidado, ni agradecido ni pagado», y parece que viene al caso sin posibilidad de duda alguna, dado que sigue vigente en nuestra sociedad, sobre todo cuando el cuidado se ha normalizado dentro de las familias, dentro de redes femeninas, que solo se hace visible cuando no funciona como se espera. Se nos olvida que sin cuidar ni ser cuidados/as no podríamos vivir, por lo que ni se remunera ni se toma en consideración.

Las autoras continúan prestando atención a la maternidad, la salud, la reproducción y la enfermedad sin dejar de lado la perspectiva de género, dando como resultado un capítulo 4 que pone en entredicho cómo estas cuestiones han sido configuradas y dotadas de sentido por y para el hombre blanco occidental dentro de esquemas capacitistas, el mismo que continúa monopolizando el poder, los saberes, la legitimidad, etc. Esta afirmación coloca sobre la mesa algunos interrogantes que tratan de responderse en los capítulos 5 y 6: ¿qué ocurre con la presencia femenina en la medicina? ¿Qué puestos de trabajo y responsabilidad ocupan las mujeres en las profesiones sanitarias? ¿En qué se están formando actualmente las mujeres de Occidente? ¿Tienen capacidad para incidir en la agenda pública? ¿Qué espacios han ocupado y ocupan

en los órganos de gobierno? ¿Qué margen de maniobra tienen en la toma de decisiones? Estas cuestiones se plantean a través de un recorrido por la presencia femenina en el sistema educativo y en los poderes del Estado en el que vamos a encontrar luces y sombras: por un lado, un aumento significativo del número de mujeres en ambos ámbitos; por otro lado, ese aumento cuantitativo no siempre va a ir acompañado de una mayor presencia en los puestos más valorados y mejor remunerados.

Se cierra así la primera parte de este libro, que tiene un carácter más introductorio general para pasar en la segunda parte a centrarse con más detenimiento en problemáticas de género, problemáticas en las que la dominación patriarcal aparece con más virulencia debido a que se torna más visible y explícita. Estos capítulos permiten hacer un recorrido por la conciliación y la corresponsabilidad como temas que han sido pospuestos y que no avanzan en paralelo con la incorporación de las mujeres de manera masiva al mercado laboral remunerado (capítulo 7), o con cuestiones relacionadas con la identidad de género. Tema que, en el prólogo, María Ángeles Durán ya había adelantado, en tanto que «si las mujeres no nacen, sino que se hacen, es porque también los hombres se hacen socialmente y las unas y los otros se hacen entre sí, de manera interactiva e inevitable» (p. 14). Cuando en el capítulo 8 se habla de masculinidad (y masculinidades) se hace precisamente partiendo de que la idea de «hombre» no preexistía, sino que le hemos ido dando forma y contenido. Lo relevante de esa forma y contenido es que va a configurarse siempre en contraposición con la parte subordinada, es decir, ser hombre es no ser mujer, pero también es alejarse lo máximo posible de todo aquello que pueda poner en duda que se es un hombre. Esto supone que el resto de identidades de género, cuanto más alejadas queden de lo que es el hombre blanco heterosexual, más lejos estarán también de gozar de los mismos derechos y libertades y quedarán más cercanas al castigo social. Este capítulo, y, sobre todo, poner sobre la mesa el binarismo de género, va a ser imprescindible para comprender las violencias contra las mujeres.

Y es que, cuando la dominación masculina es puesta en entredicho, la violencia aparece para restituirla. Los anteriores capítulos ya han ido dando cuenta de cómo esta dominación ha ido configurándose, lo que tiene que ver con que las mujeres hayan formado parte de manera tradicional del ámbito privado más que del público, con que se encargasen de los trabajos menos valorados (los domésticos), el hecho de que se considere en los esquemas binaristas de género que son ellas las que son más sensibles y empáticas, más irracionales y emotivas, y ellos, por oposición a estas cualidades y por destacar en las contrarias, más preparados para la ciencia y la tecnología. No es casual sino causal que las profesiones feminizadas sean las más precarias y peor remuneradas. La violencia a la que se ha aludido en el inicio de esta reseña, con el aumento de mujeres asesinadas, forma parte de esta jerarquía de género, y sus diferentes expresiones van a permitir mantener esa dominación, aunque sea a costa de la vida de las mujeres.

Dicha jerarquía va a denotarse en múltiples ámbitos de lo social y las autoras lo reflejan con claridad en el capítulo 10, en el que se aborda la feminización de la pobreza, la precariedad a la que hacen frente las mujeres, las condiciones de vida de las viudas y un largo etcétera que pone el foco sobre aquellas mujeres en las que varias opresiones

interseccionan, se cruzan al mismo tiempo (como es el caso de las mujeres negras, las lesbianas, las mujeres en situación de discapacidad...).

El libro termina con una tercera parte en la que se reflexiona sobre los «referentes sociales en la construcción del género», repasando genealogías de diferentes disciplinas y aludiendo a cómo la presencia femenina en ellas ha sido borrada y expoliada de la historia. Esto dificulta enormemente que niñas y jóvenes tengan un espejo en el que mirarse, un ideal que perseguir que comparta sus vivencias de género. Para ello, Tobío Soler, Alcañiz Moscardó y Martín Palomo reivindican la necesidad de «recuperar y visibilizar a las mujeres que han participado en la construcción del corpus teórico y empírico» (p. 114) de cada una de estas disciplinas. Porque sí que ha habido mujeres en la ciencia, las artes, las letras o la música, como es el caso de María Lejárraga, María Moliner, Carmen Laforet, Rosalind Franklin, Olivia Sabuco de Nantes, Marie de Gourney, entre tantas otras, pero sus estudios y obras difícilmente han sobrevivido a los procesos de borrado a los que han sido sometidas con el paso de los años. Ahora, progresivamente, se están rescatando.

Si hay un capítulo que interpela directamente a sociólogas y sociólogos es el número 12. En este capítulo se revisan los orígenes de la sociología, se recupera el aporte de aquellas mujeres que analizaron el mundo social, que estudiaron fenómenos sociales aplicando metodologías novedosas y que fueron deslegitimadas cuando la disciplina entró en la academia. Como las propias autoras mencionan en la página 235: «[...] la consolidación académica de la sociología es una historia de exclusión de las mujeres, del pensamiento crítico y de la apertura metodológica». En la actualidad, aun cuando la presencia de mujeres es ampliamente notable, las figuras de gran renombre y prestigio, los catedráticos, los decanos y rectores sociólogos siguen siendo mayoritariamente eso, sociólogos.

