

Revista **CENTRA** de Ciencias Sociales

CENTRA Journal of Social Sciences

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2024 · vol. 3 · no. 2

Revista **CENTRA** de Ciencias Sociales

CENTRA Journal of Social Sciences

Revista **CENTRA** de Ciencias Sociales
CENTRA Journal of Social Sciences

2024 | vol. 3 | No. 2

ISSN: 2951-6641 (paper); 2951-8156 (online)

DL: SE 974-2022

<https://centracs.es/revista>

Published by

Fundación Pública Andaluza Centro de Estudios Andaluces (CENTRA)
Consejería de la Presidencia, Interior, Diálogo Social y Simplificación Administrativa, Junta de Andalucía
Avda. Blas Infante s/n. Coria del Río. 41100 Seville
Tlf: 955 055 210 - Fax: 955 055 211

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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

Video Game Addiction among the Adolescent Population of Andalusia

Adicción a los videojuegos entre la población adolescente de Andalucía

Patricia Ayllón-Salas

patriay@correo.ugr.es

Manuel-Enrique Lorenzo-Martin

profesor.manuel.lorenzo@gmail.com

Daniel Camuñas-García

danielcg@ugr.es

Francisco-Javier Hinojo-Lucena

fhinojo@ugr.es

University of Granada, Spain

Received/Recibido: 08/01/2024

Accepted/Aceptado: 05/03/2024



ABSTRACT

The aim of this study was to assess the video game habits of adolescents in Andalusia, determining the extent of addiction and examining its relationship with socioemotional competence, particularly in the domain of self-control. Data on video game activity and socioemotional competence were collected from a non-probabilistic sample of 3,579 secondary school students in Andalusia. Results indicate that, overall and across different provinces, the most common profile is that of occasional gamers with low addiction levels. However, adolescents at risk of addiction exhibit lower socioemotional competence, particularly in terms of self-control. These findings underscore the importance of implementing interventions to enhance socioemotional skills among adolescents, thereby mitigating potential risks associated with excessive video game use.

KEYWORDS: behavioral disorders; addiction; video games; social and emotional learning; self-control; adolescents.

HOW TO REFERENCE: Ayllón-Salas, P., Lorenzo-Martín, M. E., Camuñas-García, D. e Hinojo-Lucena, F. J. (2024). Adicción a los videojuegos entre la población adolescente de Andalucía. *Revista Centra de Ciencias Sociales*, 3(2), 11-30. <https://doi.org/10.54790/rccs.89>

The Spanish (original) version can be read at <https://doi.org/10.54790/rccs.89>

RESUMEN

El objetivo de este estudio fue conocer y analizar la actividad con videojuegos de la población adolescente andaluza con el propósito de establecer su grado de adicción, así como la relación de esta actividad con el nivel de competencia socioemocional, sobre todo con el área de autocontrol. Para ello se han tomado medidas de la actividad con videojuegos y la competencia socioemocional a una muestra no probabilística de 3.579 estudiantes de educación secundaria obligatoria de la comunidad autónoma de Andalucía. Los resultados revelan que tanto en términos generales como por provincias, el perfil de jugador ocasional de videojuegos, con un bajo nivel de adicción a esta actividad, es el que predomina en mayor medida, sin apreciarse diferencias entre los participantes en función de las provincias de procedencia. Sin embargo, los adolescentes que se encuentran en una situación de riesgo de adicción a esta actividad manifiestan poseer un menor nivel de competencia socioemocional, sobre todo en el autocontrol. Por tanto, la necesidad de diseñar, aplicar y evaluar medidas de intervención dirigidas a mejorar la competencia socioemocional entre los adolescentes, y así prevenir este tipo de problemas, parece estar más que justificada.

PALABRAS CLAVE: trastornos comportamentales; adicción; videojuegos; aprendizaje social y emocional; autocontrol; adolescentes.

1. Introduction

In contemporary society, technology plays an increasingly crucial role in people's lives (Spanish Ministry of Health, Social Services and Equality, 2018). The development of the internet, computers, smartphones and other electronic devices has resulted in a significant increase in the hours individuals spend in front of screens in Spain (Spanish Observatory on Drugs and Addictions, 2023). This rise has generated growing concern over excessive technology use over the past decade (Spanish Ministry of Health, Social Services and Equality, 2018).

The abusive use of technology has substantial implications across various aspects of life, including personal areas such as health, leisure and socialisation (López-Gómez *et al.*, 2022). These negative effects primarily impact new generations, who have been exposed to technology from birth, influencing the construction of their identity, social interactions and emotional well-being (López-Gómez *et al.*, 2022). Excessive consumption of electronic devices and drug addiction exhibit a similar pattern characterised by loss of control (Marco and Chóliz, 2017). Thus, problematic and continued technology use can lead to the development of recognised addictions, including behavioural addictions, substance-free addictions and technological addictions (Spanish Ministry of Health, Social Services and Equality, 2018).

According to the Spanish Video Game Association (2022), video games have established themselves as the primary choice for audiovisual entertainment, with over 18 million people—approximately 50% of the Spanish population aged 6 to 64—participating in gaming last year. Furthermore, Spaniards dedicated an average of 7.42 hours per week to playing video games, with the 6-to-24 age group spending the most time on this activity (Spanish Video Game Association, 2022). In Andalusia,

10.2% of individuals report playing daily. The data reveal a striking consumption pattern during adolescence, as 42.6% of children aged 12 to 13 report doing so daily. However, among girls, this percentage drops significantly to 13.9% (Social Services and Dependency Agency of Andalusia, 2019).

It is undeniable that play takes on a fundamental role in the early stages of human development. Through play, young people have the opportunity to explore, experiment and construct their understanding of their environment. This process enables them to acquire knowledge, develop key skills such as creativity and problem-solving, assimilate social norms that contribute to their moral development and values, incorporate gender roles and experience significant emotional growth. Thus, play is not only a recreational activity but also an essential component of the holistic development of individuals in their early life stages (López-Gómez *et al.*, 2022). Video games are regarded as highly beneficial tools for enhancing declarative and procedural knowledge, as well as information retention (Riopel *et al.*, 2020). Therefore, in the educational context, they can provide significant advantages across nearly all academic disciplines, with particular emphasis on areas such as foreign languages and sciences (Martinez *et al.*, 2022). Specifically, among video games, there are those known as “serious games”, whose primary objective is learning rather than entertainment (Riopel *et al.*, 2020).

However, video games also have disadvantages due to their intrinsic characteristics, such as the sense of mastery and self-determination, appealing aesthetics, performance feedback and immersion in reality, among other aspects. The design structure can affect one's control ability, facilitating abusive and inappropriate use that may lead to addictive behaviour (Marco and Chóliz, 2017).

Addiction is a behaviour over which the individual has limited control, leading to harmful consequences (West, 2001). This ongoing behaviour can result in the development of non-substance-related disorders, defined as addictive disorders that do not involve the ingestion of a psychoactive substance (Kardefelt-Winther *et al.*, 2017). Consequently, internet gaming disorder is included in the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) (American Psychiatric Association, 2013). This disorder is characterised by recurrent use of the internet to engage in gaming, resulting in clinically significant impairment or distress manifested by the following symptoms (American Psychiatric Association, 2013): (1) preoccupation with gaming; (2) withdrawal symptoms when gaming is taken away or not possible; (3) the need to spend increasing amounts of time on internet games; (4) unsuccessful attempts to control gaming; (5) loss of interest in other hobbies and leisure activities due to gaming; (6) excessive and continued gaming despite the development of psychosocial problems; (7) deception of others regarding consumption; (8) use of gaming to relieve negative moods; (9) jeopardising important relationships or educational or career opportunities due to gaming. Similarly, gaming disorder was included in the eleventh revision of the International Classification of Diseases (ICD-

11) (World Health Organization, 2024). Unlike internet gaming disorder, it is triggered by gaming behaviours both offline and online, and is characterised by the presence of the following elements (World Health Organization, 2024): (a) loss of control; (b) prioritisation of gaming over other aspects of life; and (c) continued gaming despite negative consequences, persisting for at least 12 months.

Among the variables shown to be related to video game addiction are: (a) age (Social Services and Dependency Agency of Andalusia, 2019; Spanish Observatory on Drugs and Addictions, 2023); (b) gender (Social Services and Dependency Agency of Andalusia, 2019; Spanish Observatory on Drugs and Addictions, 2023); (c) characteristics of the video game (e.g., preferred genre, type of gaming device) (Darvesh *et al.*, 2020); (d) other leisure activities (e.g., reading habits, attending exhibitions, museums, concerts, cinema, theatre and engaging in outdoor activities) (Social Services and Dependency Agency of Andalusia, 2019); (e) dysfunctional family relationships (Torres-Rodríguez *et al.*, 2018); (f) psychological or health issues (e.g., depression, anxiety, attention deficit hyperactivity disorder) (Social Services and Dependency Agency of Andalusia, 2019; Darvesh *et al.*, 2020); (g) social problems (Torres-Rodríguez *et al.*, 2018); (h) academic performance (Social Services and Dependency Agency of Andalusia, 2019; Darvesh *et al.*, 2020); (i) personality traits (Torres-Rodríguez *et al.*, 2018); (j) personal skills (e.g., decision-making, reaction time) (Darvesh *et al.*, 2020); (k) emotional intelligence (Torres-Rodríguez *et al.*, 2018); (l) life satisfaction (Social Services and Dependency Agency of Andalusia, 2019); and (m) self-control (Social Services and Dependency Agency of Andalusia, 2019; Kim *et al.*, 2007; Quancai *et al.*, 2023).

Specifically, self-control is closely linked to addictive behaviours, particularly in the context of video game addiction (Quancai *et al.*, 2023). It is considered a key component of socio-emotional competencies and is defined as the ability to regulate emotions, manage stress, self-motivate, exercise self-control, set goals and develop organisational skills (Clarke *et al.*, 2021). Thus, it plays a crucial psychological role by enabling individuals to actively manage their thoughts, emotions and behaviours, thereby suppressing negative behavioural responses (Quancai *et al.*, 2023). Therefore, the weaker an individual's self-control, the more likely they are to develop a video game addiction (Social Services and Dependency Agency of Andalusia, 2019; Kim *et al.*, 2007; Quancai *et al.*, 2023).

Although problematic video game use has been extensively studied, some authors argue that it is a particularly controversial and challenging topic to assess, underscoring the need for further rigorous investigations in this area (López-Gómez *et al.*, 2022; Kardefelt-Winther *et al.*, 2017; Rosendo-Ríos *et al.*, 2022). Furthermore, there is a clear need for additional studies that explore the relationship between socio-emotional competencies and video game addiction, extending beyond self-control alone. This will facilitate the design and implementation of more effective intervention programmes aimed at preventing and mitigating video game-related addictions.

Therefore, the overall aim of this study was to understand and analyse the video game activity of the adolescent population in Andalusia to determine their level of addiction, as well as the relationship between this activity and their level of socio-emotional competence, particularly with regard to self-control. In this context, the following specific objectives were set: (1) to describe the video game activity of Andalusian adolescents, identifying different types or profiles of players to determine overall and provincial levels of addiction; (2) to examine whether there are differences in video game activity and socio-emotional competence among participants based on their province of origin; (3) to determine the relationship between the video game activity of Andalusian adolescents and their level of socio-emotional competence, with particular attention to self-control; and (4) to investigate whether there are differences in socio-emotional competence, especially in self-control, among the different types or profiles of players identified.

2. Method

2.1. Sample

The sample comprised 3,579 students in compulsory secondary education, including 994 in the first year (27.77%), 924 in the second year (25.82%), 890 in the third year (24.87%) and 771 in the fourth year (21.54%), from 22 secondary schools in the eight provinces of Andalusia (two from Almería = 412, three from Cádiz = 466, two from Córdoba = 408, three from Granada = 454, two from Huelva = 388, two from Jaén = 395, four from Málaga = 521 and four from Seville = 535). The mean age of participants was 13.46 years ($SD = 1.34$), with an age range of 11 to 17 years. The gender distribution included 1,668 males (46.61%) and 1,911 females (53.39%).

The sample selection procedure was non-probabilistic and based on convenience (Vehovar *et al.*, 2016). The sample size was determined according to the study's objectives, taking into account the number of students enrolled in compulsory secondary education in Andalusia as a whole and in each of its provinces: Almería (36,477), Cádiz (61,672), Córdoba (33,952), Granada (42,309), Huelva (25,770), Jaén (27,286), Málaga (79,440) and Seville (100,365) (Andalusian Regional Government Department of Educational Development and Professional Training, 2023). In this context, using the target population data, with a confidence level of 95% and a margin of error of 5%, the minimum sample size was determined for each province ($n = 384$). However, the sample size exceeds the minimum established in various simulation studies for structural models similar to those proposed in this study (Tomarken and Waller, 2005). Additionally, the minimum sample size required for the specified model with greater structural complexity was also calculated ($n = 200$) for further assurance.

2.2. Instruments

The *Spanish version of the Internet Gaming Disorder Test* (Fuster *et al.*, 2016), aligned with the original version (Pontes *et al.*, 2014), is a Likert scale comprising 20 items rated from one to five points (e.g., 1 = Strongly disagree; 2 = Disagree; 3 = Neither agree nor disagree; 4 = Agree; and 5 = Strongly agree). These items are organised into six dimensions: (a) Salience: concern about the time spent gaming; (b) Mood modification: dedicating time to play to escape or alleviate negative mood states; (c) Tolerance: devoting excessive time to gaming despite awareness of the associated problems; (d) Withdrawal symptoms: irritability, nervousness, anxiety, sadness, etc., when reducing or withdrawing from gaming; (e) Conflict: loss of interest in other activities, lying to others about gaming time and jeopardising or losing a significant relationship, job or educational opportunity due to gaming; and (f) Relapse: unsuccessful attempts to control gaming time. The scores on this test range from 20 to 100 points, categorising players into five types or subgroups: (a) Casual players (score below 45); (b) Regular players (score between 45 and 54); (c) Low-risk players (score between 55 and 64); (d) High-risk players (score between 65 and 74); and (e) Players with disorder (score above 75). This test assesses gaming activity among Spanish adolescents and young adults, both online and offline, over the past 12 months. It incorporates the diagnostic criteria for Internet Gaming Disorder from the *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)* (American Psychiatric Association, 2013) and the six dimensions of Griffiths' (2005) addiction model. It demonstrates adequate internal consistency (Cronbach's alpha of 0.87) and validity, evidenced by tests with excellent goodness-of-fit indices confirming its internal structure (Fuster *et al.*, 2016). In this study, it yielded an α of 0.89 and a McDonald's omega (ω) of 0.92, while the confirmatory factor analysis (CFA) showed adequate indices and goodness-of-fit statistics: Chi-square (χ^2) (98; $n = 3,579$) = 464.41; $p < 0.00$; $\chi^2/\text{degrees of freedom (df)} = 4.73$; comparative fit index (CFI) = 0.91; goodness-of-fit index (GFI) = 0.96; standardised root mean square residual (SRMR) = 0.77; root mean square error of approximation (RMSEA) = 0.07 (90% confidence interval [CI] = 0.06–0.07).

The Social and Emotional Learning Scale (Fernández *et al.*, 2022) is a Likert-type measure consisting of 30 items rated on a four-point scale (1 = Never or rarely; 2 = Occasionally; 3 = Often; and 4 = Almost always or always), grouped into five areas of socio-emotional competence: (a) Self-awareness: skills to accurately recognise one's own emotions, thoughts and values and how they influence behaviour, including the ability to assess one's strengths and limitations with confidence, optimism and a growth mindset; (b) Social awareness: skills to empathise with and understand the perspectives of others from diverse contexts and cultures, including the ability to advocate for one's ideas without belittling others; (c) Self-management: skills to effectively regulate one's own emotions, thoughts and behaviours in different situations, including the ability to set academic goals and work towards achieving them with self-discipline and self-motivation, using

planning and organisational strategies; (d) Relationship skills: skills to establish and maintain healthy and enriching relationships with diverse individuals and groups, including the ability to communicate clearly and effectively, listen actively and cooperate with others; and (e) Responsible decision-making: skills to make constructive decisions about personal behaviour and social interactions based on ethical standards, safety and social norms, including the realistic evaluation of the consequences of various actions and consideration of the well-being of oneself and others, as well as identifying problems, proposing solutions and taking actions that contribute to improving the immediate environment. The scores for each of the five areas range from one to five points, with a higher score indicating a higher level of socio-emotional competence. This scale is one of the few instruments available to measure socio-emotional competencies in Spanish adolescents and young people. Its psychometric properties are adequate, demonstrating reliability (α ranging from 0.70 to 0.84, and ω ranging from 0.71 to 0.84, with composite reliability and extracted variance indices exceeding 0.77 and 0.67, respectively, in the different areas of socio-emotional competence) and validity (tests with excellent goodness-of-fit indices confirming its internal structure and predictive validity for academic performance and life satisfaction) (Fernández *et al.*, 2022). In the sample used for this study, the scale yielded α values ranging from 0.75 to 0.84 and ω values from 0.76 to 0.85. The CFA showed adequate indices and goodness-of-fit statistics: $\chi^2(395; n = 3,579) = 808.08; p < 0.05; \chi^2/df = 2.04; CFI = 0.92; GFI = 0.95; SRMR = 0.08; RMSEA = 0.07$ (90% CI = 0.07–0.07).