Esto tiene que ver con que los cambios no siempre son tan rápidos como se querría y que este no está siendo un camino que no genere debate y oposición. A esto se dedica precisamente el último capítulo, a hablar de las resistencias a la igualdad. Pese a que el 13 no suele gozar de buena fama, en este capítulo vamos a encontrar buenas perspectivas.

Si bien quedan sectores de población que se resisten a perder sus privilegios y otros no tan proclives a equilibrar la balanza, se están produciendo cambios que progresivamente van a ir contrarrestando los efectos del patriarcado, aunque el cambio será lento y requerirá de esfuerzo. Hay cada vez un mayor número de mujeres en la política, la economía, en los puestos de poder, en la gerencia de las empresas... pero, sobre todo, contamos con un mayor número de personas que están cuestionando la jerarquía de los géneros, la dominación masculina y, por ende, las violencias contra las mujeres. Si de algo podemos estar seguras y seguros es que esta publicación no es la única que observa la realidad social con una mirada de género.

REVIEW/RESEÑA

Capitolina Díaz Martínez (Ed.). Martineau, Harriet.
Cómo observar la moral y las costumbres (1838).
Madrid: Centro de Investigaciones Sociológicas (CIS).
Colección Clásicos del Pensamiento Social, 2022

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El Centro de Investigaciones Sociológicas (CIS) continúa con su línea de incluir en el canon de la sociología a las mujeres fundadoras de nuestra disciplina. En este sentido, el libro *Cómo observar la moral y las costumbres* es su segunda traducción del inglés al español¹ y el primero cuya traducción edita Capitolina Díaz Martínez.

La inglesa Harriet Martineau (1802-1876), considerada la primera socióloga, escribe *Cómo Observar la Moral y las Costumbres* en el año 1838, a la edad de 36 años. Se trata de un libro presentado de forma magistral por su editora, como antesala a esta imprescindible lectura sobre métodos y técnicas de investigación social². Capitolina Díaz describe esta obra como el «primer tratado de metodología sociológica conocido», de ahí la importancia de su traducción al español.

Martineau se había iniciado en la escritura en el *Monthly Repository* (Repositorio Mensual) de su comunidad religiosa, donde afortunadamente se ofrecía un ambiente formativo igual para hombres y mujeres. Aunque al principio no firmaba con su nombre, esta oportunidad le transmitió seguridad, pudiendo observar las reacciones positivas que su experiencia como escritora despertaba, tanto en su familia como en su entorno más cercano.

Pasados los años, ya en su madurez, ¿qué es lo que la llevó a escribir este libro? Probablemente su deseo de entender una sociedad emergente, la norteamericana, donde tanto Inglaterra como ella misma tenían puesto su punto de mira. La independencia de Estados Unidos le daba la opción a esta gran nación de convertirse en un nuevo mundo, sin ataduras familiares ni estructuras feudales. Podría pensarse que su proceso hacia la democracia sería más rápido y fácil que en la vieja Europa. Martineau quería conocer esta sociedad y quería entenderla, por eso necesitaba planificar cómo interpretarla.

El principal objetivo del texto que estamos comentando es observar los hechos sociales y, para ello, su autora desarrolla esta genial obra sobre cómo observar la realidad que nos rodea, pero también —como veremos más adelante— sobre cómo y a quién entrevistar, cómo hacer análisis de contenido y cómo hacer análisis de datos tanto primarios como secundarios.

Su método de análisis se desarrolla a lo largo de seis capítulos, a través de los cuales la persona que viaja —la que observa, la socióloga/o— es guiada por unas pautas que le facilitan la comprensión de esa novedosa sociedad desde una perspectiva no etnocéntrica.

El libro se inicia con los requisitos para hacer observación, que divide en tres: filosóficos, morales y metodológicos, utilizando la expresión «Requisitos filosóficos», ya que Comte aún no había acuñado el término Sociología.

Martineau, como ya hemos iniciado, no solo nos enseña cómo observar, sino también dónde poner y dónde no poner el punto de mira, o cómo llevar un diario de campo. Para poder observar la moral y las costumbres de una nación, nos advierte de la necesidad de estudio y preparación, del riesgo de generalizar, de hacer «afirmaciones perentorias» cuando observamos o de trabajar con la «mente cansada», de los prejuicios, de la pertinencia «de desviarnos de vez en cuando de la carretera principal» (p. 25), considerando imprescindible que la viajera tenga «un espíritu de imparcialidad, respeto mutuo y amor». Además, expone métodos de generalización seguros, aclarando la utilidad de la observación para la sociedad misma que está siendo observada.

Realmente podemos encontrar muchas razones para leer esta obra. Quizás la más importante de ellas sea su utilidad, ya que sirve tanto para la investigación como para la docencia, al mostrarnos cómo nace el método empírico de investigación en ciencias sociales. También es de resaltar la capacidad didáctica de Martineau, al escribir de forma entretenida y a la vez rigurosa, con anécdotas que ejemplifican cómo hacer observación, cómo hacer análisis de contenido de los datos, dónde buscarlos o qué instituciones son de confianza y cuáles no a la hora de recabar estadísticas. Se trata de un manual de metodología para ser fácilmente entendido, al estar lleno de preguntas que la viajera debe responder, y de requisitos que igualmente debe cumplir. Así mismo, la autora presenta los métodos de una forma realista, sin obviar sus dificultades, sus riesgos, sus gozos, tal cual la vida misma.

Verdaderamente a lo largo de toda su vida, Harriet Martineau desarrolló una extraordinaria capacidad didáctica, y esa misma habilidad es la que nos muestra en todas las páginas de este libro y en todos y cada uno de sus apartados: en sus preguntas, en sus ejemplos, en su información sobre las diferentes sociedades que había visitado, o de las que se informó a través de sus estudios e investigaciones. Partiendo de todas estas premisas, no es de extrañar que continuamente se esté haciendo preguntas de investigación que después responderá en cada uno de los apartados.

Llama la atención que no se haga referencia a esta obra maestra sobre métodos en los manuales de sociología general, o en los de introducción a los métodos y técnicas de investigación social. Como a muchas de las mujeres fundadoras de nuestra disciplina, a Martineau le sobró éxito y reconocimiento en su vida profesional, pero le faltó la

autoridad que en el mundo académico se reservaba exclusivamente a los varones, en unos años en que el poder estaba totalmente en sus manos³.

El grueso de la segunda parte del texto lo dedica a enseñarnos qué observar, recomendando observar la religión, los valores morales generales, la vida doméstica, la idea de libertad, el progreso y el discurso. Sobre religión analiza las iglesias, el clero, las supersticiones y el suicidio; sobre las nociones generales de la moral señala los epitafios, el amor a los semejantes y el lugar de nacimiento, conversaciones con ancianos y niños, el orgullo, ídolos, hitos de la sociedad, personas condenadas, delincuentes, canciones populares, literatura y filosofía.

La geografía del país, sus mercados, su clase agrícola, manufacturera, comerciante, la salud, el matrimonio y las mujeres y los niños forman parte del análisis de la vida doméstica. La policía, la legislación, las clases sociales, el servicio, la imitación de la metrópoli, los periódicos, las instituciones educativas, los motivos y formas de persecución conforman la idea de libertad. Al estudiar el progreso, parte de las condiciones necesarias para el mismo, para posteriormente detenerse en la caridad, el arte, los inventos y la pluralidad de intereses, sin olvidar la importancia del discurso.

En su libro *Society in America*, Martineau explica dos de sus conceptos clave, «moral y costumbre», entendiendo la moral como los principios por los que una sociedad se rige, mientras que las costumbres serían los modelos de actuación y agrupación de una sociedad. Para su análisis de la sociedad norteamericana, se basó principalmente en la Constitución de los Estados Unidos —ya que esta sería la mejor aproximación teórica a la moral de la sociedad—, llamando con gran benevolencia anomalías a los desajustes que encontró en las costumbres de la población, por ejemplo, el trato desigual entre hombres y mujeres, cuando su Constitución precisaba que ambos eran iguales ante la ley.

Con estas apreciaciones, observamos dos de las más importantes aportaciones de Martineau a la sociología —frente a sus coetáneos sociólogos (Comte, Spencer, Marx)—⁴, las perspectivas feminista e interaccionista⁵. Ciertamente, se preguntó dónde estaban las mujeres y si estas eran libres y qué significado tenían las acciones para los/as actores.

A medida que vamos leyendo los diferentes capítulos de su texto, Martineau se nos revela como una socióloga con perspectiva macrosociológica y no solo microsociológica y centrada en la reforma social.

Al igual que Marx, su sociología nace del trabajo de campo, pero ella da un paso más adelante, recomendando observar lo que años más tarde serían universales de la cultura: los ritos matrimoniales, los funerales, las fiestas populares, las canciones, etc., y cómo estos varían de una cultura a otra, centrándose —con su imaginación sociológica y sin prejuicios— en la vida cotidiana.

Su obra muestra similitudes con las de sus coetáneos sociólogos, como Auguste Comte, pues si bien no habla de la ley de los tres estadios, sí cree en una evolución de las sociedades hacia un mundo mejor. En esta línea, Capitolina Díaz destaca (p. 9) algunas de sus afirmaciones, que «todas las sociedades humanas avanzan hacia un estado democrático más ilustrado y procurador de mayor bienestar para la ma-

yoría de la población...». O más adelante (p. 12): «Y ese progreso⁶ se realizará con la profundización de la democracia basada en la meritocracia, el esfuerzo individual, la educación generalizada y el trato igualitario». Con Auguste Comte y Harriet Martineau⁷ se produce el gran salto de la filosofía a la sociología, de lo que debería ser la sociedad, al análisis de lo que es y, precisamente, para analizarla, crearon el método sociológico de investigación.

El manual metodológico de Martineau es, además, pionero en usar varias técnicas en paralelo, lo que años después se denominó triangulación. Así ella entrevistó, observó, hizo análisis de contenido y recopiló datos tanto primarios como secundarios. Si bien es cierto que la observación es la piedra angular de la obra, no es menos cierto que introduce cómo llevar a cabo estas otras técnicas de investigación.

Leyendo a Harriet Martineau y este tratado de metodología sociológica, nos damos cuenta de cómo la sociología nace haciendo abstracciones de la realidad y categorizando al realizar los análisis, en definitiva, construyendo tipos ideales con los que poder estudiar los hechos sociales. Efectivamente, nuestra autora es una socióloga que se adelanta a muchos de los padres de la sociología como Émile Durkheim (1858-1917) o Max Weber (1864-1920). Recordamos que Martineau vivió entre 1802-1876, siendo por tanto coetánea de muchos de los sociólogos fundadores de nuestra disciplina —Karl Marx (1818-1883) o August Comte (1798-1857)— que sí figuran en todos los manuales de sociología.

Por otra parte, este libro es una muestra más de que la sociología no solo nace en la Universidad, sino que en su origen aparecen varios escenarios paralelos. Así, los viajes, ya que Harriet Martineau —además de una gran lectora— fue una viajera empedernida, una observadora objetiva y en definitiva, una gran socióloga. Sobre viajes, también publicó *Eastern Life: Past and Present* (1848), en donde relata un viaje de dos años por Oriente Medio, analizando especialmente la religión como una construcción social. En 1852 escribirá otra obra de análisis social sobre viajes: *Letters from Ireland*.

Alexis de Tocqueville (1805-1859), o la socióloga norteamericana Jane Addams (1860-1935), analizan igualmente la importancia de los viajes en el nacimiento de la sociología. El proyecto social de Addams surge precisamente en un viaje a Londres, en el que toma conciencia de que el estudio en sí mismo no la había dotado de la necesaria capacidad de reacción ante las problemáticas sociales. A partir de ahí —además de otros muchos logros— Jane Addams será pionera de la ética aplicada a la investigación en la Escuela de Mujeres de Chicago que cofundó, siendo todas ellas innovadoras y exhaustivas en cuestiones metodológicas.

Otro de los escenarios origen de la sociología será la prensa, de hecho, la propia Harriet Martineau comienza su andadura como escritora usando este medio, al igual que lo hiciera Ida B. Wells, denunciando los linchamientos de la población afroamericana. Al no poder formarse en la Universidad, estas pioneras ansiosas de conocimientos se reunían en asociaciones de mujeres o en los «salones» (Marianne y Max Weber en Alemania, o Harriet Taylor Mill en Inglaterra), otros escenarios más donde nace nuestra disciplina.

Recordando la pregunta inicial que se plantea Harriet Martineau sobre cómo observar y analizar la sociedad que nos rodea, vemos que aspiró «a usar la razón y la ciencia para la mejora de la vida social, de la convivencia de gentes y países» (González de la Fe, en Lengermann y Niebrugge-Brantley, 2019, p. 1).