The Socio-Demographic, Academic and Gaming Data Questionnaire is a self-report developed *ad hoc*, consisting of seven items with various response options. It is designed to gather relevant socio-demographic (i.e., age and gender), academic (i.e., secondary school and year) and gaming information (i.e., number of hours of gaming per week, platforms used for gaming and favourite game types or genres) from the participants.

2.3. Design and procedure

This research adopted a cross-sectional predictive methodological design (Ato *et al.*, 2013).

Regarding the procedure, once the necessary institutional permissions were requested and granted by the Research Ethics Committee of the University of Granada (3494/CEIH/2023), telephone contact was made with a member of the management team of 22 secondary schools in the eight provinces of Andalusia (two in Almería, three in Cádiz, two in Córdoba, three in Granada, two in Huelva, two in Jaén, four in Málaga and four in Seville) to request their voluntary participation in the research and to obtain a sample of adolescents from Andalusia. The purpose and procedure of the study were explained to them, and they were then sent an email containing the following documentation: (a) an introduction letter detailing the objectives and procedures of the research,

as well as the anonymous and voluntary nature of their participation; (b) an information document for participants, providing basic information about the project, participation in the research and data processing for participating students; (c) an informed consent form for the participants; and (d) a digital copy of the measurement instruments.

Subsequently, once the participation of the educational centres in the research was confirmed, the instruments were administered to the participating students using the computer-assisted web interviewing technique (Couper and Bosnjak, 2010). However, prior to this, the information document for participants and the informed consent forms for participants' parents and guardians were distributed by the participating educational centres through the teachers-tutors of their class groups. The administration of the instruments to the participating students was conducted collectively during class time in each reference class group, with the presence of their respective teacher-tutor. This process was carried out by a member of the research team, who first informed the students of the study's objective, the voluntary nature of their participation and the confidentiality of their responses. Subsequently, the written instructions provided in the online form were supplemented with oral explanations from the researcher, and the queries raised by the participants were addressed. The participants completed the instruments within a timeframe of 35 to 40 minutes. The data were collected during October and November 2023.

2.4. Data analysis

Initially, a descriptive analysis of the collected data was conducted, assessing distribution, linearity, outliers, missing values and influential points (Tabachnick and Fidell, 2019). Prior to this, the minimum sample size required for the specified model with greater structural complexity was calculated, considering the number of observed variables (30) and latent variables (5), the expected effect size (0.10), the associated probability (0.05) and the desired levels of statistical power (0.80) (Soper, 2023).

Secondly, to examine the theoretical structure of the Spanish version of the Internet Gaming Disorder Test (Fuster *et al.*, 2016), a confirmatory factor analysis (CFA) of six first-order factors correlated with each other was performed. In the case of the Social and Emotional Learning Scale (Fernández *et al.*, 2022), a CFA of five first-order factors was executed. The CFAs were estimated using the weighted least squares (WLS) method, employing various indices to assess goodness of fit (Hu and Bentler, 1999; Kline, 2015): (a) χ^2 , which should not be statistically significant; however, due to its sensitivity to sample size, the χ^2/df ratio, which should be below 5, is also considered; (b) CFI and GFI, which should yield values greater than 0.90; and (c) SRMR and RMSEA, which should yield values less than 0.08. Furthermore, to assess the internal consistency of both instruments, the α and ω were calculated, with values expected to exceed 0.70 (Hair *et al.*, 2014).

Subsequently, a Kruskal–Wallis H test for independent samples was conducted (e.g., gaming activity, hours of play and socio–emotional competence) alongside Pearson’s chi–square (χ^2) (i.e., platforms, types of games and players) to identify differences in the study variables among participants by province. Following this, Spearman’s rank correlation (r) was used to correlate the various variables associated with gaming activity, hours of play, socio–emotional competence and age.

Next, a second Kruskal–Wallis H test for independent samples was performed (i.e., age, gaming activity, hours of play and socio–emotional competence), along with χ^2 (i.e., gender, school year, platforms, types of games and players) to identify differences in the study variables based on player types.

Finally, the family–wise error rate resulting from the multiple comparisons problem was controlled using the Bonferroni correction.

Statistical analyses were conducted using Stata v17 (StataCorp, College Station, TX, USA).

3. Results

The descriptive statistics for the various variables considered in the study are shown in Table 1. The values of skewness and kurtosis, as well as the Kolmogorov–Smirnov statistic, reveal a univariate non–normal distribution in all variables, while Mardia’s multivariate skewness (93.42; $\chi^2 = 55,776.80$; $p < 0.001$) and kurtosis (1,116.22; $\chi^2 = 11,373.05$; $p < 0.001$) coefficients indicate that the joint distribution of the variables does not fit the multivariate normal distribution. This justifies the choice of the WLS estimator for the CFA and non–parametric tests for hypothesis testing. No missing values were detected, and outliers identified through Mahalanobis distance were processed using robust estimators. The descriptive analysis of the variables reveals that most Andalusian adolescents, both overall (Table 1) and by province (Table 2), play video games occasionally, mainly strategy video games on tablets or smartphones. In general, the participants in this study score low on the different dimensions of video game addiction, although it should be noted that nearly 5% of them are at risk of addiction to this activity. Furthermore, regarding the level of socio–emotional competence shown by Andalusian adolescents, it should be highlighted that their relationship skills are at an adequate level, although self–control stands out as the most limited dimension. Finally, no statistically significant differences were identified in video game activity, hours of play, platforms, types of games, types of players and socio–emotional competence among participants based on their province of origin.

Table 1*Overall descriptive statistics (Autonomous Community of Andalusia)*

Variables	M (SD)	N (%)	SK	KU	K-S
Video game activity					
Saliency	1.52 (0.70)	-	1.44	1.64	0.27***
Mood modification	2.17 (1.02)	-	0.58	-0.51	0.14***
Tolerance	1.49 (0.67)	-	1.41	1.34	0.29***
Withdrawal symptoms	1.34 (0.57)	-	2.02	4.59	0.36***
Conflict	1.58 (0.54)	-	0.85	0.80	0.16***
Relapse	1.50 (0.54)	-	1.38	1.64	0.30***
IGD-20	31.90 (10.72)	-	1.18	1.03	0.17***
Number of hours of play per week	4.48 (6.03)	-	2.94	10.70	0.26***
Platforms					
None	-	121 (3.38)	-	-	-
Personal computer (desktop or laptop)	-	977 (27.30)	-	-	-
Console (desktop or laptop)	-	611 (17.07)	-	-	-
Other device (tablet, smartphone)	-	1,870 (52.25)	-	-	-
Types of games					
None	-	126 (3.52)	-	-	-
Action	-	692 (19.33)	-	-	-
Strategy	-	1,545 (43.17)	-	-	-
Role-playing games	-	252 (7.04)	-	-	-
Adventure	-	715 (19.98)	-	-	-
Sports	-	249 (6.96)	-	-	-
Types of players					
Occasional	-	3,069 (85.75)	-	-	-
Regular	-	350 (9.78)	-	-	-
Low risk	-	134 (3.75)	-	-	-
High risk	-	22 (0.61)	-	-	-
Disordered	-	4 (0.11)	-	-	-
Socio-emotional competence					
Self-awareness	3.09 (0.56)	-	-0.38	-0.38	0.10***
Social awareness	3.18 (0.48)	-	-0.24	-0.34	0.09***
Self-control	2.94 (0.53)	-	-0.23	-0.25	0.07***
Relationship skills	3.55 (0.43)	-	-1.24	1.99	0.16***
Responsible decision-making	3.35 (0.51)	-	-0.54	-0.33	0.12***

N.B.: M: mean; SD: standard deviation; N: total number; %: percent; SK: skewness; KU: kurtosis; K-S: Kolmogorov-Smirnov;
*** $p < 0.001$.

Table 2
Descriptive statistics and contrasts by provinces

Variables	1 M/N (SD)	2 M/N (SD)	3 M/N (SD)	4 M/N (SD)	5 M/N (SD)	6 M/N (SD)	7 M/N (SD)	8 M/N (SD)	H/ χ^2 (df)
Video game activity									
Salience	1.54 (0.71)	1.50 (0.70)	1.49 (0.66)	1.52 (0.69)	1.53 (0.72)	1.52 (0.72)	1.52 (0.69)	1.51 (0.71)	1.39 (7)
Mood modification	2.18 (1.01)	2.17 (1.02)	2.16 (1.00)	2.13 (1.00)	2.18 (1.04)	2.20 (1.03)	2.17 (1.02)	2.16 (1.02)	1.17 (7)
Tolerance	1.50 (0.67)	1.50 (0.68)	1.46 (0.64)	1.47 (0.64)	1.50 (0.70)	1.51 (0.69)	1.49 (0.68)	1.48 (0.68)	1.03 (7)
Withdrawal symptoms	1.34 (0.56)	1.35 (0.59)	1.34 (0.56)	1.32 (0.56)	1.34 (0.57)	1.34 (0.60)	1.34 (0.58)	1.33 (0.58)	0.89 (7)
Conflict	1.60 (0.54)	1.58 (0.56)	1.57 (0.52)	1.56 (0.51)	1.60 (0.55)	1.57 (0.56)	1.58 (0.54)	1.57 (0.55)	2.88 (7)
Relapse	1.54 (0.72)	1.49 (0.66)	1.48 (0.64)	1.49 (0.64)	1.52 (0.69)	1.49 (0.68)	1.49 (0.68)	1.49 (0.66)	1.19 (7)
IGD-20	32.29 (10.92)	31.95 (10.85)	31.67 (10.13)	31.55 (10.17)	32.20 (11.09)	31.99 (11.06)	31.91 (10.81)	31.77 (10.76)	0.92 (7)
Number of hours of play per week	4.33 (5.97)	4.53 (6.03)	4.24 (5.45)	4.40 (6.20)	4.90 (6.68)	4.59 (5.87)	4.23 (5.51)	4.64 (4.47)	3.62 (7)
Platforms									
None	12	14	18	15	12	12	19	19	18.25 (21)
Personal computer (desktop or laptop)	110	133	105	126	107	112	147	137	
Console (desktop or laptop)	64	94	59	70	71	81	78	94	
Other device (tablet, smartphone)	226	225	226	243	198	190	277	285	
Types of games									
None	12	14	19	16	13	12	20	20	16.99 (35)
Action	90	97	81	84	77	64	95	104	
Strategy	172	185	175	205	169	180	225	234	
Role-playing games	30	34	25	31	26	32	37	37	
Adventure	79	101	83	89	73	86	106	98	
Sports	29	35	25	29	30	21	38	42	
Types of players									
Occasional	350	399	352	396	332	336	441	463	10.29 (28)
Regular	40	45	44	42	36	39	56	48	
Low risk	19	18	10	14	16	16	21	20	
High risk	3	3	2	2	3	3	3	3	
Disordered	0	1	0	0	1	1	0	1	
Socio-emotional competence									
Self-awareness	3.08 (0.55)	3.08 (0.54)	3.09 (0.56)	3.11 (0.55)	3.10 (0.57)	3.08 (0.55)	3.09 (0.56)	3.10 (0.58)	2.20 (7)
Social awareness	3.19 (0.48)	3.16 (0.48)	3.18 (0.49)	3.20 (0.48)	3.17 (0.49)	3.16 (0.48)	3.18 (0.47)	3.17 (0.49)	2.22 (7)
Self-control	2.94 (0.52)	2.94 (0.54)	2.95 (0.54)	2.97 (0.53)	2.91 (0.53)	2.93 (0.53)	2.96 (0.54)	2.92 (0.53)	3.44 (7)
Relationship skills	3.56 (0.44)	3.53 (0.44)	3.55 (0.45)	3.56 (0.42)	3.56 (0.41)	3.54 (0.43)	3.56 (0.43)	3.56 (0.42)	3.12 (7)
Responsible decision-making	3.37 (0.51)	3.34 (0.51)	3.32 (0.52)	3.37 (0.51)	3.37 (0.50)	3.33 (0.52)	3.36 (0.52)	3.36 (0.51)	3.03 (7)

N.B.: M: mean; SD: standard deviation; N: total number; 1: Almería; 2: Cádiz; 3: Córdoba; 4: Granada; 5: Huelva; 6: Jaén; 7: Málaga; 8: Seville; H = Kruskal-Wallis H; χ^2 : Pearson's chi-square; df: degrees of freedom; *p < 0.007.

The correlations between the different variables associated with video game activity, socio-emotional competence and age ranged from 0.04 (age and withdrawal symptoms) to 0.80 (salience and IGD-20) (Table 3).

Table 3

Correlations between video game activity, socio-emotional competence and age

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	-													
2	0.54*	-												
3	0.71*	0.56*	-											
4	0.69*	0.51*	0.68*	-										
5	0.46*	0.31*	0.42*	0.54*	-									
6	0.70*	0.47*	0.64*	0.66*	0.48*	-								
7	0.80*	0.79*	0.78*	0.76*	0.68*	0.77*	-							
8	0.49*	0.41*	0.49*	0.37*	0.23*	0.42*	0.50*	-						
9	0.06*	0.08*	0.06*	0.04*	0.05*	0.03	0.07*	0.11*	-					
10	-0.18*	-0.14*	-0.15*	-0.17*	-0.12*	-0.17*	-0.19*	-0.10*	-0.01	-				
11	-0.12*	-0.11*	-0.16*	-0.14*	-0.10*	-0.13*	-0.17*	-0.08*	-0.04	0.44*	-			
12	-0.16*	-0.09*	-0.13*	-0.16*	-0.12*	-0.14*	-0.15*	-0.13*	-0.00	0.62*	0.41*	-		
13	-0.18*	-0.16*	-0.20*	-0.20*	-0.18*	-0.16*	-0.22*	-0.12*	-0.02	0.39*	0.43*	0.47*	-	
14	-0.12*	-0.06*	-0.12*	-0.10*	-0.05*	-0.10*	-0.11*	-0.06*	-0.03	0.42*	0.48*	0.48*	0.51*	-

N.B.: 1: Salience; 2: Mood modification; 3: Tolerance; 4: Withdrawal symptoms; 5: Conflict; 6: Relapse; 7: IGD-20; 8: Hours of play; 9: Age; 10: Self-awareness; 11: Social awareness; 12: Self-control; 13: Relationship skills; 14: Responsible decision-making; * $p < 0.001$.

For comparisons of video game activity, socio-emotional competence and age based on player types, the significance level for each multiple comparison test was adjusted using the Bonferroni correction, resulting in 0.007 for the different contrasts (0.05/7). In this context, the results of the comparisons according to player types reveal statistically significant differences in the variables associated with video game activity (e.g., dimensions of video game addiction, gaming platforms and types of games) and socio-emotional competence (Table 4).

Table 4
Comparisons of video game activity and socio-emotional competence with socio-demographic, academic and gaming variables based on player types

Variables Occasional M / N (SD)	Types of players					H / χ^2 (df)	
	Regular M / N (SD)	Low risk M / N (SD)	High risk M / N (SD)	Disordered M / N (SD)			
Saliency	1.32 (0.49)	2.42 (0.52)	3.06 (0.60)	3.73 (0.34)	4.33 (0.09)	1,172.88* (4)	
Mood modification	1.95 (0.89)	3.32 (0.77)	3.57 (0.67)	4.50 (0.41)	4.67 (0.05)	823.99* (4)	
Tolerance	1.30 (0.44)	2.54 (0.61)	2.77 (0.54)	3.50 (0.41)	3.67 (0.06)	1,253.86* (4)	
Withdrawal symptoms	1.17 (0.33)	2.19 (0.52)	2.66 (0.79)	3.18 (0.52)	3.33 (0.07)	1,466.06* (4)	
Conflict	1.46 (0.42)	2.10 (0.45)	2.73 (0.51)	2.86 (0.74)	3.80 (0.07)	849.30* (4)	
Relapse	1.33 (0.50)	2.28 (0.56)	2.82 (0.60)	3.47 (0.49)	5.00 (0.08)	1,069.15* (4)	
IGD-20	28.50 (6.71)	48.72 (3.01)	58.24 (2.78)	69.41 (3.58)	82.03 (0.05)	486.76* (4)	
Hours of play	3.38 (4.43)	10.47 (8.77)	12.10 (10.49)	14.36 (10.39)	10.00 (0.06)	1,323.86* (4)	
Age	13.45 (1.36)	13.53 (1.24)	13.42 (1.25)	13.27 (1.35)	13.75 (0.96)	2.91 (4)	
Gender							
	Male	1,429	155	69	13	2	3.42 (4)
	Female	1,640	195	65	9	2	
Academic year							
	First	871	79	37	7	0	11.06 (12)
	Second	786	98	32	6	2	
	Third	745	99	40	5	1	
	Fourth	667	74	25	4	1	
Platforms							
	None	121	0	0	0	0	225.01* (12)
	Personal computer (desktop or laptop)	752	125	91	5	4	
	Console (desktop or laptop)	481	98	24	8	0	
	Other device (tablet, smartphone)	1,715	127	19	9	0	
Types of games							
	None	126	0	0	0	0	130.76* (20)
	Action	571	71	45	5	0	
	Strategy	1,358	121	57	9	0	
	Role-playing games	226	18	0	8	0	
	Adventure	576	108	27	0	4	
	Sports	212	32	5	0	0	
Self-awareness		3.12 (0.55)	3.00 (0.58)	2.87 (0.53)	2.61 (0.55)	2.20 (0.06)	59.61* (4)
Social awareness		3.20 (0.47)	3.09 (0.49)	2.99 (0.54)	2.77 (0.31)	1.80 (0.05)	58.74* (4)
Self-control		2.97 (0.52)	2.80 (0.54)	2.69 (0.46)	2.27 (0.95)	1.10 (0.05)	95.53* (4)

Variables Occasional M / N (SD)	Types of players				H / χ^2 (df)	
	Regular M / N (SD)	Low risk M / N (SD)	High risk M / N (SD)	Disor- dered M / N (SD)		
Relationship skills	3.58 (0.39)	3.34 (0.58)	3.42 (0.50)	2.98 (0.49)	3.40 (0.04)	94.06* (4)
Responsible decision-making	3.36 (0.51)	3.34 (0.52)	3.23 (0.47)	3.12 (0.65)	2.60 (0.02)	21.17* (4)

N.B.: M: mean; SD: standard deviation; N: total number; H = Kruskal-Wallis H; χ^2 : Pearson's chi-square; df: degrees of freedom; *p < 0.007.