Este libro es una prueba más de que, desde el inicio de nuestra disciplina, hubo mujeres metodólogas. Por lo tanto, la necesidad de incluirlas en el canon de la metodología sociológica es de justicia social. Pues si bien parece haber un cierto consenso en la aceptación de la teoría sociológica feminista de las mujeres fundadoras de la sociología, ¿lo hay también sobre cuestiones metodológicas? ¿Hemos consensuado suficientemente sobre esto? Y también, ¿dónde ubicamos todos los temas de ética en la investigación?

En este manual sí que se plantea una sociología comprometida con el cambio social, que contemple como objetivo lograr la mayor felicidad, para el mayor número de personas posible. Frente al tipo de ciencia libre de valores que definió nuestra disciplina durante tanto tiempo, Harriet Martineau —como buena feminista— plantea una ciencia comprometida con el bienestar de la sociedad.

Para terminar, nada mejor que resaltar la importancia que actualmente tiene esta autora para personas con diferentes capacidades, ya que ella misma fue perdiendo audición hasta quedar prácticamente sorda al final de sus días. En este sentido, Sara Rodríguez (2020, pp. 28-40) desarrolla un capítulo de «Lectura Fácil» centrado en Harriet Martineau y su obra, diseñado especialmente para ser utilizado por personas con dificultad cognitiva.

Bibliografía y webgrafía

- Abbott, E. (1906). Harriet Martineau and the Employment of Women in 1836. *Journal of Political Economy*, 14 (10), 614-626. <https://www.jstor.org/stable/1819994>
- Del Pino-Espejo, M. J., Illescas Estévez, E., González de la Fe, T., Ruiz Repullo, C. y Abad, M. J. (ACISO intérprete de Lengua de Signos). Serie Fundadoras de la Sociología. Harriet Martineau y Augusto Comte. *UpoTV. Podcast audio. Septiembre 13, 2021* <https://upotv.upo.es/video/613f336cabe3c6ed658b456a> y <https://www.youtube.com/watch?v=by85HOZv3Vk>
- Lengermann, P. M. y Niebrugge, G. ([1998] 2019). 2. Harriet Martineau (1802-1976). Los inicios de una Ciencia de la Sociedad. En: P. M. Lengermann y G. Niebrugge (Eds.). *Fundadoras de la Sociología y la Teoría Social 1830-1930*. Madrid: CIS.
- Rodríguez, Sara (2020). *Vidas de Mujeres Inspiradoras* Ed. Fundación ONCE Via Libre. Publicación desarrollada por ALTAVOZ Miradas que aportan valor. Colabora en la validación Asociación Salud y Alternativas de Vida. <http://planetafacil.plenainclusion.org/libros/vidas-de-mujeres-inspiradoras/>

Notas

- 1 La primera traducción fue la de Lengerman y Niebrugge-Brantley (2019).
- 2 Es de justicia mencionar a la traductora Alejandra Méndez-Valdés Pérez, que hace posible una lectura amena desde la primera hasta la última página.
- 3 Lengerman y Niebrugge-Brantley (1995, 2019, pp. 33, 36) reinterpretan la teoría fenomenológica de Alfred Schutz (1967, 1973) y de Schutz y Luckmann (1973) en clave feminista; igualmente, Anzaldúa (1990) y Keller (1985), entre otros autores, trataron de explicar la presencia de las mujeres como *yo-otro*, así como esta política de género que no incluyó a las mujeres fundadoras de nuestra disciplina.
- 4 Lengermann y Niebrugge-Brantley (2019, pp. 77-81) analizan la posición de Martineau con respecto a la primera generación de sociólogos (Comte, Spencer y Marx), haciendo también alusión a Alexis de Tocqueville y su libro *Democracia en América (1835/1840)* y a E. Durkheim, entre otras obras y autores.
- 5 Del Pino-Espejo *et al.* (2021).
- 6 Esta idea de progreso también la desarrolla el necesarismo y la religión unitaria que ella profesó en su juventud.
- 7 Ambos autores son contemporáneos y se admiran académicamente. Harriet Martineau traduce y compila los 7 volúmenes de *Filosofía Positiva* de A. Comte en 2 tomos y él mismo manda traducir esos dos volúmenes de nuevo al francés lleno de admiración y gratitud.

REVIEW/RESEÑA

Ramón Flecha. *La Sociedad Dialógica. La sociología que gusta y usa la ciudadanía.* Barcelona: Hipatia Press, 2022

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Katalin Karikó, la principal creadora de las vacunas RN-mensajero, ha puesto me gusta en la cuenta de Instagram de este libro. Hasta ahora, la sociología, incluso sus principales obras y autores, no habían llegado a ser conocidas por parte de las principales personalidades coetáneas de las diferentes ciencias. La obra que aquí revisamos está dedicada a la sociología dialógica que ha desbordado los límites de las ciencias sociales para llegar a interesar e incluso a coliderar transformaciones profundas del conjunto de todas las ciencias.

El libro comienza con una síntesis de las nueve orientaciones de las sociologías dialógicas: diálogo, mejora, verdad, bondad, belleza, género, culturas, universal y visión de futuro. El diálogo y la mejora se refieren a los dos principales criterios actuales de los programas internacionales de investigación en todas las ciencias: cocreación e impacto social. La verdad significa superar la frecuente costumbre de escribir sobre lo que no se ha leído directamente. La bondad supone ponerse al servicio de lo que en toda democracia tiene derecho a decidir la ciudadanía, por ejemplo, que son buenas las relaciones sexuales libres y son malos y condenables los abusos a menores. La belleza desvela que profesionales de la sociología son artistas sociales que crean belleza en las relaciones humanas que promueven, igual que hay belleza en los cuadros que crean artistas de la pintura. Culturas resalta la indudable necesidad de contemplar la diversidad. Universal significa trabajar en comunicación con la comunidad científica internacional. Visión de futuro orienta hacia la solidaridad con las próximas generaciones y el planeta en que vivirán.

Michael Burawoy, expresidente de la International Sociological Association, escribió, entre otras, las siguientes palabras: «Me parece una formulación brillante de tanto de lo que has contribuido a las ciencias sociales y a la humanidad. Tan generoso con tantas personas. Tan amplio y tan "cultural" en el buen sentido de la palabra, aportando a la ciencia social mucho más que ciencia social —literatura, música, arte.