4. Discussion

The purpose of this research was to understand and analyse the video game activity of the adolescent population in Andalusia to determine their level of addiction, as well as the relationship between this activity and their level of socio-emotional competence, particularly with regard to self-control. Based on the results obtained, the following conclusions can be drawn: (1) the adolescent population in Andalusia generally exhibits a profile of an occasional video game player with a low level of addiction to this activity; (2) there are no differences in video game activity, hours of play, platforms, types of games, types of players or socio-emotional competence among participants based on their province of origin; (3) the variables associated with video game activity in Andalusian adolescents show an inverse relationship with their level of socio-emotional competence; and (4) adolescents at risk of addiction to this activity exhibit a lower level of socio-emotional competence, especially with regards self-control.

The results of this study stand in contrast to the findings of the specific literature previously published in Andalusia, which reports that between 20% and 30% of young people aged 12 to 20 play these types of games daily (Social Services and Dependency Agency of Andalusia, 2019). However, these differences could be attributed to the particular characteristics of the sample and the influence of other contextual variables, such as the location of schools or the socio-economic status of the families.

Although most Andalusian adolescents used tablets or smartphones to play video games, those at risk of developing an addiction tended to use personal computers more frequently. Additionally, it was observed that Andalusian adolescents predominantly preferred strategy, action and adventure games. Interestingly, participants with internet gaming disorder showed a specific preference for adventure games.

As expected, adolescents with lower levels of socio-emotional competence were the ones who spent more time playing video games. Specifically, students with lower self-awareness and relationship skills showed greater concern about the time spent on video games. Similarly, those with less developed relationship skills also spent more time playing video games, experienced withdrawal symptoms when

reducing their playing time and lost interest in other leisure activities. Additionally, regarding the differences in socio-emotional competence based on player profiles, the particularly low level of self-control exhibited by players with internet gaming disorder is noteworthy, aligning with findings from previous research (Social Services and Dependency Agency of Andalusia, 2019; Kim *et al.*, 2007; Quancai *et al.*, 2023).

The results of this study have significant implications. Adolescents with low levels of socio-emotional competence who play adventure games on personal computers are more susceptible to developing internet gaming disorder. Therefore, it is crucial to invest in intervention programmes that foster the development of socio-emotional competencies as a preventive measure against these disorders (Dieris-Hirche *et al.*, 2021). Such prevention should be implemented especially in schools, raising awareness about the risks associated with this behaviour and providing guidelines for its detection and treatment. Furthermore, it is essential to promote digital competence among students to ensure the safe, responsible, critical, healthy and sustainable use of technology (Spanish Video Game Association, 2022).

Despite the valuable insights provided by this study, it is essential to interpret the results with caution due to its limitations. On one hand, the cross-sectional predictive methodological design does not allow for the establishment of causal relationships. Therefore, future research should employ experimental or quasi-experimental designs and longitudinal research methods to enhance the study's findings and facilitate generalisation of the results. On the other hand, although the instruments used in this study have been widely employed in previous research, it is crucial to recognise that the use of self-reports may introduce biases. Additionally, future studies should consider variables such as academic performance and family context to gain a more comprehensive understanding of this issue.

5. Conclusions

In summary, video game addiction represents a growing problem that impacts the health of young people. Therefore, it is crucial to conduct research that analyses player profiles and the variables that may contribute to the development of internet gaming disorder. This will facilitate the design and implementation of effective interventions to prevent and address this phenomenon.

6. Bibliography

- Agencia de Servicios Sociales y Dependencia de Andalucía (2019). *Las adicciones comportamentales en Andalucía*. Consejería de Igualdad, Políticas Sociales y Conciliación. Junta de Andalucía.
- American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). American Psychiatric Association. <https://doi.org/10.1176/appi.books.9780890425596>
- Asociación Española de Videojuegos (2022). *La industria del videojuego en España en 2022*. <http://www.aevi.org.es/web/wp-content/uploads/2023/05/AEVI-Anuario-2022-DIGITAL.pdf>
- Ato, M., López, J. J. and Benavente, A. (2013). A classification system for research designs in Psychology. *Annals of Psychology*, 29(3), 1038–1059. <http://doi.org/10.6018/analesps.29.3.178511>
- Clarke, A., Sorgenfrei, M., Mulcahy, J., Davie, P., Friedrich, C. and McBride, T. (2021). *Adolescent mental health. A systematic review on the effectiveness of school-based interventions*. Early Intervention Foundation. <https://www.eif.org.uk/report/adolescent-mental-health-a-systematic-review-on-the-effectiveness-of-school-based-interventions>
- Consejería de Desarrollo Educativo y Formación Profesional (2023). *Estadística sobre el alumnado escolarizado en el sistema educativo andaluz, a excepción del universitario*. Junta de Andalucía. <https://www.juntadeandalucia.es/organismos/desarrolloeducativoyformacionprofesional/servicios/estadistica-cartografia/actividad/detalle/175110/175572.html>
- Couper, M. P. and Bosnjak, M. (2010). Internet surveys. In P. V. Mardsen and J. D. Wright (Eds.), *Handbook of survey research* (pp. 527–550). Emerald Group.
- Darvesh, N., Radhakrishnan, A., Lachance, C. C., Nincic, V., Sharpe, J. P., Ghassemi, M., Straus, S. E. and Tricco, A. C. (2020). Exploring the prevalence of gaming disorder and Internet gaming disorder: a rapid scoping review. *Systematic Reviews*, 9(1). <https://doi.org/10.1186/s13643-020-01329-2>
- Dieris-Hirche, J., Bottel, L., Pape, M., Te-Wildt, B. T., Wölfling, K., Henningsen, P., Timmesfeld, N., Neumann, A., Neusser, S., Beckers, R. and Herpertz, S. (2021). Effects of an online-based motivational intervention to reduce problematic internet use and promote treatment motivation in internet gaming disorder and internet use disorder (OMPRIS): Study protocol for a randomised controlled trial. *BMJ Open*, 11(83), e045840. <https://doi.org/10.1136/bmjopen-2020-045840>
- Fernández, F. D., Moreno, A. J., Marín, J. A. and Romero, J. M. (2022). Adolescents' emotions in Spanish education: Development and validation of the social and emotional learning scale. *Sustainability*, 14(7), 3755. <https://doi.org/10.3390/su14073755>

- Fuster, H., Carbonell, X., Pontes, H. M. and Griffiths, M. D. (2016). Spanish validation of the Internet Gaming Disorder–20 (IGD–20) Test. *Computers in Human Behaviors*, 56, 215–224. <https://doi.org/10.1016/j.chb.2015.11.050>
- Griffiths, M. D. (2005). A “components” model of addiction within a biopsychosocial framework. *Journal of Substance Use*, 10(4), 191–197. <https://doi.org/10.1080/14659890500114359>
- Hair, J., Black, W., Babin, B. J., Anderson, R. and Tatham, R. (2014). *Multivariate data analysis* (6th ed.). Pearson International Edition.
- Hu, L. and Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1–55. <https://doi.org/10.1080/10705519909540118>
- Kardefelt–Winther, D., Heeren, A., Schimmenti, A., van Rooij, A., Maurage, P., Carras, M., Edman, J., Blaszczynski, A., Khazaal, Y. and Billieux, J. (2017). How can we conceptualize behavioural addiction without pathologizing common behaviours? *Addiction*, 112(10), 1709–1715. <https://doi.org/10.1111/add.13763>
- Kim, E. J., Namkoong, K., Ku, T. and Kim, S. J. (2007). The relationship between online game addiction and aggression, self–control and narcissistic personality traits. *European Psychiatry*, 23(3), 212–218. <https://doi.org/10.1016/j.eurpsy.2007.10.010>
- Kline, R. B. (2015). *Principles and practice of structural equation modeling* (4th ed.). Guilford Publications.
- López–Gómez, S., Rial–Boubeta, A., Marín–Suelves, D. and Rodríguez–Rodríguez, J. (2022). Videojuegos, salud, convivencia y adicción. ¿Qué dice la evidencia científica? *Psychology, Society & Education*, 14(1), 45–54. <https://doi.org/10.21071/psye.v14i1.14178>
- Marco, C. and Chóliz, M. (2017). Eficacia de las técnicas de control de la impulsividad en la prevención de la adicción a videojuegos. *Terapia Psicológica*, 35(1), 57–69. <https://doi.org/10.4067/s0718-48082017000100006>
- Martinez, L., Gimenes, M. and Lambert, E. (2022). Entertainment video games for academic learning: a systematic review. *Journal of Educational Computing Research*, 60(5), 1083–1109. <https://doi.org/10.1177/07356331211053848>
- Ministerio de Sanidad, Servicios Sociales e Igualdad (2018). *Estrategia nacional sobre adicciones 2017–2024*. Secretaría General Técnica. Centro de Publicaciones Delegación del Gobierno para el Plan Nacional sobre Drogas. https://pnsd.sanidad.gob.es/pnsd/estrategiaNacional/docs/180209 ESTRATEGIA_N. ADICCIONES_2017-2024_ aprobada_CM.pdf
- Observatorio Español de las Drogas y las Adicciones (2023). *Informe sobre adicciones comportamentales y otros trastornos adictivos 2023: Indicador de admitidos a tratamiento por adicciones comportamentales: Juego con dinero, uso de videojuegos, uso problemático de internet y otros trastornos adictivos en las encuestas de drogas en*

- España EDADES y ESTUDES. Ministerio de Sanidad. Delegación del Gobierno para el Plan Nacional sobre Drogas.
- Pontes, H. M., Király, O., Demetrovics, Z. and Griffiths, M. D. (2014). The conceptualisation and measurement of DSM–5 Internet Gaming Disorder: the development of the IGD–20 Test. *PloS ONE*, 9(10), e110137. <https://doi.org/10.1371/journal.pone.0110137>
- Quancai, L., Meng, C. and Kunjie, C. (2023). Social control and self–control: factors linking exposure to domestic violence and adolescents' Internet gaming addiction. *Frontiers in Psychiatry*, 14. <https://doi.org/10.3389/fpsy.2023.1245563>
- Riopel, M., Nenciovici, L., Potvin, P., Chastenay, P., Charland, P., Sarrasin, J. B. and Masson, S. (2019). Impact of serious games on science learning achievement compared with more conventional instruction: An overview and a meta–analysis. *Studies in Science Education*, 55(2), 169–214. <https://doi.org/10.1080/03057267.2019.1722420>
- Rosendo–Rios, V., Trott, S. and Shukla, P. (2022). Systematic literature review online gaming addiction among children and young adults: A framework and research agenda. *Addictive Behaviors*, 129, 107238. <https://doi.org/10.1016/j.addbeh.2022.107238>
- Soper, D. S. (2023). *A–priori sample size calculator for structural equation models*. [Software] <https://www.danielsoper.com/statcalc/calculator.aspx?id=89>
- Tabachnick, B. G. and Fidell, L. S. (2019). *Using multivariate statistics* (7th ed.). Pearson.
- Tomarken, A. J. and Waller, N. G. (2005). Structural equation modeling: Strengths, limitations, and misconceptions. *Annual Review of Clinical Psychology*, 1, 31–65. <https://doi.org/10.1146/annurev.clinpsy.1.102803.144239>
- Torres–Rodríguez, A., Griffiths, M. D., Carbonell, X. and Oberst, U. (2018). Internet gaming disorder in adolescence: Psychological characteristics of a clinical sample. *Journal of Behavioral Addictions*, 7(3), 707–718. <https://doi.org/10.1556/2006.7.2018.75>
- Vehovar, V., Toepoel, V. and Steinmetz, S. (2016). Non–probability sampling. In C. Wolf (Ed.), *The Sage handbook of survey methods* (pp. 329–345). Sage. <https://doi.org/10.4135/9781473957893.n22>
- West, R. (2001). Theories of addiction. *Addiction*, 96(1), 3–13. <https://doi.org/10.1046/j.1360-0443.2001.96131.x>
- World Health Organization (2024). Gaming disorder. Retrieved on 3 January 2024 from <https://www.who.int/standards/classifications/frequently-asked-questions/gaming-disorder>

Patricia Ayllón Salas

A PhD student in Educational Sciences, she previously graduated in primary education, later specialising with a master's degree in research and innovation in curriculum and training. During these stages, she received the Research Initiation Grant and the Collaboration Grant from the Department of Developmental Psychology and Education.

Manuel-Enrique Lorenzo-Martin

Holder of a PhD in Education from the University of Granada, he is a compulsory secondary education teacher specialising in economics, geography and history and a member of the research group HUM-1058, DIGITAL Interdisciplinary Contexts at the University of Granada. In addition to his teaching role, which emphasises active methodologies, he writes content for Editorial Edebé, authoring the Learning Situations for all textbooks from year 1 to year 4 of compulsory secondary education. He also trains teachers in LOMLOE (Spanish education legislation), learning situations and universal design for learning (UDL), and actively collaborates on European educational innovation projects with Neotalentway.

Daniel Camuñas-García

He is currently a PhD student in Educational Sciences. He received the FPU Research Grant in the Department of Social Sciences Didactics at the University of Granada. He previously graduated in primary education, later specialising with a master's degree in research and innovation in curriculum and training. His research focuses on the creation and use of video games in heritage education.

Francisco-Javier Hinojo-Lucena

Francisco holds a Diploma in Physical Education, a Bachelor's Degree in Educational Psychology and a PhD in Educational Sciences from the University of Granada. He has authored over a hundred scientific publications at both national and international levels and has participated in various educational research and innovation projects, with a key focus on vocational training and lifelong learning. He currently serves as a permanent lecturer in the Department of Didactics and School Organisation at the University of Granada.

ARTICLES/ARTÍCULOS

The Use of Public Narrative as Way to Facilitate Team Formation in Leadership Development and Community Organizing

El uso de la narrativa pública como medio para facilitar la formación de equipos en el desarrollo del liderazgo y la organización comunitaria

Emilia Aiello

Autonomous University of Madrid, Spain
emilia.aiello@uam.es

Nelly Fuentes

We The People Michigan, USA
nelly@wethepeoplemi.org

Recibido/Received: 13/10/2023

Aceptado/Accepted: 5/3/2024



ABSTRACT

Public narrative is a leadership practice being learned and practiced across different contexts worldwide. Examining specific instances provides valuable insights into the grassroots adoption of public narrative, particularly in environments conducive to agency development. This article delves into the utilization of public narrative for team formation within the realms of leadership and community organizing. We delve deeper into the case of We the People Michigan, an organization engaged in community organizing, and its pivotal role in convening the Drive Michigan Forward coalition through the lens of public narrative. Our findings highlight the crucial role of public narrative in enhancing two critical aspects of team formation and effective group collaboration. Firstly, the act of sharing personal narratives serves as a means to foster mutual understanding and establish a shared foundation. Secondly, it facilitates a shift from the specific needs of individual organizations towards a focus on the urgent challenges facing their constituencies, particularly the undocumented migrant population in Michigan.

KEYWORDS: public narratives, leadership, migrants, team, organizing, community.

HOW TO QUOTE: Aiello, E. y Fuentes, N. (2024). The use of public narrative as way to facilitate team formation in leadership development and community organizing. *Revista Centra de Ciencias Sociales*, 3(2), 31-52. <https://doi.org/10.54790/rccs.79>

English version can be read on <https://doi.org/10.54790/rccs.79>

RESUMEN

La narrativa pública es una práctica de liderazgo que se aprende y se practica en diferentes contextos en todo el mundo. El examen de casos específicos proporciona información valiosa sobre la adopción popular de la narrativa pública, particularmente en entornos propicios para el desarrollo de agencias. Este artículo profundiza en la utilización de la narrativa pública para la formación de equipos dentro de los ámbitos del liderazgo y la organización comunitaria. Profundizamos en el caso de We the People Michigan, una organización dedicada a la organización comunitaria, y su papel fundamental en la convocatoria de la coalición Drive Michigan Forward a través de la lente de la narrativa pública. Nuestros hallazgos resaltan el papel crucial de la narrativa pública en la mejora de dos aspectos críticos de la formación de equipos y la colaboración grupal efectiva. En primer lugar, el acto de compartir narrativas personales sirve como medio para fomentar el entendimiento mutuo y establecer una base compartida. En segundo lugar, facilita un cambio desde las necesidades específicas de las organizaciones individuales hacia un enfoque en los desafíos urgentes que enfrentan sus electores, particularmente la población de inmigrantes indocumentados en Michigan.