Estoy encantado de que hayas escrito este libro en un estilo de narrativa tan accesible». Las aportaciones del autor están muy enriquecidas por una cultura amplísima y diversa. Se relata una de las razones de esa característica: su participación durante décadas en tertulias dialógicas de muy diferentes ámbitos: sociológicas, intelectuales, literarias, musicales, pictóricas, matemáticas, científicas y otras. El Seminario de Teoría Sociológica de la Asociación Catalana de Sociología que creó en 1995 sigue funcionando periódicamente y en él se han leído y comentado «con el libro en la mano» las principales obras de Durkheim, Weber y Habermas, entre otras muchas de autorías muy diversas.

El Seminario Tertulia Intelectual Dialógica, que creó en 1991, también sigue funcionando regularmente, y en él se han leído y comentado «con el libro en la mano», las principales obras de Adam Smith, Heidegger, Kandel, Marx, entre otras muchas de los más diversos campos del saber. En el libro se relata la impresión que ha producido a autores y autoras que han participado ocasionalmente en él. Cuando una estudiante de diecinueve años corrigió correctamente lo que Ulrich Beck había dicho sobre uno de sus propios libros exclamó muy positivamente: «¿Dónde está el milagro?». El «milagro» era que se denomina «con el libro en la mano» porque solo se puede intervenir si se comienza diciendo en qué página está lo que se va a comentar. De esa forma, se logra que no se hable y luego se escriba sobre lo que no se ha leído y comentado, al mismo tiempo se evitan errores elementales muy comunes en la literatura de ciencias sociales y se logra un nivel intelectual no superado hasta hoy en ningún otro tipo de actividad y formación.

Después de esa síntesis de las nueve orientaciones para las sociologías dialógicas (que alguien ha relacionado con las nueve musas) desarrolla las tres siguientes partes del libro: II) La sociedad es dialógica, III) La belleza de las relaciones humanas, IV) La sociología que gusta y usa la ciudadanía. La segunda parte consta de ocho apartados destinados a presentar evidencias y argumentos de cómo en la actualidad nos encontramos en sociedades dialógicas. Se reconocen y se incluyen en esta teoría aportaciones de teorías anteriores, como la sociedad industrial, la sociedad de la información, la sociedad del conocimiento, pero se demuestra cómo el diálogo es cada vez más la clave principal de las transformaciones de nuestras sociedades y de nuestras vidas colectivas e individuales. Se explica en estos apartados cómo el diálogo es el origen del conocimiento, una dinámica creciente de nuestra vida, de la política y de las organizaciones, así como el principal recurso para lograr la paz cotidiana. Se desarrolla también una argumentación sólida para demostrar que somos, cada vez más, personas dialógicas, pero que ya fue el diálogo el que marcó el paso de la evolución a transformarnos en seres humanos, un diálogo del que se afirma que tiene mil y una dimensiones.

La tercera parte es todavía más sorprendente, está dedicada a demostrar que la sociología se puede hacer con belleza y que, cuanto más bella se haga, más acierta en la comprensión de la sociedad y de los seres humanos y mejor elabora las actuaciones que llevan a su transformación y mejora. En los tres primeros de sus ocho apartados explica el papel del arte, la ciencia y los derechos humanos en las sociedades dialógicas. Luego clarifica errores elementales de autores como Foucault y otros en la

interpretación de obras como *El Quijote* o *Las meninas* o las pinturas negras de Goya, y resalta el papel del Romanticismo iniciado por Beethoven. Emplea tres apartados en diseccionar las razones que llevan a algunas personas y profesionales a elegir la fealdad en la sociedad y en las ciencias sociales incluso provocando que autores importantes se autodestruyan buscando protagonismo o dinero. El último apartado produce un reencanto al situar que profesionales de la sociología podemos ser, si queremos, artistas sociales. Las creaciones sociales que describe se mueven muy bien en los ambientes culturales y han sido destacadas por numerosas y diversas personalidades abriendo continuamente caminos no habituales a la sociología. El Premio Nobel José Saramago escribió sobre las tertulias literarias dialógicas: «Me encanta saber que una Tertulia Literaria interese tanto a las gentes y tenga alcanzado tanto éxito. [...] vuestro plan de trabajo es tan extraordinario y tan necesario para tornar consciente la individualidad de cada uno en una sociedad que intentamos sea más y más solidaria».

La cuarta parte consta de veinte apartados, explicando exhaustivamente cómo hacer la sociología que más gusta y usan tanto las personas de las diferentes ciencias como la ciudadanía. Se inicia con una reivindicación ciudadana de una ciencia llena de bondad y belleza, vinculada a los objetivos de desarrollo sostenible y a la participación ciudadana tanto presencial como *online*, y una nueva metodología para analizarla: «social media analytics». Parte de la clasificación en sociología clásica, contemporánea y democrática, siendo esta última la más actual y la más vinculada a las fundadoras de la sociología; resalta que sociólogas como Jane Addams trataron más y mejor que los «padres fundadores» (como Durkheim y Weber) los temas clave de la sociología actual como género, etnia o paz. La vieja polémica entre sociología descriptiva y normativa es superada por esta propuesta que se ciñe a hacer un análisis científico de la realidad y a identificar dentro de ella las actuaciones que logran el éxito en el avance hacia los objetivos que la propia ciudadanía se plantea y decide. Estas actuaciones de éxito son un fundamento extraordinario para la transformación social y para el desarrollo de políticas que mejoran las vidas de las personas y de las democracias de las que forman parte. Es necesario para realizar esa tarea superar los dogmatismos ideológicos y el individualismo opaco, ya que hoy solo se pueden hacer teorías del máximo nivel de excelencia en redes interdisciplinarias. Se dan sólidos argumentos, como los elementales errores en que han caído, por trabajar individualmente, incluso autores de tanto nivel intelectual como Habermas.

Se presentan como referencias actuales teorías como la sociología pública de Michael Burawoy, las utopías reales de Erik Olin Wright o el feminismo multicultural de Fátima Mernissi, pero también se recuperan con gran rigurosidad las mejores aportaciones de autorías como la de Talcott Parsons y las principales obras de diferentes ciencias, como la de la neurocientífica Rita Levi-Montalcini o del psicoanalista Sigmund Freud. Se clarifica la importancia de la economía o el trabajo asalariado, y la ceguera del materialismo vulgar que ha llevado a las ciencias sociales a límites en la comprensión de las sociedades por no analizar rigurosamente los sentimientos y deseos más profundamente humanos. Estos son diseccionados con valentía al deshacer los equívocos, como los relativos a la marcha nocturna despreciativa que tanto está configurando los sentimientos y deseos de la juventud y, por tanto, de la

sociedad presente y futura. Se finaliza demostrando que somos las personas y grupos humanos quienes movemos el mundo, y podemos, si queremos, transformarlo hasta hacerlo mucho mejor del que hemos recibido.

Todo el libro se ilustra con referencias teóricas y reflexiones clave complementadas con actuaciones prácticas que están configurando la sociedad que al mismo tiempo se analiza. Por ejemplo, de entre sus páginas surgen actuaciones como las del grupo cooperativo Mondragón, resaltando que han logrado el menor índice de Gini del mundo sin matar a nadie, mientras que algunas supuestas revoluciones han matado a millones de personas diciendo que era necesario para lograr una supuesta igualdad desmentida por sus actuales índices de Gini. También analiza de una forma muy original las diferencias entre la Revolución democrática norteamericana y la Revolución francesa, estableciendo posibles vinculaciones bidireccionales entre los sentimientos que unían o desunían a los diferentes políticos, y la continuidad de las democracias conseguidas o su evolución hacia lo contrario, incluso nombrando un emperador.

Entre esas actuaciones de éxito descritas hay muchas lideradas por el mismo autor, así como por una diversidad de especialistas en sociología dialógica. Esas actuaciones y las investigaciones en las que se basan han conseguido un enorme impacto político. Algunos de esos estudios han visto sus resultados aprobados por unanimidad por el Parlamento Europeo y por otros parlamentos de diferentes zonas geográficas del mundo. Se diseccionan los problemas de las políticas basadas en evidencias entendidas jerárquicamente como que las políticas tienen que basarse en las evidencias que creamos el personal investigador. Se considera que toda pretensión de profesionales de la universidad de decidir cómo tienen que ser las políticas supone una orientación antidemocrática porque esa decisión corresponde a la ciudadanía y a representantes que ella elige. Se propone la política dialógica que tan buenos resultados está dando en la práctica y en la cual la cocreación supone que la misma elaboración de esas evidencias responde a lo que la ciudadanía ha considerado relevante y se hace en continuo diálogo con las personas de ciencia, representantes que han ganado elecciones, ciudadanía y todo tipo de empresas y organizaciones.

Este importante impacto político se logra porque genera un gran impacto social, unas mejoras claras y medibles cuantitativa y cualitativamente de las vidas de las personas y las sociedades con relación a los objetivos de desarrollo sostenible y otras finalidades democráticamente decididas en cada lugar. Se ponen ejemplos de la «sociología» que empeora la sociedad y desprestigia a la sociología. Uno de ellos se produjo en la conferencia oficial europea denominada Ciencia contra la Pobreza, que se realizó en el año 2010. Como concluyeron diferentes personalidades, casi todos los estudios presentaban diagnósticos, complementados con recomendaciones que no se basaban en un análisis científico de la realidad, sino en unas ideologías o ideas particulares de quienes hacían las recomendaciones. Se concluyó que si se financiaba con un millón de euros una investigación sobre pobreza, quienes las realizaban tenían la obligación de presentar evidencias de que así se disminuía el número de pobres más y mejor que si se daba ese dinero directamente a las personas que sufrían ese problema.

Estos y muchos otros ejemplos sirven al autor para ilustrar, por un lado, su teoría de la sociedad dialógica, que, como destacábamos al inicio de esta reseña, plantea

el creciente diálogo de nuestras sociedades como elemento clave de la mejora social. Por otro lado, propone una teoría social dialógica, diferenciándose de perspectivas teóricas previas. Tomando distancia y a grandes rasgos, vemos que la sociología dialógica aquí propuesta se opone a la sociología estructuralista de autores como Bourdieu, donde el capital cultural está determinado por las condiciones materiales en la estructura social y no contempla la posibilidad de transformación. Además, supera con nuevas aportaciones la sociología crítica de autores como Habermas, que sí contempla el cambio social desde la intersubjetividad, pero no explica ninguna mejora que se haya generado con esa teoría. La sociología dialógica se podría situar en la línea transformadora de Jane Addams, que desarrolló sus aportaciones teóricas para el cambio social mientras mejoraba las vidas de muchas mujeres, niños y hombres, en diálogo con intelectuales de todas las ciencias y personalidades políticas que ella reunía en Hull House junto a esas mismas familias humildes de Chicago. La sociología dialógica, pero, a diferencia de la de Addams, se sitúa en la sociedad dialógica del siglo XXI.

Este libro no solo servirá, sino que ya está sirviendo para dar un gigantesco paso adelante, en la mejora de la sociología hasta ahora disponible. Servirá a representantes institucionales para desarrollar políticas de éxito contrastable y medible. Por otro lado, mejorará muchísimo el prestigio de quienes somos profesionales de la sociología, puesto que trabajaremos en una orientación que nos llevará a posibilitar mejoras hasta ahora no alcanzadas en las vidas de la ciudadanía. Esta obra servirá a todo tipo de personas para colaborar en la construcción de evidencias mejorando al mismo tiempo no solo la sociedad, sino también sus vidas individuales y familiares. Se trata de un libro de un altísimo rigor teórico y al mismo tiempo de lectura muy amena. Se nota que se han repasado todos los detalles hasta hacer sus difíciles contenidos alcanzables por todo tipo de individuos. En resumen, nos encontramos ante una obra de una sociología que abre caminos a diálogos que ya están comenzando a contribuir a la mejora de la humanidad.

REVIEW/RESEÑA

Daniel Javier de la Garza Montemayor y José Antonio Peña-Ramos (Eds.). *Transformaciones en la vida social a raíz del aceleramiento de la interacción digital durante la coyuntura del COVID-19*. México: Tirant lo Blanch, 2022

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Las condiciones políticas, económicas y sociales durante la pandemia expusieron la capacidad de respuesta de todos los gobiernos alrededor del mundo. Se destacaron algunos por la rápida respuesta, pero, en otros, las restricciones de libertades provocadas por el distanciamiento social profundizaron acciones autoritarias. En ese sentido, categorías como democracias débiles, resilientes e híbridas comenzaron a ser parte del lenguaje especializado para dar respuesta del avance o retroceso democrático.