PALABRAS CLAVE: narrativas públicas, liderazgo, migrantes, equipo, organización, comunidad.

1. Introduction

Stories are a fundamental means through which we come to know ourselves, our surroundings, and even the sacred (Bradt, 1997; Ricoeur, 1992). Jerome Bruner contends that stories allow for simultaneous but also alternative interpretations of reality, which he refers to as 'possible worlds' (Bruner, 1986). As human beings, we structure our experiences and memories in the form of narratives, using stories to organize our consciousness and imagine new possibilities and realities. Sociologist Margaret Somers has introduced the concept of 'narrative identity,' suggesting that narratives are constellations of interconnected relationships, embedded in time and space, and shaped by causal emplotment (Somers, p. 601). Emplotment enables the construction of networks or configurations of relationships. Recognizing the pivotal role of narratives in interpreting and making sense of our personal and social realities, as well as in shaping our individual and collective identities, raises the question of how stories can be harnessed to propose innovative solutions to real-life problems. Exploring this question leads to a more specific inquiry: Can narratives contribute to advancing both individual and collective leadership capacity?

Narratives, as cultural resources, have the potential to assist individuals operating in diverse fields in developing their multifaceted agentic capacity. Public narrative represents the intersection of narrative and human action. As a leadership practice, it connects the power of narrative with the work of leadership by teaching individuals how to tell a story (Ganz, 2010). Harvard Professor Marshall Ganz and his collaborators initiated the development of a public narrative pedagogy at the Harvard Kennedy School in 2006. Public narrative involves articulating and linking three elements: a story of why I have been called, a story of self; a story of why we have been called, a story of

us; and a story of the urgent challenge on which we are called to act, a story of now. According to Ganz, this articulation of the relationship between self, others, and action is also at the core of our moral traditions. In this context, leadership is pivotal for enabling others to work towards a shared purpose in the face of uncertainty. Within this framework, leadership is seen as the capacity to transform moments of uncertainty into constructive purpose by responding with self-agency, not only by assuming responsibility for one's part of the work but also for the collective effort. Enhancing one's agency is as important as enhancing the agency of others (Ganz & McKenna, 2018).

This article presents and discusses how We the People Michigan (WTP-MI), a statewide organization engaged in community organizing in Michigan, USA, has leveraged the public narrative framework to convene a state-wide, multi-organization coalition known as the Drive Michigan Forward Coalition (DMF). This coalition is dedicated to the restoration of driver's licenses for undocumented migrants in Michigan. As part of the Narratives4Change research project, funded by the EU Horizon 2020 program (Project No. 841355), this article explores the case of WTP-MI and its deliberate use of public narrative within its organizing efforts. It showcases how WTP-MI utilizes public narrative to engage, build trust, and foster meaningful interpersonal relationships with its constituents, ultimately contributing to leadership development.

1.1. Narratives and their role in building relationships

Existing research has thoroughly explored the ways in which narratives and storytelling influence organizing, impact the social relationships within it, and serve as a method for creating meaning and identity. Within the field of social movement studies, scholars have critiqued the overemphasis on political opportunities and rational-choice approaches. Instead, they argue for the exploration of the cultural and emotional dimensions of collective action and protest (Goodwin & Jasper, 1999; Davis, 2002; Jasper, 2010, 2011; Polletta & Jasper, 2001).

Polletta (1998, 2008) emphasizes the moral and cultural meanings conveyed by narratives through plotment. The way narratives configure events over time is essential for constructing and maintaining individual and collective identities. Her perspective challenges the framing processes discussed by Gamson (1988), McAdam, McCarthy, and Zald (1996), and Benford and Snow (2000), which focus on acknowledging and incorporating meanings into action. Polletta argues that framing theory may limit the understanding of social reality in social movements, as it takes an instrumentalist view of acts and events. This shift in understanding narratives within the context of social movements and protest activities moves beyond viewing them solely as resources for expanding opportunities. Human narratives have evolved to serve as a means to infuse emotions, cultural repertoires, and meaning into these movements (Ganz, 2009; Polletta, 1998; Jasper, 2011; Davis, 2002; Polletta & Jasper, 2001; Alexander, 2012).

Other scholarly works have delved into the utilization of storytelling and narratives within the context of organizing, with a specific focus on helping individuals comprehend personal and community stories, amplifying shared values, and nurturing individual and shared meaning. For instance, Delehanty and Oyakawa (2018) conducted research on how storytelling is employed within faith-based community organizations. They sought to understand how faith coalitions effectively mobilize individuals for collective action on various issues, even across social differences, while other types of coalitions may not succeed. Their findings highlight the importance of one-on-one conversations and narrative practices in fostering a constructive moral meaning. These narrative practices enable activists to internalize a 'collective moral imaginary.' Narratives serve as a conduit for conveying both individual and social meaning, bridging individual motivations with the idea that advocating for a collective good is a worthwhile endeavor.

In a more recent work, Delehanty (2020) explored the significance of interactive cultural practices, such as songs and storytelling, in contemporary social movement organizing and their capacity to address the challenges of social differences. Storytelling expands participants' comprehension of themselves in relation to their community. Practices centered on personal moral authenticity prove to be particularly effective in aligning social movement objectives with individuals' pre-existing moral commitments, even when encompassing diverse racial and religious sub-groups.

Goldstein and colleagues (2015) conducted a study on the use of narratives within communities engaged in enhancing social-ecological resilience in complex urban systems. They focused on a case in Orange County, California, which had been severely impacted by wildfires. The researchers demonstrated how narratives served as a tool for participants to envision alternative environmental futures. This not only facilitated critical learning but also enhanced coordination. The use of narratives allowed for the expression of the subjective and symbolic meaning of resilience, promoting the engagement of multiple voices and facilitating self-organizing processes to determine what should be more resilient and for whose benefit.

Similarly, studies in the realm of undocumented migrants' rights have yielded comparable findings. Dao (2017) conducted research with Asian American and Pacific Islander youth engaged in political activities. He found that strategic storytelling throughout the political organizing process prompted a reevaluation of internalized stereotypes and led to a return to organizing co-ethnic communities. Storytelling proved to be a valuable strategy, enabling those involved in the movement to make the choice to reveal their status. This, in turn, shaped their collective identity formation and increased their political engagement across inter-racial boundaries. Similar accounts of the efficacy of organizing with narratives and storytelling have been documented in the fields of human rights and migrants' rights (Gouge, 2016; Pande, 2012), education (Welton & Freelon, 2018), the feminist movement (Polletta, 1998), and more.

While previous research has delved into how narratives and storytelling are employed to foster interpersonal relationships grounded in shared meaning and values, a deeper understanding can be gained by examining specific cases that illuminate the convergence of leadership, grassroots organizing, and the use of narratives to propose innovative solutions to emerging problems. Focusing on these intersections and contexts that challenge the status quo, encourage the envisioning of new alternative futures, and delve into the intentional crafting of narratives for these new projects can provide valuable insights into the mechanisms that influence actors' range of action in relation to existing constraining structures and in the realm of public leadership.

1.2. Public narrative for leadership development

Public narrative is the use of stories for public leadership, learning how to craft and articulate a *story of self*, a *story of us*, and a *story of now*. Narrative is grounded in specific story moments in which a protagonist is confronted with a disruption for which s/he is not prepared, the choice s/he makes in response, and the resulting outcome. Because we can identify empathetically with the protagonist, we experience the emotional content of the moment, the values on which the protagonist draws to respond (Nussbaum, 2001; Keen, 2006). The “moral” of the story we learn, then, is in this emotional experience, a “lesson of the heart” rather than only a cognitive “lesson of the head.” We can thus call on this experience as a “moral resource” when we must face disruptions endemic to the human experience (Aiello & Ganz, 2021). Consequently, narrative is a way of accessing emotional resources embedded in values to transform threats to which we react fearfully and retreat into challenges to which we can respond with hope and engage.

The idea of agency as a relational entity is central in the understanding of public narrative. This is what distinguishes public narrative from other individual-centered understandings of leadership. Public narrative as a leadership practice is oriented to develop not solely one's agentic capacities, but also that of others. The theoretical understanding of human agency by Emirbayer and Mische (1998) —largely influenced by Herbert Mead's social-interactionist contributions— is useful for capturing the manifold agentic orientations that can be triggered by public narrative, especially due to their projective character when used in public leadership. These authors define agency as the temporally constructed engagement by actors of different structural environments — the temporal- relational contexts of action— which, through the interplay of habit, imagination, and judgment, both reproduces and transforms those structures in interactive response to the problems posed by changing historical situations (Ibid., p. 970). In their definition, Emirbayer and Mische distinguish three constitutive elements of human agency: iteration which is linked to habit; projectivity which is linked to imagination; and practical evaluation which is linked to judgement. Each of these elements of human agency allows us to analytically examine forms of action that are oriented toward the past,

future, and present. This is of relevance in our explanation of public narrative as it illuminates, for instance, how public narrative can trigger the projective dimension of agency. As narratives provide alternative roads for actions, they can also serve to ideate and envision ways out of emerging problems. The underlying question here becomes, *in which ways can public narrative trigger the projective dimension of agency, equipping actors with ways to think more creatively on potential solutions to emerging challenges?*

The public narrative pedagogy has been adapted for use in both online and onsite courses at the Harvard Kennedy School (HKS) and has been integrated into workshops, projects, and campaigns, including the 2008 Obama for President campaign. From 2006 to 2016, over 32,000 individuals participated in 448 workshops across approximately 25 countries. These workshops spanned diverse regions, including Denmark, Serbia, Jordan, India, Vietnam, China, Japan, Australia, and Mexico, and encompassed various domains such as healthcare, education, politics, religion, and advocacy.

This article delves into the case of We The People Michigan (WTP-MI), an organization that strategically employs public narrative within its leadership role in convening the Drive Michigan Forward coalition. The use of public narrative by WTP-MI is an integral part of its organizing methodology, aimed at fostering leadership development and forging a multi-racial, working-class constituency across the state. This constituency is envisioned as a powerful force for advancing a unified, proactive agenda rooted in economic, racial, and social justice for all Michiganders.

2. Methods

This study is one of the three in-depth case studies conducted in the framework of the broad Narratives4Change research project (EU Horizon 2020, 2019–2021). The purpose of these case studies is to analyze initiatives that have used public narrative and to what extent it helped to develop leadership and enhance the agency of those most vulnerable communities.

Data was meticulously gathered from a variety of sources, with a focus on enriching the research through qualitative online fieldwork conducted between 2019 and 2020. This fieldwork engaged deeply with members of the We The People Michigan (WTP-MI) and the Drive Michigan Forward (DMF) coalition. Participants were carefully chosen based on their distinct roles and profiles within these organizations, ensuring a comprehensive understanding of the campaign's dynamics and impact.

The selection process prioritized individuals who not only held diverse positions within WTP-MI but also varied in their tenure and involvement levels in the campaign. This led to conducting six in-depth interviews with key members, including the executive director, known for their strategic leadership and vision; the Michigan immigrant justice coordinator, who focuses on the rights and legal support for immigrants; community organizers, who are the backbone of grassroots

mobilization; the communications director, responsible for messaging and public engagement; and the deputy director, who plays a critical role in operational and administrative leadership. Furthermore, two focus groups were organized, offering a collective insight into the organization's internal dynamics and strategy formulation.

Simultaneously, the study extended its reach to stakeholders within the DMF coalition, which comprises various organizations dedicated to driving policy changes for immigrant rights and justice in Michigan. This phase included six in-depth interviews with organizers from member organizations, such as the Michigan League for Public Policy (MLPP), known for its advocacy on socio-economic issues; the Michigan Immigrant Rights Center (MIRC), a pivotal legal resource for immigrants; Action of Greater Lansing, focusing on community-based social justice initiatives; and the Cosecha Movement, a collaborating organization with a grassroots approach to immigrant rights. These interviews were instrumental in understanding the coalition's collaborative efforts, challenges, and achievements in advocating for policy reforms and immigrant rights in Michigan.

This detailed approach to selecting and engaging with fieldwork participants provided a rich, multi-dimensional perspective on the advocacy and policy change efforts led by WTP-MI and the DMF coalition. It ensured a deep dive into the strategic, operational, and grassroots levels of campaign work, reflecting the complexities and nuances of social justice and policy advocacy in the contemporary American context.

Also, participant observations were done in October and November 2020 specifically about WTP-MI training sessions related to the Deep Canvassing Programme held by WTP-MI, as well as a series of events in which the DMF campaign was presented between September-November 2020. All the fieldwork was run online due to COVID-19.

Qualitative fieldwork was recorded and transcribed, and in this article pseudonyms are used to refer to all interviewees and to prevent the disclosure of potential personal data. Data was coded and analyzed using NVivo software (Version 12). In doing this an initial coding scheme was created drawing on the Narratives4Change project general research questions, and the specific research question defined for this case study, which was the following: *How is WTP using Public Narrative for the development of individual and collective leadership in the context of its organizing activities?* This article solely reports some of the findings of this case study.

2.1. Ethical issues

The Institutional Review Board (IRB) of the Harvard University–Area approved this study, IRB Registration Nr: IRB00000109. In addition, all information gathered for the Narratives4Change project complies with the Ethics Appraisal Procedure required by the Horizon 2020 research program, funded by the European Commission. Accordingly, Narratives4Change project follows the Regulation (EU) 2016/679, the EU new General Data Protection Regulation (GDPR).

2.2. A glimpse about the We The People Michigan and its role in the Drive Michigan Forward Coalition

We The People Michigan (WTP-MI) is a left-of-center-non-profit organization which was created in July 2018, with the goal of organizing for the rights of minority and vulnerable groups across the state of Michigan in the United States. Since its beginning, WTP-MI has been working in explicitly multiracial urban, suburban and rural communities with a racial justice lens, from all corners of the state -from Calumet to Flint, from Detroit to Grand Rapids. To achieve its goal, WTP-MI focuses on three main edges: build long-term deep organizing infrastructure; foster stable, long-lasting alliances, and be an engine for learning.

Estimations point out that 130,000 undocumented people in Michigan do not have access to a driver's license or an ID card. In 2008, the state of Michigan decided to revoke driving licenses and IDs for the undocumented. For this reason, immigrants and their allies, through previously established organizations such as WTP-MI, formed a statewide coalition called Drive Michigan Forward (DMF). The mission of the DMF coalition is to build a coalition to restore driver's licenses to all and to ensure that undocumented migrants benefit equally from access to all basic services. This way, the DMF coalition emerged from immigrants and their allies in order to put forth an inclusive policy which allows all Michigan residents to obtain a driver's license, regardless of their resident situation.

By the end of 2021, the DMF coalition had already been formed by 16 immigrant-led organizations, organizations advocating for the rights of undocumented migrants, and allies who believe in restoring driving licenses to all. Member organizations are the following: We the People MI; African Bureau of Immigration & Social Affairs, Action of Greater Lansing; Interfaith Council for Peace & Justice; American Civil Liberties Union Michigan; Michigan Immigrant Rights Center; Michigan League for Public Policy; Progress Michigan; Detroit Hispanic Development Corporation; Detroit Jews for Justice; Michigan United: Justice and dignity, Jewish Community Relations Council; MI Students Dream; Interfaith Action and Berrien Immigrant Solidarity Network.

3. Results

This section explores in which ways the public narrative pedagogy used by WTP-MI a core aspect of its organizing methodology, has been adapted and used in its leading role at the time of convening the DMF coalition.

Sitting down face to face and getting to know each other: knitting interpersonal relationships

I consider the concept of a public narrative in the following way: Firstly, it's about understanding what motivates and drives us to engage in this type of work. The work we're involved in demands considerable sacrifice and a consistent willingness to tackle challenging tasks. Therefore, it must hold great significance. This entails a deep commitment, which is rooted in our personal experiences and the values we carry with us (...) These experiences and values serve as the foundation for our motivation. It's a rather personal exploration of what drives us, but it's also essential that we can articulate it effectively to establish trust with others. (WTP-MI executive director)

The excerpt above is from a conversation with the current executive director of WTP-MI. What he explains captures the essence of the work that WTP-MI has undertaken in convening the diverse organizations that currently form the DMF coalition. These organizations are laying the groundwork to collaborate and establish relationships founded on trust:

WTP-MI has achieved success through its partnerships. However, according to WTP-MI, things have to move at the speed of trust, which, at times, may not be as rapid as we desire. Organizing is indeed challenging, yet prioritizing transformational relationships is an even more formidable task. It entails adopting a specific approach. (DMF organizer)

The use of public narrative within the WTP-MI organization has been instrumental in its community organizing pedagogy. It has enabled its members to engage in the introspective work mentioned by the WTP-MI executive director. Through intersubjective dialogue and conversations among each other, WTP-MI organizers have delved deep into their personal motivations that drive their commitment to the work they do. This exercise involves crafting 'stories of self,' 'stories of us,' and 'stories of now,' a process for which the community organizers at WTP-MI have received training. These narratives are then applied when facilitating team formation during the convening of the DMF coalition:

[When working with new people in the DMF coalition] Doing that was really important. Sitting down with representatives of other organizations and getting to know each other. Sharing my story, and getting to know why they were doing the work they were doing helped us to get where others were. (WTP-MI community organizer)

3.1. Using our story to “discover each other”

The incorporation of storytelling within the process of forming the DMF coalition has played a significant role in helping individuals understand and ‘discover’ others who, despite their diverse backgrounds and unique life stories, share similar motivations for joining the cause of supporting undocumented migrants. This insight is emphasized by another member of the coalition, who underscores that the DMF coalition’s primary focus when bringing individuals on board has been to anchor the campaign in shared values that resonate with all of them:

My boss for example, she thought that organizers were terrible... and just really annoying to work with... until she met WTP-MI. It’s the value of listening (...) For instance, in the communication group – Sara didn’t have experience in communication but she joined the meeting just to guide it and to root the communication in values. Guiding the narrative – community voices are listened to – the communication group was predominantly white. So they asked: Why are you here? Who are you bringing into this campaign? (DMF organizer)

Establishing actions rooted in shared values has been a fundamental aspect of bringing together a diverse array of organizations based in Michigan. Despite having progressive agendas, these organizations operate from different angles and possess distinct working cultures. Some engage in legal and advocacy issues, while others work directly with the community, and so on. In some cases, these organizations had not previously collaborated. To address this challenge, the application of public narrative pedagogy proved instrumental in fostering team formation within the coalition. It provided a common ground for organizations to align their efforts. This approach is elucidated through the following quotations, shared by individuals who represent various organizations within the coalition:

So, I think the biggest difference here is really having those kinds of grassroots groups and seeing how they do things (...) that’s been the most refreshing part... is having that energy and excitement and enthusiasm and really there’s something different because I sense when I sit at this table or now when we sit at our zoom, we really care about each other. It’s not just a meeting. It feels like we have a connection that is deeper than just this goal (...) (DMF organizer)

Another member of the coalition also emphasizes how stories are deeply woven into the fabric of the coalition’s approach and the nature of relationships it fosters, both within the organization and in interactions with others across Michigan:

(...) over the last 10 years my sense is that the position of the organization I represent have been much more delivered about doing work, about getting involved with community organizations and community partnerships, which I think is a really important shift. I think in particular with undocumented community here in Michigan that’s a group that is often left out of the policy discussions and this policy and the work that the coalition is doing really focuses on them. And so here is the role of WTP-MI which is a grassroots organization, to come to us and to other similar organizations and saying: “we’d love to partner with you on this”. And this is a great opportunity for us to support this issue and to land what we can for the campaign (member of the DMF coalition – legal expertise).

3.2. Holding each other accountable and daring to be vulnerable in conversations with others

Another aspect that emerged in the conversations with members of the DMF coalition was how because of setting a common ground to work together since the very beginning of the coalition formation, getting to know each other knowing for what they care, enabled them to hold each other accountable during their monthly meetings. Also, they explained that this common ground in which trust predominated helped to better navigate conflicts in those specific moments when they emerged:

I facilitated a conflict resolution meeting between two of the organizing groups that we interact with. The goal was not for them to talk to each other about each other, but to hear, from each other, their own feelings. I think of conflict resolution from the point of view of learning from each other, especially where the other person is coming from and what their mindset was to get to the positions they had. And from there, the conversation goes around what we want now and how we can work to get there. What is the way we want the world to look for us (WTP organizer).

Sharing personal stories and using them in a public context revealed that vulnerability is not something to be feared. On the contrary, daring to be vulnerable in public and sharing these personal (not private) stories during conversations can humanize the other person, thus fostering more humane interpersonal relationships within the coalition:

Using my story when we were working on the ID campaign made me feel guilty because I thought I was victimizing myself, but learning how the public narrative actually works made a change. The story of self doesn't serve to make you a victim, but to show your plight. The story of self is a story of victory of the self within oneself, the one that allows us to tell our stories with agency (DMF coalition member).

In conclusion, the fieldwork conducted with DMF participants has revealed that the use of elements from the public narrative pedagogy during initial meetings, where they introduced themselves and joined the coalition, greatly facilitated a deeper personal understanding among members. Participants had the opportunity to uncover the true motivations of individuals representing the member organizations and the organizations themselves. In these initial encounters, they followed the core principles of public narrative, which involved sharing why they were particularly committed to the campaign and why the issue of undocumented migrants and driving licenses resonated with them, even if many of them were not migrants (Story of self). They discussed the shared values that united them as a team and motivated them to form a working coalition (Story of us). They also delved into why they needed to address the driving license issue in such a turbulent socio-political moment in Michigan and the USA, or in other words, what was at stake if they didn't take action (Story of now). These discussions encouraged them to commit to the leadership mission required by the DMF coalition.

3.3. Agreeing a shared agenda based on community needs, and not on the needs of single organizations

Another noteworthy aspect of the coalition was the willingness of organizations to collaborate on an issue of great importance to their constituencies—undocumented migrants in Michigan—rather than solely focusing on their individual organizational priorities. The evidence collected indicates that WTP-MI's intentional use of public narrative pedagogy, based on shared experiences and rooted in strong relationships, played a pivotal role in bringing the DMF coalition together. It facilitated the development of mutual understanding and the establishment of a shared purpose.

When collecting data for this research in 2020, the DMF coalition comprised fewer than 10 organizations. By 2022, the coalition had grown to include 16 organizations, all of which are dispersed across the state of Michigan. These organizations represent various migrants' groups and approach the issue from different angles. The notion of prioritizing issues that impact the entire undocumented migrant community, rather than focusing solely on organization-specific matters, was eloquently articulated by members of WTP-MI during a focus group discussion. They emphasized the significance of this approach when aiming to build a different organizing ecosystem in Michigan. According to the organizers from WTP-MI, this is a long-overdue commitment that Michigan organizations owe to their constituents, rather than being solely accountable to funders:

We build relationships in depth; we function with trust. Listening to the community's stories and understanding what has happened to them allows us to create deep and meaningful bonds (WTP-MI organizer).

Sharing values and establishing a common purpose are not just prerequisites for collective action but also the foundation for cultivating a shared sense of identity among diverse actors. As WTP-MI organizers discussed among themselves, this process involves asking themselves what type of Michigan they envision and dream of:

I think we slowly started to tell a more complete story about what Michigan is, to be honest about our state's divisions, where the sort of fault lines are... But also, you know, it does not reach for like a kind of bland unity but says no, there are like forces deliberately dividing us and they are not just pitting us against each other, but they are scapegoating certain groups (poor communities black and brown communities, immigrant communities). And they want us weak.. So, we've started to weave that in the different entities, different campaigns and the driver's license campaign has definitely been one of the more prominent (member of the DMF coalition – legal expertise).

Moreover, by prioritizing the needs of their constituents, the DMF coalition was able to tap into a diverse range of skills that could be harnessed as key resources during the campaign's strategic planning. Member organizations within the DMF coalition offer varying expertise, with some excelling in community outreach, others specializing in legal matters, and still others focusing on communication campaigns. However, despite their varied expertise, the

coalition shares a common message: advocating for the rights of undocumented migrants, particularly the need for driving licenses to be restored as a means of empowering the people:

And instead, what we have been doing is pushing people and saying, no, this is not an economic issue. This is not a law and order issue. This is a dignity issue that immigrants as human means inherently or what and deserve these rights and driver's license is a step in that. It is not the full dignity package. Just one small step that undocumented communities have asked us to do and work on and we're responding to a call, but it's not the full picture. So I think the role that we play is like reminding people of that and also finding other organizations and other people who understand it and can help us do that like personal transformation (member of the DMF coalition – communications expertise).

3.4. It's not the economy, it's our dignity

In the excerpts shared in this section, it becomes evident that an ongoing issue within the coalition and a particular concern of some member organizations is how to continually remind both their own constituents and the broader public, including those familiar with the situation of undocumented migrants and those who are not, that the restoration of driving licenses is not merely an economic or public safety issue, nor is it a privilege. Instead, it directly relates to the dignity of migrants and the vision shared by all the organizations within the DMF coalition for the type of Michigan they aspire to create:

You know, previously and still the case in a bunch of places that immigration issues are framed all around deserving and undeserving. And I always like to make this argument that like we don't use that for any other marginalized group of people. We like never say we need to give like LGBT rights because they bring in money to the economy because they pay taxes. And past campaigns and like sometimes we still get people in the coalition or other community members are like want to have the argument or driver's license be on money and economy and public safety in terms of law and order. And instead, what we have been doing is pushing people and saying, no, this is not an economic issue. This is not a law and order issue. This is a dignity issue that immigrants as human means inherently or what and deserve these rights and driver's license is a step in that (member of the DMF coalition – communications expertise).

Overall, placing the needs of the undocumented migrant community at the forefront of every strategy and action undertaken by the coalition, rooted in the principle of dignity, lies at the core of its mission and its shared vision for Michigan as a place where everyone can thrive, develop, and progress. An example of this commitment is the Deep Canvassing program, as explained below.

3.5. Deep Canvassing: another way to share the message

WTP-MI implemented a Deep Canvassing Program to organize and campaign across 12 different counties in Michigan leading up to the November 2020 election. The program aimed to facilitate anti-racism conversations centered around the criminal justice system, the promotion of BIPOC (Black, Indigenous, People of Color) leadership in local politics, and the reduction of prejudice. Remarkably, the entire program was conducted remotely, with organizers engaging in conversations with voters over the phone.

To achieve their goals, the program focused on establishing genuine and unique connections with each voter through the use of listening tools, curiosity, and storytelling. The experience of WTP-MI community organizers, rooted in the public narrative pedagogy, played a significant role in developing and organizing volunteers for this initiative. WTP-MI trained volunteers to initiate meaningful conversations with fellow Michiganders over the phone, regardless of whether the conversation lasted one minute or thirty:

and the deep canvassing program is rooted in Story of Self. It's about going into a person's home knocking on the door and saying, Hey, this is me, ... This is my story. It's more complicated than that of course... but... that's the basic. So the driver's license campaign with the beep canvassing along with the with already like the fertile ground that has been created in northern Michigan. I mean, there's a chance that we can change the landscape in order for Drivers' License to happen. And so yes driver's license is very important, but it's just a part of the whole ingrained (WTP-MI organizer; focus group).

WTP-MI organizers interviewed shared some of their experiences while leading the deep canvassing program. One of them explained that a significant number of participants in the deep canvass in Michigan's Upper Peninsula began to believe in the potential of deep canvassing to engage and convince voters due to the stories they would hear. She emphasized that, for many white Michiganders, the abstract concept of undocumented migrants might not be relatable. However, when specific situations are shared, such as the challenges undocumented migrants face when providing for their children, the fear of job loss, or the longing for their homeland, these particular aspects resonate with the personal stories of those listening on the other side.

During one of the observed training sessions for this study, WTP-MI volunteers recounted how deep canvassing strategies often proved effective in engaging the most skeptical voters. This success was attributed to the ability to establish a personal connection with others. Deep canvassing, combined with strategies from the public narrative pedagogy, enables a call to basic emotions, ultimately invoking empathy:

We both want the same thing but we talked about it differently, but at the bottom, we want the basic thing. For this, public narrative has helped me to build that connection (WTP-MI organizer; focus group).

In my organization, we have clients with 16-year-olds who are unaware that they won't be able to obtain a driver's license, and their parents often delay sharing this difficult news. It's these stories that motivate me to stay involved. During a conversation with DACA recipients, I realized that many of them had parents struggling with alcoholism. It dawned on me that attributing this issue solely to being Latino or an immigrant is a misguided perspective. The challenges they face every day, the constant worry about work and the risk of not returning home due to the fear of arrest, contribute to the stress they endure. How can anyone endure this for 15, 20 years? (member of the DMF coalition).

While one of the strategies employed by WTP-MI in the program involved making phone calls to understand people's concerns and worries, the subsequent step was to consider the actions and decisions required to make that envisioned future a reality. The Deep Canvassing Program, designed to shift power in Michigan, played a pivotal role in the election of a progressive candidate in one of Detroit's districts. An interviewee explained that part of the success of the winning candidate's campaign lay in her substantial effort to visit households and get to know the people in the district.

This success not only serves as an example of a collective achievement that worked alongside the community to influence the political landscape of the county but also highlights the impact of agentic action, fostered by the intentional use of the public narrative pedagogy.

4. Discussion and conclusions

In this article, we have explored how WTM-MI has leveraged the public narrative framework in its role as the leading organization convening the Drive Michigan Forward coalition (DMF). The evidence gathered illustrates that the use of public narrative pedagogy has enhanced two crucial aspects that were instrumental in team formation and effective group functioning. First, it facilitated sharing personal stories to foster mutual understanding and to establish a collective sense of identity, crafting a narrative of "us". Second, it encouraged the member organizations of the coalition to shift their focus from individual needs and personal agendas to address the urgent needs of their constituents—specifically, the need to enable undocumented migrants in Michigan to obtain driving licenses.

The findings discussed in this article reveal that the use of public narrative significantly contributed to building and strengthening social relationships among DMF coalition members. Interviewed members of the coalition described the transformation they experienced, moving from being relative strangers, often not having worked together in the past, to sharing personal experiences that shaped their commitment to the dignity of undocumented migrants in Michigan. By sharing their personal journeys and fostering dialogic communication, they were able to engage in discussions about the challenges they faced, make tough strategic decisions, and identify with others' sources of hope and courage, ultimately believing in the possibility of creating a different Michigan.

Previous research has shown that leadership development within organizing and volunteer-led organizations often becomes entangled in managerial models (Skocpol, 2003), expending considerable effort on mobilization but sometimes falling short on effective organization (Han et al., 2011). In contrast, this study reveals that activities oriented toward relationship building should not be neglected, as they play a crucial role in activating effective leadership and fostering a dynamic environment that can build and sustain organizational capacity (Andrews et al., 2013). This aligns with one of the core organizing goals of WTP-MI, which is to cultivate diverse relationships among Michiganders, thus restoring people's power while nurturing a transformational and emancipatory organizing environment. This approach prioritizes accountability to constituents rather than funders.

While conducting a comprehensive analysis of the campaign's organizational effectiveness may require examining additional aspects beyond those addressed in this study, the evidence suggests that developing leadership grounded in interpersonal relationships characterized by trust, solidarity, and a shared purpose (the 'Us' dimension) is pivotal for driving effective change. As demonstrated above, the use of storytelling within the framework of public narrative serves as an effective organizing method.

The case of WTP-MI and its use of public narrative, not only within its own organizing pedagogy but also in convening and collaborating with other organizations within the DMF coalition, illuminates three essential aspects of how public narrative fosters and envisions leadership that are worth considering in other campaigns.

First, public narrative has the potential to enhance individual and collective agentic capacities even within constrained conditions. It motivates individuals and groups to take the lead together. Public narrative employs stories with intentionality through a pedagogy that is inherently relational, experiential, and reflexive. Consequently, it emphasizes the importance of inter-relationality in the pursuit of shared goals, shaping the 'Self' in dialogue with the 'Us,' and vice versa, within the temporal framework of the 'Now.' In cultivating such interrelationality, the modeling and practice of public narrative contributes to the creation of a shared sense of 'usness' (Steffens, Haslam & Reicher, 2014). Narratives enable the identification and articulation of sources of common concern, moving away from an 'Us' identity rooted in essentialist singular categories (Somers, 1994). Instead, it delineates group boundaries based on shared experiences, revealing shared values. Through the act of storytelling, public narrative links the 'story of self,' 'story of us,' and 'story of now.' It presents a narrative process in which individuals engage with internal and external emotional resources, bridging the personal, collective, and temporal dimensions.

This can be observed in the narratives and stories shared by members and leaders of WTP-MI and the DMF coalition when explaining the changes in their own perceptions of power structures and hierarchies. These changes extend to their workplace, the public domain, and even their private lives, altering how they relate to these structures. They transition from being passive agents to becoming agentic actors capable of challenging and contesting these contexts.

Within the DMF campaign, public narrative served as a means to develop agentic capacities by invoking urgency and anger instead of inertia and apathy. It promoted solidarity and hope in place of isolation and fear. This showcases the potential of public narrative to expand one's agency while empowering others to expand theirs. Furthermore, public narrative reinforces the importance of pursuing shared goals. In public narrative, agency involves responding to and generating alternative solutions to the problems we face in our daily lives (Emirbayer & Mische, 1998), which Mead (1934) referred to as 'reflective intelligence.' Through the use of the story of self, the story of us, and the story of now, public narrative challenges audiences to envision the impact of activating collective agency on the unfolding of events. It invites them to engage in processes of change rather than allowing 'threats' to undermine the values at stake. Stories serve as maps of action, allowing people to consider 'either' 'or' alternatives.