Con base en lo anterior, encontramos una obra que da cuenta de diferentes procesos y reacciones para afrontar la crisis sanitaria. El libro de los investigadores De la Garza y Peña-Ramos consta de 14 capítulos y un total de 299 páginas. Por medio de diferentes metodologías y documentación empírica ofrecen valiosos hallazgos que permiten observar de forma puntual los efectos en los ciudadanos en diferentes ámbitos de la vida pública y privada.

De forma general encontramos temas como la democracia liberal, por un lado, investigaciones de casos de estudio sobre los efectos de la contingencia, como el auge de las plataformas digitales, la desinformación provocada en las redes sociales, la posición del sector empresarial. Por otro, estudios que versan sobre la experiencia de los centros educativos para afrontar la nueva realidad social, el teletrabajo y la perspectiva de género. Finalmente, investigaciones nacionales en México, España y una revisión del liderazgo de los presidentes Donald Trump, Jair Bolsonaro y John Magufuli.

A continuación, algunos hallazgos que resultan atractivos para los lectores, ya sean investigadores que deseen continuar con las líneas de trabajo, o bien estudiantes de

licenciatura o posgrado, quienes encontraran indicadores pertinentes sobre un tema original, ya que el tratamiento de la pandemia se aborda desde una perspectiva académica basada en evidencia y resultados; en ello estriba la actualidad de esta obra.

En el capítulo 1, el coordinador de la obra, Daniel de la Garza, ofrece un análisis sobre el auge de las plataformas de *streaming*, en donde menciona que la contingencia fue un catalizador de las principales empresas de entretenimiento (p. 11), es decir, hay un antes y un después, porque pasó de colectivo a una comunicación impersonal. En medio de la crisis sanitaria se potenciaron empresas como Netflix, Amazon Prime, Disney Plus, Apple TV y Hulu como los principales proveedores de contenido para ciudadanos que vieron limitadas sus actividades cotidianas (asistir a un cine, reunirse con amigos). Señala el autor que la asistencia al cine en México cayó un 80% (p. 13). En ese sentido, la socialización se presentó de una forma alternativa con la presencia de Tik Tok. En general, se constataron cambios en las preferencias para el acceso a contenido digital y en la confianza en las redes sociales.

En el segundo capítulo, escrito también por De la Garza, aborda ahora el tema de la desinformación y polarización durante la coyuntura de la COVID-19. Señala el investigador que proliferaron noticias falsas, pero también se extendió el uso de plataformas como Facebook Messenger, Zoom, Whatsapp, entre otras (p. 31), en medio de la adaptación de los diferentes centros escolares para continuar con los programas en línea y se implementó el teletrabajo. Entre los rasgos negativos se puede destacar la generación de infodemia y de *fake news*. En el caso mexicano se presentó una polarización digital entre los defensores y los detractores del Gobierno del presidente Andrés Manuel López Obrador. Este tipo de interacciones también se presentaron en las elecciones presidenciales en los Estados Unidos en la contienda entre Joe Biden y Donald Trump.

En el capítulo tres, Peña-Ramos y Pina examinan el estatus de la democracia liberal tras la pandemia desde una perspectiva europea. La crisis sanitaria generó un deterioro del modelo porque recientemente no había enfrentado riesgos como la COVID-19. La base de la democracia es la cantidad de derechos y libertades, los cuales fueron limitados para combatir la enfermedad. El modelo liberal para enfrentar los efectos económicos tuvo que recurrir a un Estado benefactor desde la perspectiva de Keynes y que este asumiera la responsabilidad desde una óptica intervencionista en la creación de infraestructura de salud, incluso el resurgimiento de gobiernos populistas (p. 53).

El cuarto capítulo, escrito por Islas y Arribas, versa sobre las consecuencias en la década por venir, 2020-2030. Se analizan diferentes escenarios, tanto previos como futuros, sobre un mundo sin epidemias, en donde vendrán años difíciles de recuperación económica. La forzada cuarentena hizo necesaria la búsqueda de nuevos hábitos de higiene y la búsqueda de vacunas (p. 71), lo cual implicó un fuerte gasto y negociación a nivel internacional para ser de los primeros en alcanzarla. Para los autores, la pandemia «ofreció una radiografía del deterioro de los servicios de salud fuera de las capitales y de las grandes ciudades latinoamericanas» (p. 73). La mayoría de los países en la región experimentó números negativos de crecimiento económico.

El quinto capítulo, redactado por López-Ruiz, nos presenta un estudio de caso sobre la inversión y la percepción de la higiene de manos. Es un estudio interesante porque uno de los insumos necesarios es el agua potable, ya que «un tercio de la población mundial carece del acceso a servicios de agua» (p. 89). La evidencia que se presenta en este texto se enfoca en la importancia del lavado de manos, la efectividad del uso de jabón y el extendimiento del uso de desinfectantes de manos a base de alcohol, lo cual incluso provocó en algunos países su escasez y el alza de los precios de los insumos necesarios para su elaboración. Aunque limitado el acceso, sí se pudo identificar algunos incrementos, aunque las inversiones públicas fueron desiguales en higiene (p. 103).

En el capítulo sexto encontramos la investigación de López-Rodríguez, que versa sobre la unidad militar durante la pandemia de la COVID-19 en España. Ante la insuficiencia de las estructuras de salud, algunos Gobiernos utilizaron la infraestructura militar como apoyo; este fue el caso del Gobierno español con la Unidad Militar de Emergencias (UME), la cual fue creada en 2005, y que ya tenía experiencia en atender otras circunstancias. En 2021 la UME desplegó «3.583 efectivos distribuidos por el territorio» (p. 118), por lo cual incrementó su presencia, no solo en incendios y fenómenos meteorológicos, sino en la atención al repunte masivo de casos e infecciones de la COVID-19.

El séptimo capítulo, de Dávila Aguirre, estudia los factores que impactaron en el comportamiento intraemprendedor en empresas de servicios durante la pandemia en México. El funcionamiento de las empresas fue uno de los principales problemas de la contingencia, pues algunas cerraron de manera definitiva, mientras otras implementaron algunas estrategias para mantenerse a flote. Este texto aborda el comportamiento de los empleados a la par que el estrés ocupacional debido a la excesiva presión que se tiene en el entorno de trabajo (p. 132). La evidencia empírica que presenta es interesante porque examina si el estrés es determinante para mantener buen ánimo entre los trabajadores.