Second, public narrative shifts leadership and social relationships from transactional interactions to opportunities for potential social transformation. This shift redirects the focus from achieving a specific outcome to locating outcomes within a broader network of interpersonal relations, which can be cultivated and nurtured through each leadership initiative. This shift is rooted in the relational aspect of public narrative and its view of individuals as moral beings (Smith, 2003) rather than mere material entities. Public narrative brings culture to the forefront, recognizing the morally constituted and permeated world in which we all exist (Collins, 1993). This is particularly relevant in the state of Michigan, where marginalized communities are often left behind by party politics.

The third aspect worthy of consideration for other campaigns is the potential scalability of public narrative as a leadership practice. This scalability isn't limited to well-funded and resource-rich areas but extends to more challenging conditions, as experienced in Michigan. This state is marked by divisions across ethnic and racial lines, urban-rural-suburban divides, economic disparities, and various other complexities. By examining where public narrative is being used and extracting lessons related to its universal elements, particularly the use of narratives rooted in a pedagogy that is relational, experiential, and reflexive, we can gain insights into how it can be adapted in other contexts.

Our investigation into WTP-MI's strategic use of public narrative reveals a broader societal relevance, illustrating how grassroots movements can leverage storytelling to foster inclusivity, empathy, and collective action. Thus, the study underscores the critical importance of voice and storytelling in mobilizing communities for social justice, emphasizing the role of personal narratives in bridging divides and humanizing policy debates. The findings highlight the transformative potential of narrative practices in not only advocating for policy change but also in building resilient, interconnected communities capable of confronting systemic challenges.

Furthermore, the utilization of WTP-MI as a case study serves as a compelling empirical example of the efficacy of narrative strategies in community organizing and leadership development. This example offers valuable insights for other organizations and movements seeking to galvanize support and foster deep, meaningful connections among diverse groups. By detailing the mechanisms through which public narrative facilitates team formation and collective action, this research contributes to a broader understanding of how similar approaches can be applied across various societal contexts to address pressing issues.

The implications of our study extend beyond the specific case of WTP-MI, offering a blueprint for knowledge transfer to other domains facing similar challenges. The strategies employed by WTP-MI can be adapted and applied in other settings to enhance leadership development, organizational effectiveness, and social impact. This research enriches the toolkit available to community organizers, social movement leaders, and policymakers, providing them with a tested approach for cultivating solidarity and driving change. The study's insights into the power of narrative to mobilize and unite suggest pathways for broader societal engagement and the potential for significant social transformation.

In conclusion, this study not only enriches our understanding of public narrative's role in community organizing and leadership development but also highlights its significance as a tool for social change. The case of WTP-MI exemplifies the profound impact of narrative practices on societal engagement and policy advocacy, offering a model for other movements and organizations committed to social justice and equity. By emphasizing the social impact and applicability of our findings, we aim to inspire further research and action that harnesses the transformative power of storytelling in addressing societal challenges.

5. References

- Aiello, E. & Joanpere, M. (2014). Social Creation. A New Concept for Social Sciences and Humanities. *International and Multidisciplinary Journal of Social Science*, 3(3), 297–313. <https://doi.org/10.4471/rimcis.2014.41>
- Aiello, E. & Ganz, M. (2021). "2020 Public Narrative Impact Survey Overview Report". Available online: https://ash.harvard.edu/publications/2020-public-narrative-impact-survey-overview-report?utm_campaign=coschedule&utm_source=twitter&utm_medium=HarvardAsh&utm_content=2020%20Public%20Narrative%20Impact%20Survey%20Overview%20Report
- Alexander, J. C. (2012). *The Meanings of Social Life: A Cultural Sociology*. The Meanings of Social Life: A Cultural Sociology. *Oxford University Press*. <https://doi.org/10.1093/acprof:oso/9780195160840.001.0001>
- Andrews, K. T., Ganz, M., Baggetta, M., Han, H. & Andrews, K. T. (2013). Leadership, Membership, and Voice: Civic Associations That Work. *American Journal of Sociology*, 115(4), 1191–1242. <https://doi.org/10.1086/649060>

- Benford, R. D. & Snow, D. D. (2000). Framing Processes and Social Movements: An Overview and Assessment. *Annual Review of Sociology*, 26, 611–639. <https://doi.org/10.1146/annurev.soc.26.1.611>
- Bradt, K. M. (1997). *Story as a way of knowing*. Kansas City, MO: Sheed & Ward.
- Bruner, J. (1986). *Actual Minds, Possible Worlds*. Cambridge, Mass: Harvard University Press. <https://doi.org/10.4159/9780674029019>
- Collins, R. (1993). Emotional Energy as the Common Denominator of Rational Action. *Rationality and Society*, 5(2), 203–230. Available online: <https://doi.org/10.1177/1043463193005002005>
- Dao, L. (2017). Out and Asian: How Undocu/DACAmented Asian Americans and Pacific Islander Youth Navigate Dual Liminality in the Immigrant Rights Movement. *Societies*, 7(3), 17. <https://doi.org/10.3390/soc7030017>
- Davis, J. (2002). Narrative and Social Movements. In *Stories of Change. Narrative and Social Movements*, 3–29. <https://doi.org/10.1353/book4482>
- Delehanty, J. (2020). Becoming “People of Faith:” Personal Moral Authenticity in the Cultural Practices of a Faith-Based Social Justice Movement. *Sociological Forum*, 35(4), 1228–1249. <https://doi.org/10.1111/socf.12645>
- Delehanty, J. & Oyakawa, M. (2018). Building a collective moral imaginary: Personalist culture and social performance in faith-based community organizing. *American Journal of Cultural Sociology*, 6, 266–295. <https://doi.org/10.1057/s41290-017-0029-7>
- Emirbayer, M. (1997). Manifesto for a Relational Sociology. *American Journal of Sociology*, 103(2), 281–317. <https://doi.org/10.1086/231209>
- Emirbayer, M. & Mische, A. (1998). What Is Agency? *American Journal of Sociology*, 103(4), 962–1023. <https://doi.org/10.1086/231294>
- Gamson, W. A. (1988). Political Discourse and Collective Action. *International Social Movement Research*, 219–244.
- Ganz, M. (2009). *Why David sometimes wins. Strategy, leadership and The California Agricultural Movement*. New York, NY: Oxford University Press.
- Ganz, M. & McKenna, E. (2018). Bringing Leadership Back In. In D. A. Snow, S. A. Soule, H. Kriesi & H. J. McCammon (Eds.), *The Wiley Blackwell Companion to Social Movements*, 185–202. Chichester, UK: John Wiley & Sons, Ltd. <https://doi.org/10.1002/9781119168577.ch10>
- Ganz, M. & Lin, E. (2011). *Learning to Lead: Pedagogy of Practice*. In N. Nohria, R. Khurana & S. Snook (Eds.), *Handbook for Teaching Leadership*. Los Angeles: SAGE Publications (353–366).
- Goldstein, B. E., Wessells, A. T., Lejano, R. & Butler, W. (2015). Narrating Resilience: Transforming Urban Systems Through Collaborative Storytelling. *Urban Studies*, 52(7), 1285–1303. <https://doi.org/10.1177/0042098013505653>

- Goodwin, J. & Jasper, J. M. (1999). Caught in a Winding, Snarling Vine: The Structural Bias of Political Process Theory. *Sociological Forum*, 14(1), 27–54. <https://doi.org/10.1023/A:1021684610881>
- Gouge, M. C. (2016). Human Rights in Play, Transnational Solidarity at Work: Creative Playfulness and Subversive Storytelling among the Coalition of Immokalee Workers. *Critical Sociology*, 42(6), 861–875. <https://doi.org/10.1177/0896920515603110>
- Han, H., Andrews, K. T., Ganz, M., Baggetta, M. & Lim, C. (2011). The Relationship of Leadership Quality to the Political Presence of Civic Associations. *Perspectives on Politics*, 9(01), 45–59. <https://doi.org/10.1017/S1537592710004081>
- Jasper, J. M. (2011). Emotions and Social Movements: Twenty Years of Theory and Research. *Annual Review of Sociology*, 37(1), 285–303. <https://doi.org/10.1146/annurev-soc-081309-150015>
- Jasper, J. M. (2010). Social Movement Theory Today: Toward a Theory of Action? *Sociology Compass*, 4(11), 965–976. <https://doi.org/10.1111/j.1751-9020.2010.00329.x>
- Keen, S. (2006). A Theory of Narrative Empathy. *Narrative. The Ohio State University Press*, 14(3), 207–236. Available online: <https://doi.org/10.1353/nar.2006.0015>
- McAdam, D., McCarthy, J. D. & Zald, M. N. (1996). Comparative Perspectives on Social Movements. *Cambridge University Press*. <https://doi.org/10.1017/cbo9780511803987>
- Mead, G. (1934). *Mind, Self and Society*. Chicago: University of Chicago Press.
- Nussbaum, M. C. (2001). Upheavals of Thought. *Cambridge University Press*. <https://doi.org/10.1017/cbo9780511840715>
- Pande, A. (2012). From “balcony talk” and “practical prayers” to illegal collectives: Migrant Domestic Workers and Meso-Level Resistances in Lebanon. *Gender & Society*, 26(3), 382–405. <https://doi.org/10.1177/0891243212439247>
- Polletta, F. (1998). Contending Stories: Narrative in Social Movements. *Qualitative Sociology*, 21(4), 419–446. <https://doi.org/10.1023/A:1023332410633>
- Polletta, F. (2008). Culture and Movements. *Annals of the American Academy of Political and Social Science*, 619, 78–96. <https://doi.org/10.1177/0002716208320042>
- Polletta, F. & Jasper, J. M. (2001). Collective Identity and Social Movements. *Annual Review of Sociology*, 27(1), 283–305. <https://doi.org/10.1146/annurev.soc.27.1.283>
- Ricoeur, P. (1992). *Oneself as another*. London: The University of Chicago Press.
- Skocpol, T. (2003). *Diminished Democracy: From membership to management in american civic life*. Oklahoma: University of Oklahoma Press.
- Smith, C. (2003). *Moral, Believing Animals: Human Personhood and Culture*. New York: Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780195162028.001.0001>

- Somers, M. R. (1994). The narrative constitution of identity: A relational and network approach. *Theory and Society*, 23(5), 605–649. <https://doi.org/10.1007/BF00992905>
- Steffens, N. K., Haslam, S. A. & Reicher, S. D. (2014). Up close and personal: Evidence that shared social identity is a basis for the “special” relationship that binds followers to leaders. *Leadership Quarterly*, 25(2), 296–313. <https://doi.org/10.1016/j.leaqua.2013.08.008>
- Welton, A. D. & Freelon, R. (2018). Community Organizing as Educational Leadership: Lessons From Chicago on the Politics of Racial Justice. *Journal of Research on Leadership Education*, 13(1), 79–104. <https://doi.org/10.1177/1942775117744193>

Funding

This study has been conducted under the framework of the Narratives4Change research project, which has received funding from the European Union’s Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 841355.

Acknowledgments

We would like to thank all individuals’ members of We The People Michigan (WTP-MI) and the Drive Michigan Forward (Coalition DMF) who have accepted to collaborate in the fieldwork of this study, providing insights and reflections on the topic discussed.

Data Availability Statement

All qualitative data derived from the fieldwork and used for this study are available from the corresponding author on reasonable request.

Emilia Aiello-Cabrera

Emilia Aiello es Investigadora Ramon & Cajal en el Departamento de Sociología de la Universidad Autónoma de Madrid (UAM). Entre 2019-2022 fue EU Marie Sklodowska-Curie Fellow en la Harvard Kennedy School of Government (Ash Center) y en la Universitat Autònoma de Barcelona (UAB, Departamento de Sociología). Sus intereses de investigación se centran en estudiar aquellos factores que generan y facilitan la agencia humana en contextos sociales deprimidos, especialmente en los grupos sociales más vulnerables como son las personas migrantes y/o refugiadas y de minorías étnicas, y en especial el rol de las mujeres en estos grupos. Además, su preocupación científica y personal también está en identificar formas de maximizar el impacto social de la investigación científica, para generar mecanismos de conexión entre ciencia y sociedad.

Nelly Fuentes

Nelly Fuentes es organizadora regional en We The People en el suroeste de Michigan. Es una mujer nativa de Mesoamérica que migró a la región de Michigan a principios del siglo, estableciéndose en Kalamazoo en 2006. Cree en el derecho humano a la migración libre dentro de la Isla Tortuga y está comprometida con los esfuerzos de liberación de los migrantes. Las prácticas anticoloniales y de sanación son el centro de su visión organizativa. Como parte de sus prácticas de sanación, invoca la guía y sabiduría de sus ancestros a través del arte de hacer tortillas. Fuentes colaboró con la Dra. Aiello en el desarrollo del caso de We The People Michigan, dentro del proyecto de investigación Narratives4Change (2019-2021).

ARTICLE/ARTÍCULO

Psychopathy and Narcissistic Abuse: the Consequences of an Unknown Type of Intimate Partner Violence

Psicopatía y abuso narcisista: las consecuencias de un tipo desconocido de violencia en pareja

Alexandra Ainz Galende

University of Almería, Spain
aag486@ual.es

Rubén Rodríguez Puertas

University of Almería, Spain
rubenrp@ual.es

Received/Recibido: 20/11/2023

Accepted/Aceptado: 16/4/2024

ABSTRACT

This article addresses the issue of narcissistic abuse within romantic relationships in which one partner is an integrated psychopath. The study focuses on heterosexual couples in which the psychopath is the male partner. Specifically, it seeks to explain what this abuse entails and its characteristics, and then outline its consequences. Firstly, we explain what psychopathy is. Secondly, we provide a detailed description of narcissistic abuse and its phases: love bombing, devaluation, discard and hoovering. To achieve our objective, we present an analysis of interviews with twenty women who claim to have been in a relationship with an integrated psychopath, a fact corroborated by their therapists. As a methodological tool for data analysis, we employed Grounded Theory, generating theory based on the analysis of the women's discourse rather than from pre-existing hypotheses. Some conclusions relate to the establishment of a previously unknown pattern of violence and abuse linked to psychopathy and narcissism. This type of abuse results in a significant emotional impact on the partners and ex-partners of narcissistic psychopaths.

KEYWORDS: devaluation; hoovering; integrated psychopaths; love bombing; discard.

HOW TO REFERENCE: Ainz Galende, A. y Rodríguez Puertas, R. (2024). Psicopatía y abuso narcisista: las consecuencias de un tipo desconocido de violencia en pareja. *Revista Centra de Ciencias Sociales*, 3(2), 53–72. <https://doi.org/10.54790/rccs.85>

The Original version can be read at <https://doi.org/10.54790/rccs.85>

RESUMEN

Este artículo aborda la cuestión del abuso narcisista dentro de las relaciones de pareja en la que uno de los dos integrantes es psicópata integrado. El estudio se centra en parejas heterosexuales en las que el psicópata es el hombre. Concretamente buscamos explicar en qué consiste y cuáles son las características de tal abuso, para después plasmar cuáles son las consecuencias del mismo. En primer lugar, explicamos qué es la psicopatía y, en segundo, describimos detalladamente qué es el abuso narcisista y cuáles son sus fases (bombardeo de amor, devaluación, descarte y hoovering). Para la consecución de nuestro objetivo, se expone el análisis de entrevistas a veinte mujeres que declaran haber estado en pareja con un psicópata integrado, hecho que ha sido corroborado por sus terapeutas. Como instrumento metodológico para llevar a cabo el análisis de datos hemos empleado la Teoría Fundamentada, dado que partimos del análisis del discurso de las mujeres para generar teoría y no de hipótesis previas. Algunas de las conclusiones obtenidas tienen que ver con el establecimiento de un, hasta ahora desconocido, patrón de violencia y maltrato vinculado a la psicopatía y al narcisismo. Maltrato que deriva en un alto impacto emocional que tienen este tipo de relaciones de abuso en las parejas y exparejas de psicópatas narcisistas.

PALABRAS CLAVE: bombardeo de amor; descarte; devaluación; hoovering; psicópatas integrados.