En el capítulo ocho, escrito por Santana, Gallardo y De la Serna, se examinan las experiencias docentes con las tecnologías para la educación remota de emergencia. Los Gobiernos en más de 166 países cancelaron clases presenciales e implementaron clases en línea (p. 149). Se popularizaron diferentes plataformas como Zoom, Webex, Google Meets, Teams, entre otras, para impartir la docencia, pero también como medio para organizar foros y seminarios. Esto provocó que tanto estudiantes como docentes se adaptaran y capacitaran en nuevos recursos tecnológicos, desde recursos *e-learning*, Entornos Virtuales de Aprendizaje (EVA), entre otros. En particular, aumentaron las oportunidades para mejorar las clases, pero también se generaron problemas para captar la atención de los estudiantes, ya que para algunos fue muy sencillo, y no tanto para otros.

En el noveno capítulo, De Curiel y Barredo discuten sobre la COVID-19 y las transformaciones comunicacionales en grupos indígenas en Colombia, el caso de los Wayuu, Manaure, Maicao y Riohacha en el año 2021. Se preguntan cuánto ha influido la tecnología en la comunicación personal y colectiva como grupo. Se trata de indagar los métodos de transmisión de información. Por un lado, «la oralidad es el canal más

utilizado dentro de la cultura Wayuu para la transmisión de información» (p. 173), aunque las redes sociales representaron un medio alternativo de comunicación, no solo entre ellos, sino con familiares o grupos que están en otras ciudades o entornos, aunque también representan un desafío, como mantener vivo el lenguaje nativo frente al idioma español de los dispositivos.

El capítulo diez aporta una investigación de Blázquez y Alarcón, la cual versa sobre las condiciones del teletrabajo y la conciliación en España: un análisis con perspectiva de género del impacto de la COVID-19. «La Ley de Teletrabajo en 2020 obligó a todas las personas que realizaban actividades que no se consideraron trabajo esencial a quedarse en casa» (p. 187). Es relevante mencionar que no todos los Gobiernos implementaron decretos o legislaciones como en España, pero todos implementaron medidas para el distanciamiento social. Este texto da cuenta de algunos efectos. La investigación diferencia entre trabajo a distancia, teletrabajo y trabajo presencial. El teletrabajo tiene el potencial tanto de mejorar la conciliación como de empeorarla (p. 191). También ofrecen evidencia de quiénes fueron los más afectados, si hombres o mujeres.

El onceavo capítulo está a cargo de Hernández y Cárdenas, «Discursos y medidas gubernamentales frente la violencia contra las mujeres en México y España en el contexto de la pandemia de COVID-19». Para los autores, la emergencia sanitaria provocó «impactos sociales negativos, como el aumento de la pobreza y el desempleo» (p. 215), aunados a los problemas de interacción social. También se presentaron desigualdades entre hombres y mujeres, lo que afectó más a las mujeres (p. 216), unido al contexto de violencia doméstica y al mantenimiento de estereotipos. Esto ocurrió en medio de una respuesta no tan favorable del Gobierno de Andrés Manuel López Obrador sobre el movimiento feminista y sus demandas, a quien se le cuestiona «una clara falta de sensibilidad y perspectiva de género» (p. 230).

El capítulo doce, escrito por Recuero, lleva por título «Democracia, digitalización y covid-19: un análisis de la percepción de los ciudadanos de la Unión Europea». En todo el mundo el arribo de la pandemia de la COVID-19 trajo importantes transformaciones, y en Europa no fue la excepción. Una lucha entre derechos y libertades y acciones para combatir la enfermedad. Como alternativa para la realización de elecciones se introdujeron nuevas tecnologías (p. 241). Uno de los elementos que se debe considerar es la satisfacción de los ciudadanos con la democracia, en donde en la parte más alta se encuentran Dinamarca y Finlandia (más de 7), mientras que en la parte más baja están Bulgaria y Polonia (menos de 3). Respecto de la confianza en el gobierno, los indicadores son más o menos similares, igual que la confianza en los sistemas sanitarios. La evidencia empírica del texto arroja que la pandemia y la percepción ciudadana de la democracia y, por consiguiente, su legitimidad se ha deteriorado (p. 259).

En el décimo tercer capítulo Collado y Valencia examinan los argumentos negociacionistas al poder: discursos y acción política en Trump, Bolsonaro y Magufuli ante la crisis de la COVID-19. En esta investigación se destacan elementos como la posverdad y las *fake news*, a lo cual deberíamos incluir el uso de Twitter como un mecanismo de comunicación y de presión política. Estos líderes políticos, distintos entre si, están

al frente de regímenes políticos con diferente grado de consolidación: Estados Unidos, considerado una democracia plena; Brasil, una democracia defectuosa, y Tanzania, un régimen no democrático. Lo que estaba en juego era la capacidad de respuesta ante una amenaza sanitaria, que en su mayoría fue tardía.

En el último capítulo, «¿Es igualitario el teletrabajo? Percepciones de la ciudadanía en tiempos de pandemia en España», escrito por Barros y García, se examinan las «consecuencias en el ámbito laboral [...] especialmente tras la paralización de todas las actividades económicas» (p. 283), lo cual en algunos casos implicó que algunos realizaran trabajo en casa, pero en otros, su despido, y así, el surgimiento de una crisis económica. En ese sentido, el texto discute los alcances del teletrabajo y el *coworking*, lo cual representó una complejidad en sí misma. Los autores discuten sobre los efectos positivos y negativos, en los primeros, la ausencia de desplazamientos, y en los segundos, aislamiento social y estrés personal (p. 285). Aunque el teletrabajo no es nuevo, se extendió durante la pandemia y emerge su uso como alternativa a largo plazo. Finalmente, también analizan los efectos del cuidado de la familia, de los hijos en clases en línea y sobre la organización del tiempo.

La obra de Daniel Javier de la Garza Montemayor y José Antonio Peña-Ramos representa un gran aporte a los estudios sobre el funcionamiento de la democracia, particularmente sobre los efectos de la pandemia. En ese sentido, hay temas fundamentales que se abordan desde una perspectiva actual. La evidencia empírica de este libro es relevante porque permite examinar las capacidades institucionales de los Gobiernos sobre temas específicos y cómo diferentes países enfrentaron a un adversario que no era el comunismo como en el siglo pasado, sino un enemigo invisible que fue capaz de resucitar las recetas de un modelo de intervención económica que parecía derrotado a principios del siglo XXI. La obra es panorámica, exhaustiva, académica y, sin duda, un referente útil para comprender los años por venir.