1. Introduction

Studies such as those by Shejet (2023), Iñaki Piñuel (2008) and Vicente Garrido (2000) highlight that psychopathy is prevalent in our societies in fields such as politics, media and the economy. There are social analyses of psychopathy, such as those by Lasch (1979), Sennett (1980), Lipovetsky (1983, 1990), Bauman (2007) and Grapsas (2022), that link it, along with narcissism, to the capitalist system (Miller *et al.*, 2017). According to Lipovetsky, the myth of “Narcissus” and its conceptualisation are the most precise symbols of the individuality born in this era, which he terms “hypermodernity”, focused on emotional fulfilment, a constant yearning for youth, consumption, sport as a value, the need for movement, etc. Lipovetsky argues that we are witnessing a shift in subjective interests characterised by a lack of concern for values and institutions previously considered solid, such as family and religion. In this context, authors such as Garrido (2004) and Pozueco, Romero and Casas (2011) recognise two types of psychopaths: those who commit crimes and those who do not. The protagonists of this article will be the latter, referred to as subclinical or integrated psychopaths. What differentiates one from the other is solely the issue mentioned: whether they have committed any criminal act or not. Both types of psychopaths share, as will be seen in detail later, the same profile concerning emotions and personality (Pozueco, Romero and Casas, 2011). It is precisely for this reason, because they have not committed any punitive act—or at least have not been caught—that it becomes very complex to distinguish them from the rest of the population. Nothing alerts one to the fact that they are interacting with psychopaths until, through deeper interaction, their true personality emerges, which in many cases leads to some form of abuse (Alyson, 2023). In this case, we will discuss narcissistic abuse, which, as evidence suggests, often occurs within romantic relation-

ships involving an integrated psychopath (Littlebear, Lofties and Mikolon, 2023). This type of abuse within couples, as well as the romantic relationships where one partner has a psychopathic personality, has not been the subject of extensive study due to the significant difficulty in addressing these issues. Furthermore, psychopathy has been stereotypically attributed only to ruthless murderers, largely due to the media and cinema in general (Kumar and Sharma, 2023). Moreover, until a few years ago, the issue of abuse and mistreatment belonged primarily to the domestic or private sphere, which is why it was not extensively discussed (Graña, 2023). Additionally, the pattern of partner violence has been largely confined to Lenore Walker's framework. Walker describes this pattern as a spiral comprising several stages that occur repeatedly until the cycle is broken. Specifically, the framework divides the cycle of violence into repetitive phases: the tension-building phase, the acute battering phase and the remorseful or "honeymoon" phase (1979). In recent years, this type of abuse has been increasingly highlighted to raise awareness and educate the population, with the aim of eradicating this highly destructive form of relationship. Awareness has been significantly boosted by the media, which has brought visibility to this issue and condemned it. Similarly, social media has played its part, creating spaces for communication, expression and debate. It is precisely through social media that other patterns of partner violence have been brought to light, including the one presented in these lines. Specifically, while conducting a social media analysis, particularly on Instagram, for a research project on fundamentalism, we came across various profiles on the mentioned social network (@pulsiondevida.psi, @psico.maxi, @instintocriminal.science, @apartados8km, @self-talk, @psicopsiquis, @pinuelinaki, @giapelleterapeuta, @psicopatascotidianos, @orudiz, etc.) that addressed the general issue of romantic relationships with psychopaths. These profiles discuss topics ranging from raising awareness about narcissistic psychopathic abuse and helping to detect whether your partner is a psychopath and/or narcissist, to what actions to take when this occurs. Thus, the discovery of these realities led to a redirection of the previous sociological perspective and a study on this issue. This issue is of vital importance as it outlines a previously unknown profile of abuse, whose most complex characteristic is its subtlety. This type of violence is beginning to be studied from a psychological perspective, but not from sociology or anthropology. Therefore, this study aims to take the first steps toward addressing these realities within the social sciences. Specifically, one of the objectives is to raise awareness of the cycle of narcissistic violence that exists in relationships with psychopaths, as well as its particularities. Additionally, the study will highlight the consequences of having been in a relationship with a narcissistic psychopath on the lives of the women under study, who are some of the participants in the various aforementioned Instagram pages dedicated to this topic. It is important to clarify that psychopaths can be both men and women and are involved in both heterosexual and homosexual relationships. However, the study has focused on interviewing women involved in heterosexual relationships because, quantitatively, there are far more women participating in these pages, and their narratives were much more accessible than those of men.

2. Theoretical Framework

2.1. The psychopath

Given the complexity of the topic, we will explore all the facets involved. We will begin with the definition of psychopathy, which is not without debate, as there is no unanimous agreement on it. Some definitions focus, for example, on biological aspects (Taylor *et al.*, 2003; Guinea *et al.*, 2006), while others are more “environmentalist” (Lang *et al.*, 2002; Poythress *et al.*, 2006; Craparo *et al.*, 2013). Additionally, it is observed that there are authors proposing various types and subtypes of psychopathy. Hare (1984), for example, identified three types of psychopaths: “primary” (characterised by antisocial behaviour based on a deficient or non-existent emotional response towards others); “secondary”/“neurotic” (forms emotional relationships, can feel guilt or remorse and is characterised by high anxiety); and “dis-social” (whose antisocial behaviour is due to environmental factors). In this context, the narcissistic psychopath would be conceptualised as “primary”. There are other sociological classifications, such as Babiak’s (2000), which differentiates only between criminal and non-criminal psychopaths. In summary, these classifications are important to highlight, although they are not the main focus of our study. In any case, considering the various categories proposed by authors such as Cleckley (1941), Karpman (1961), and Hare, Millon and Davis (2001), certain fundamental characteristics define psychopathic personality. Before continuing, it is important to note that psychopathy is not classified as a mental illness, but rather as a personality disorder characterised by a deficient emotional response towards others. This deficiency underpins the antisocial behaviour exhibited by psychopaths (Cleckley, 1941). This emotional deficit arises from an inability to experience emotions, despite not necessarily displaying this trait verbally or outwardly. According to Babiak (2000), their predatory relational style presents a constant and significant risk to those around them, potentially resulting in emotional, physical and/or economic harm. Hare (1991) developed the Psychopathy Checklist-Revised (PCL-R), comprising 20 items that delineate the specific traits of psychopathy.

Table 1

Psychopathy checklist factors (Hare, 1991)

1. Glibness/superficial charm	11. Promiscuous sexual behaviour
2. Grandiose sense of self-worth	12. Early behaviour problems
3. Need for stimulation	13. Lack of realistic goals
4. Pathological lying	14. Impulsivity
5. Conning/manipulative	15. Irresponsibility
6. Lack of remorse or guilt	16. Failure to accept responsibility
7. Shallow affect	17. Many short-term relationships
8. Callous/lack of empathy	18. Juvenile delinquency
9. Parasitic lifestyle	19. Revocation of conditional release
10. Poor behavioural controls	20. Criminal versatility

The study of the narcissistic aspect of psychopathy began in the 1970s in North America. Works such as *Generation of Narcissus* (Malcolm, 1971), *Le Narcissisme* (Grunberger, 1971), *Los narcisos: el radicalismo cultural de los jóvenes* (De Miguel, 1979) and *La cultura del yo* (Béjar, 1993) emerged during this period, deeply exploring this phenomenon from diverse perspectives. According to Lasch (1979), each era gives rise to its own particular form of pathology, and narcissism would epitomise our current era, influenced once again by the values of the economic system in which we live. Authors like Jauregui (2018) argue that psychopathy is inherent to modernity and its “values”, where it has become the paradigm of success and power. Beyond psychiatric diagnosis, this author suggests that psychopathy manifests as a growing social issue characterised by cruelty towards humanity. This cruelty stems not merely from consistent norm violations, but from ongoing ethical, moral and even legal distortions for personal gain, driven by market laws and prevailing individualism.

According to Kohut (1968), the narcissistic aspect of psychopathy manifests as a clinical expression of the infantile need for admiration. Svračić (1987) suggests this involves a tendency to present oneself as unique and exclusive, with the ultimate existential goal of gaining attention and admiration (Bleichmar, 1983). Narcissists therefore strive to maintain or regain a grandiose self-image (Freud, 1986; Kernberg, 1970; Kohut, 1966). This behaviour aligns with the “mask” model, a concept derived from clinical observations in which narcissistic individuals project a grandiose exterior while harbouring deep-seated feelings of threat, inferiority, weakness and fragility. Lasch (1979) posits that the constant pursuit of attention by narcissistic psychopaths prevents them from succumbing to their underlying sense of emptiness. This emptiness stems from a profound loss of identity; contrary to their outward portrayal, narcissists suffer from a chronic lack of self-love (Edershill, 2021). At this juncture, Kernberg (1970) discusses the narcissistic paradox, which suggests that while the narcissistic psychopath is unable to comprehend anything external to themselves, they simultaneously rely on constant external “supply” to maintain their fragile ego. Tudor (2017), who openly identifies as a narcissistic psychopath, dubs these supplies “fuel”. Terms like “fuel”, “supply” and “narcissistic supplement” denote the emotional reactions from others that the psychopathic narcissist consumes to counter their inner emptiness. Through these reactions, they uphold their grandiose self-image; lacking them, they plunge into existential void. Regarding fuel, two types are discernible on which the narcissistic psychopath “feeds”: positive fuel (emotional reactions that induce positive sensations such as admiration, idolisation or any form of general attention) and negative fuel (anger, resentment, fury, etc.). Both types are equally valuable and significant.

2.2. The cycle of narcissistic psychopathic abuse

Having elucidated the concept of narcissistic supply, it becomes evident that the routine of the narcissistic psychopath revolves around obtaining it, as their fragile ego would otherwise collapse (Herreros, 1995). Authors such as Piñuel (2015) un-

derscore a recurring pattern of abuse present in every relationship with a narcissistic psychopath, which comprises four main phases: love bombing, devaluation, discard and hoovering. In each phase, the narcissistic psychopath secures their “dose of supply”.

During the initial phase of love bombing, detecting the psychopath can be challenging as they portray themselves as the ideal partner. Armed with information about their prospective partner, the psychopath constructs a tailored mask or persona to allure and satisfy the victim’s emotional needs, painting an ideal and exhilarating picture. The psychopath effectively masks themselves as a “soul mate”, echoing the person’s preferences and beliefs, fostering an illusion of exceptional compatibility. Relationships often escalate swiftly, forming intense emotional bonds. Furthermore, typically during this phase, the psychopath may present themselves as a victim of some purportedly traumatic life event (issues in previous relationships, various forms of abuse suffered, etc.). In this manner, by portraying themselves as victims, they elicit empathy and a sense of commitment from the victim towards the perpetrator. This also renders the victim more receptive, grateful for the trust bestowed upon them and feeling secure and confident, thus divulging more personal and intimate information (which will later be used, in one form or another, against them). During this phase, the psychopath experiences a form of euphoria as they receive attention and supply (affection, compliments, gifts, etc.). In contrast, the victim perceives a false reciprocity in the relationship, believing their partner is genuinely happy. Yet, the narcissistic psychopath’s happiness derives from admiration, being the focal point of attention and achieving the desired outcomes of their manipulation.

The second phase, known as devaluation, initiates when the victim’s attachment to the psychopath is notably strong. Gradually, the narcissist escalates their demand for attention, thereby initiating a process of distancing the victim from their social circles. Concurrently, through isolation and increased dependency on the psychopath, manipulation tactics such as intermittent reinforcement, gaslighting, silent treatment and/or triangulation come into play.

Regarding intermittent reinforcement, in 1956, Skinner discovered that while rewards and punishments impact mammalian behaviour, a particular method of reward delivery can sustain behaviour over time: intermittent reinforcement, which entails a reward schedule that is unpredictable and random. This implies that when a reward is anticipated after a specific action, individuals tend to exert less effort to attain it. However, when the timing of the reward or the certainty of obtaining it is unpredictable, there tends to be a repetition of the behaviour that “worked” or another perceived as an improvement, with greater enthusiasm, in the hope of achieving a positive outcome. This pattern occurs in relationships where the victim increasingly strives to obtain an emotional reward without knowing when or if it will arrive.

The concept of gaslighting originates from the British play *Gas Light* (1933), later adapted into a film by George Cukor (1944). Since the 1970s, it has colloquially described efforts to manipulate a person’s sense of reality, causing them to

question their own sanity (Sweet, 2019). Alongside these, there is the silent treatment, which involves a complete communication blockade without apparent cause (Morán *et al.*, 2019). They may not communicate for hours, days or even weeks. Alternatively, they may disappear entirely. Later, they return or resume communication as if nothing happened, causing confusion, guilt, unease, uncertainty and more in the victim.

Lastly, there is triangulation (Sánchez, 2020), another manipulation tactic where the narcissistic psychopath introduces a third person abruptly into the relationship. This person may exist, be someone from the past or even be invented. In any case, the psychopath shows excessive interest in this person and extols all their supposed qualities, especially those the victim believes they lack or perceives themselves lacking. This leads to constant comparison, self-devaluation and competition for attention, which is what the psychopath truly desires. During this phase, the psychopath continues to receive fuel from the confused victim, who sometimes strives harder to obtain rewards and at other times offers fuel in the form of anger, jealousy, sadness, constant demands and so forth.

The third phase is discard: when the psychopath knows their victim is trapped in their web and psychologically sunk, they abruptly end the relationship simply because “they no longer serve them” and “cannot extract fuel”. In other words, they cannot obtain the attention they need or the emotional reactions they feed on from the victim. Thus, they leave behind a confused, disoriented, dependent person who, in many cases, is financially ruined because the victim will have given everything, one way or another, believing in the relationship. Typically, and simultaneously, at this stage, the psychopath will have already initiated a new relationship (or several), entering the “love bombing” phase. During this time, a traumatic bond exists between the psychopath and the victim, intensifying the devastation of being discarded. According to some psychiatrists and psychologists like Piñuel (2015), three conditions must be met by victims for a traumatic bond to form: an unwavering loyalty that defies logic and common sense, an inability to detach or a dependency on the perpetrator and a denial of a self-destructive reality. In most instances, while victims suffer profound devastation, the psychopath seamlessly continues their life with a new partner, effectively forgetting the one left behind. In the most severe cases, they persist with triangulation, seeking to inflict maximum harm.

There is a final phase known as hoovering. This concept originates from the American vacuum cleaner brand “Hoover” and metaphorically describes the intention to “suck” the victim back into the cycle of abuse within the relationship. Hoovering typically begins anew with “love bombing”, especially when the victim is starting to recover. Should the victim be “sucked” back in, they re-enter the spiral of the narcissistic psychopath (He, 2023).

3. Methodology

The data collection instrument utilised in this study was a semi-structured, in-depth interview. It comprised a script containing ninety questions (mostly open-ended, except for sociodemographic questions) organised into thematic sections. The final section specifically explored the impact of relationships with psychopathic partners and experiences of narcissistic abuse on the participants' lives. Twenty interviews were conducted with women who met the following criteria: (1) actively participate on Instagram in some of the previously mentioned profiles, (2) report having been in a relationship with narcissistic psychopaths and (3) indicate that they are undergoing psychological or psychiatric treatment as a result of these relationships. The interviewed women assert the validity of the second criterion—having been in a romantic relationship with a psychopath—based on confirmation from mental health professionals during their therapeutic process. The confirmation by mental health professionals was pivotal and a prerequisite for sample selection, mitigating potential subjectivity regarding whether their partner or ex-partner is a narcissistic psychopath, as the evaluation was conducted by an expert. On the other hand, it is noteworthy that there is a simultaneous and paradoxical awareness regarding one possible aspect in this context: the construction of the diagnosis of the narcissistic psychopath based on the subjective experiences narrated by the women. Ideally, interviewing the psychopaths themselves would have been desirable, but this endeavour, although considered as an objective, proved completely infeasible for reasons beyond the scope of this work.

3.1. Analysis technique

As previously mentioned, the current subject of study was not initially the primary focus. These realities, which we analyse somewhat serendipitously, were discovered—literally speaking—by accident, hence there were no predefined research hypotheses. Therefore, Grounded Theory was deemed the best methodological approach for conducting data analysis, as it derives from the analysis of discourse rather than from preconceived ideas or hypotheses (Glaser and Strauss, 1967). This technique involves a series of procedures that help organise information and develop analytical categories that reveal the most pertinent patterns in the data (Cutcliffe, 2000). Thus, Atlas.Ti6 software served as the primary tool for coding and creating various codes, upon which the constant comparative method was applied. This method entails systematically exploring similarities and differences through the analysis of incidents found within the data (Trinidad, Carrero and Soriano, 2006). The process began by developing substantive codes from the data obtained during the initial interviews (open coding), aimed at deriving core categories grounded in the data. These categories, referred to in Grounded Theory as *in vivo* codes, are based on participants' expressions and literal language, which play a crucial role in facilitating the emergence of theory. Simultaneously, the aforementioned coding process

was conducted alongside the constant comparative method, enabling the development of diverse narratives. Continuous comparison of incidents within the data prompted the emergence of new avenues for exploration in subsequent interviews. Thus, each interviewee's narrative contributed information that enabled comparison of similarities, differences and the robustness of the identified categories. Thus, the categories began to solidify with the emergence of new properties until they were ultimately verified and saturated. Through this process, and due to the theoretical emergence and saturation of multiple categories found in the initial in-depth interviews, there was a pursuit for more novel information.

After transcribing and analysing the initial interviews, substantive codes such as "dependence", "I can't live without him", "I can't leave him", "neither with you nor without you", were identified, illustrating how women demonstrated an inability to detach themselves from the narcissistic psychopath. These codes facilitated the development of a category termed "attachment", which encapsulated the aforementioned substantive codes. Similarly, other codes indicated that the second core category could be labelled "ruin", grouping substantive codes such as "I'm bankrupt", "sunk", "destroyed", "he's taken everything", "broken" and "empty and with nothing". Lastly, the central category "madness" emerged from substantive codes like "lost", "half-crazy", "crazy", "incongruous", "hypervigilant" and "paranoid".

With these substantive codes, three significant categories were established to elucidate and address the research questions: "attachment", "ruin" and "madness". The term "attachment" was selected for the first category because it is rooted in the women's descriptions of unconditional attachment and addiction, akin to that experienced by a drug addict. The second category, "ruin", reflects the emotional, economic and social turmoil these women endure upon ending the relationship. Lastly, "madness" was chosen for the third category to capture the recurrent expressions of feeling like they "are going crazy" or "were going crazy" in the women's narratives.

3.2. Participants

The participants consisted of twenty women aged between 24 and 59 years who have reported being in relationships with narcissistic psychopaths and are currently undergoing psychological or psychiatric treatment for this experience. The sample was incidental, with women selected based on the specified criteria. Participants were primarily accessed through Instagram profiles as detailed in the introduction. Additionally, the snowball technique was employed, where some interviewees encouraged others to participate. All interviews took place via Skype during September, October and December 2023, in view of the diverse geographic locations of the women's residences. Table 2 below presents the profiles of the interviewees.

Table 2
Interviewee profiles

Name	Age	Duration of relationship	Time since leaving relationship	Instances of resuming relationship	Who ended the relationship (last time)
Cinthya	29	9 months	1 month	2 times	Ex-partner
Sole	52	10 years	6 months	At least 10 times	Sole
Marga	42	6 years	1 month	At least 8 times	Ex-partner
Luisa	48	2 years	8 months	2 times	Ex-partner
Encarni	59	20 years	More than a year	1 time	Encarni
Yolanda	56	9 months	3 weeks	2	Yolanda
Érica	33	1 year and 6 months	2 months	At least 5 times	Érica
Susana	37	9 months	6 months	At least 8 times	Ex-partner
María	34	4 years	2 months	1 time	María
Izaskun	29	1 year	3 months	4 times	Izaskun
Estefanía	24	4 months	4 months	1 time	Estefanía
Sonia	38	5 years	6 months	2 times	Ex-partner
Sofía	39	4 years	1 week	1 time	Ex-partner
Carla	32	2 years	3 months	3 times	Carla
Marta	27				
Carmen	53	34 years	9 months	3 times	Ex-partner
Patricia	49	5 years	1 month	At least 12 times	Ex-partner
María del Mar	45	25 years	1 year	A lot of times: doesn't remember	Ex-partner
Laura	43	12 years	3 years	A lot of times: doesn't remember	Ex-partner
Nereida	30	10 years	2 weeks	A lot of times: doesn't remember	Ex-partner

Source: Own research (the names of the participants have been changed to protect their identity).

4. Analysis

As mentioned in the introduction and following the delineation of the cycle of narcissistic abuse, this analysis examines the repercussions for women who have been involved with an integrated psychopath. All interviewees recount experiencing the cycle of abuse delineated in earlier sections and its various stages. While some describe it implicitly, others do so explicitly. Moreover, their narratives highlight several common elements that closely mirror traits identified by Hare in his classification of psychopathic personalities, which are notably significant. Foremost among these is the issue of pathological lying, a characteristic mentioned by all the women.

All the women interviewed describe the psychopath as a pathological liar. They note that psychopaths begin lying from the outset of the relationship, fabricating details about themselves, their preferences and sometimes even their profession and educational background. The women discuss “the psychopath’s mask” and their “se-

cret/hidden agenda". For example, regarding this alleged hidden agenda, twelve out of the twenty interviewed women reveal that over time, they discovered their partners were chatting and having sexual encounters with other women besides them, starting from the beginning of the relationship (during the love bombing phase). Moreover, five of these women learned that their ex-partners had another phone, from which, as one interviewee described, they lived "a different life".

Regarding their true identity, the most significant falsehood was recounted by a participant whose ex-partner claimed to work in gardening in Australia and had come to Spain to reconnect with his Spanish roots, supposedly having Spanish nationality. This narrative was based on the story that his parents migrated to Australia years ago when he was young, seeking work. The woman discovered from an archived news article online that her ex-partner had served twelve years in prison for murder. He was deported to Spain after completing his sentence.

Regarding the theme of the psychopath's mask and hidden agenda, more than half of the twenty interviewees indicate that their healing process has involved or currently involves "killing" the image they had constructed of the psychopath during the love bombing phase. This phase was when the psychopath crafted their persona and essence based on the idealised concept of love that the woman they were seducing held. One interviewee succinctly captures this sentiment:

My grieving process has revolved around that, permanently burying that character in some way. Coming to terms with the fact that it was a falsehood that never truly existed and will never return (María del Mar).

In this context, the women being studied undergo a state of cognitive dissonance, as articulated by Cinthya and Luisa in their accounts. This dissonance is influenced by cultural and structural factors ingrained in the concept of romantic love, perpetuated through literature and media over the years. This notion often includes the belief that if you wait long enough, "he will change", or specifically in this case, "he will return to his initial self":

What happens to us is something like this: you've had really good experiences with that person, and suddenly you can't reconcile that they're being, yes, bad to you. And then you search for reasons; oh, it's because they had a bad day, or it's because their father used to hit them, or it's because their ex was a bad person, and you make excuses and it continues, and each time they mess you up even more deeply (Cinthya).

Cinthya describes the contradiction that all interviewed women acknowledge experiencing. They initially fell in love with someone they admired for certain qualities, and now they must confront the reality that this person they wanted/loved, and in some cases still want/love, is not who they believed them to be.

The following excerpt also illustrates the contradictions experienced by the women, which in various ways paralyse them in a state of indecision, prolonging their hesitation in abusive situations.

Imagine, you think he's nostalgic, that he came to meet his relatives, that he wants to reconnect with his roots, it's wonderful, even romantic, and suddenly

you discover that he has killed someone! I looked into his eyes and thought: it's impossible for him to have killed someone. He doesn't have the eyes of a killer. He's very affectionate. It's impossible. But it's not impossible, no. It's a difficult truth to digest (Luisa).

Luisa reveals that she persisted in the relationship with him even after uncovering this fact. It wasn't until she observed his increasing lies that she became able to question the relationship. She recognised his deceit and manipulation but questioned her own perception of reality. Eventually, she began to doubt her sanity. She confesses her inability to end the relationship; she was “completely hooked”, and it was he who “discarded” her, leaving her “destroyed”.

It is notable that all the women whose relationships were terminated by the psychopath assert that just as he ends the relationship, they experience a challenging existential moment. On one hand, they express exhaustion from the relationship, while on the other, they highlight an incident where they futilely expected the psychopath to treat them well (reciprocity). Many of these women describe how the psychopath leaves them in the worst possible circumstances, feeling “empty” and believing they have nothing more to offer (no supply). Furthermore, most of them disclose that when their partner ends the relationship, he had already begun another:

I was devastated. He had returned to my life after being with someone else, and all he did was compare me. But the worst part was when my father's cancer worsened, and he was dying. What do you think he did? He disappeared. [...] He hadn't finished with me, but he already had someone else. Emotionally, I felt like a corpse (Laura).

In the penultimate column of the table, you can observe instances of relationship cessation between the interviewees and their partners. In most cases, the relationship has ended more than once, and as illustrated by Nereida, sometimes multiple times: “So many that I don't even remember,” she says. This fact is reflected in the data as one of the consequences of a relationship with a narcissistic psychopath, which some psychiatrists/psychologists refer to as “traumatic bonding”. This term describes the “attachment” sensation that the women report feeling, which we have categorised accordingly.

It's like a drug; over time, but only over time—lest people think we are foolish—you know it's killing you, that he pretends, deceives, mistreats and humiliates you, but you need that, you need him, you need his attention. You just don't want to believe it! It's very hard to digest! His good side, his other side. The one from the beginning. You have hope. I've already told you that I ended up in a psychiatric ward; I didn't even know where my right foot was. I doubted everything: myself, reality, and yet I wanted him to come back, to return and deceive me, to suck me back in and let me rest. To put on the mask and play the character from the beginning, the one I don't know why I long for so much and have become obsessed with (Yolanda).

In part of the interview, Sonia summarises various aspects of narcissistic psychopathic abuse very well. Among other issues, she highlights the reinforcement of the submission she experienced, linked to intermittent reinforcement. Towards the end of her account, she questions whether she would re-enter the cycle of narcissistic psychopathic abuse, illustrating the difficulty of breaking the bond.

It sounds super pathological, but he is... well, I want to think he was, because he left me, I believe, fortunately for me, my favourite form of self-destruction. I make a joke of it, but it's not funny at all. I got myself into a place from which I couldn't escape, and the worst part is that nothing tied me down—it was my mind. It's like they kidnap your mind, and you live solely for him. You try everything to please him, to bring back that person you knew, so that he won't leave you. I tried everything: his favourite food, clever surprises, massages, hoping I would hit the mark and bring back that magical person from the good times... until I understood that he wasn't a person, but a fabricated character (Sonia).

When asked, "In one word, describe your current state after having experienced this relationship," the most repeated words were "ruin", "broken", "dead" and "crazy". Cultural expectations and traditional gender roles still play a fundamental role in this context. Some interviewees wondered how they could break up when, to their families and surroundings, their partner was or had been wonderful: "hard-working, a good father, a good conversationalist, etc.," thus placing significant weight on family and societal expectations at the expense of their psychological and social well-being.

The following statement highlights the exercise of economic violence, perpetuated partly by the still-prevalent idea of the sexual division of labour, where men work outside and provide while women work at home without economic or social recognition. In this case, it is imposed to maintain women's dependency on men:

Ruined. He left me in ruins. I married him—you know how it was years ago, it's not like now. He would disappear for days, spend money and give gifts to other girlfriends he had. I was dying of heartbreak; on top of that, he compared me to them. I endured everything. It's hard to understand, but it was like knowing two different people: the perfect one and the monster. He wouldn't let me work, so I was useless, dependent (Encarni).

All the interviewed women reported psychological problems after the end of the relationship: depression, anxiety, post-traumatic stress disorder, etc. Of the twenty women interviewed, only three had psychological issues before starting the relationship with their partner. When asked to describe their psychological state while in the relationship, most referred to madness: "I was crazy", "it was sheer madness", "one day you'd be on cloud nine with a crumb, with a kind word, and two days later you'd be in the muck because he'd disappear or make you feel worthless", "a living hell, madness", "I thought I had lost it, felt like I was going completely nuts", "crackpot", etc.

Do you know what it is to literally pull your hair out? You have to live through it to understand it. Everything's going fantastically, you're super in love, theoretically, he is too, and suddenly everything changes, and you say: what happened? Is it me? And you look for him and can't find him. From being the most affectionate person in the world, he becomes the most distant, cold and calculating person in the blink of an eye. He goes days without talking to you, literally. From being the person who cared for you the most, he becomes... nothing... no one. You become nothing, like air, and you start grovelling, and he gives you crumbs, and you light up again, and then he rejects you, insults you, humiliates you in a thousand possible ways, and you dim again. He starts bringing in others, and you endure it and start competing... you compete. Broken, dead, and him, he's happy, indifferent. Do you understand? As if nothing had happened (Laura).

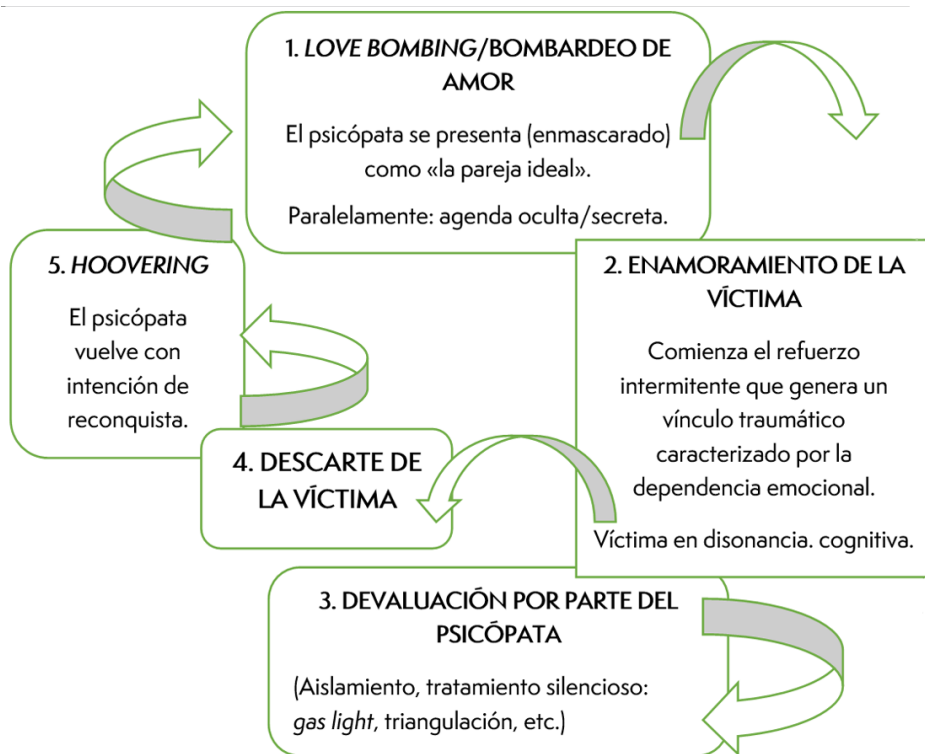
5. Discussion and conclusions

Exploring the scientific literature on this topic reveals that current research is emerging from realities like those described by the interviewed women. These realities are brought to light thanks to social media and various documentaries and programmes addressing this issue, such as *The Tinder Swindler* and *Bad Surgeon: Love Under the Knife*. Such documentaries provide some insights, in a more relaxed and less scientific manner, into the personality of these types of individuals and the consequences of being in a relationship with them. The term “unknown” is used in the title of this article to refer to the type of violence discussed. This term is used intentionally, as this type of violence has likely existed for a long time but has either been invisible or analysed through different behavioural patterns that obscured the particularities of these realities. It is important to highlight that, according to various authors, especially the sociologists cited throughout this work, psychopathy and particularly its narcissistic component are significantly related to the characteristics of our time, where individualism, impermanence, volatility, anomie and market dictates prevail. Consequently, some psychopaths, given their characteristics, become figures of success and reference in fields connected to the public sphere.

This article has systematised and organised existing information, providing theory based on the analysis of the conducted interviews and generating a starting point, a new horizon for the study of violence and abuse within romantic relationships. This new horizon indicates the existence of other patterns of abuse and mistreatment within romantic relationships, beyond those detected and described by Walker. Walker theorised, as previously mentioned, about the cyclical dynamics of violence within couples, specifically the violence exerted by men towards women. In contrast, this study and the emerging theory suggest that psychopathic narcissistic violence and abuse are not necessarily related to sex-gender constructions—although such abuse can be reinforced by cultural patterns based on these constructions—but that this type of violence can occur within any romantic relationship, whether from a man towards a woman, a woman towards a man or within homosexual couples. The type of abuse discussed in this article, which requires further extensive study, also follows a cyclical pattern and comprises different stages. Specifically, the repetitive pattern observed in various cases, based on literature and especially the analysis of different social media groups and the interviews, corresponds to the outline presented in Table 3.

Table 3

Phases of psychopathic narcissistic abuse in relationships



Source: own research.

This pattern, therefore, necessitates further study to refine additional details that could enhance efforts in the prevention and detection of this type of violence, as well as the development of specialised therapies tailored to address such abuse effectively and provide adequate support to victims. As highlighted throughout this text, psychopathic narcissistic abuse reveals its complexity through constant, subtle manipulation. Its insidious nature instils doubt in the victim's judgement and mental stability, fostering a belief in a distorted reality.

The psychological impact of this abuse is profound and devastating, which is borne out by the fact that all twenty women interviewed are currently undergoing psychiatric or psychological treatment. Prior to their relationships with psychopaths, only three had sought psychological or psychiatric consultation. This underscores the critical need for comprehensive dissemination of knowledge regarding the intricacies of psychopathic narcissistic abuse. The dissemination of this type of abuse, alongside the experiences of the interviewed women, can offer robust support to others who have undergone or are currently facing similar situ-

ations. It enables them to depersonalise their experiences and recognise that they have been victims of psychopathic narcissistic abuse, reassuring them that “there is nothing wrong with them”. In essence, their mental health challenges do not stem from intrinsic flaws, but rather from the abusive relationships they urgently need to break free from, starting with what psychiatrists and psychologists term “no contact”. As noted by various experts, including Scott Peck, evil exists alongside evildoers and warrants thorough study. Therefore, there is an urgent call for comprehensive studies to elucidate these phenomena, the nature of evil and their repercussions. Moreover, these studies must adopt a holistic approach, encompassing not only psychological and psychiatric perspectives but also social dimensions. For future research, the aim is to interview psychopathic and narcissistic individuals, acknowledging the complexity of this issue. Firstly, because these individuals are “integrated” psychopaths, meaning they blend in with the general population. Secondly, because obtaining a professional diagnosis and finding participants willing to disclose their condition and undergo interviews pose significant challenges. As recommendations and future research directions, it would be crucial and valuable to investigate profiles “closely” associated with individuals exhibiting these personality characteristics. While this study focused on women partnered with them, exploring insights from professionals who work with such individuals could provide deeper understanding of the issues at hand.

Moreover, the narratives of these women have underscored that psychopathy is not confined to cinema; rather, psychopathy and psychopaths are firmly integrated into our societies. These societies, influenced by emerging values like individualism and competitiveness, sometimes elevate these individuals as role models and examples, often unaware of the potential danger they pose to everyone.

6. References

- Alyson E. B. and Emanuele, F. (2023). Love is a losing game: Capacity for love mediates the relationship between the vulnerable dark triad and love styles. *Personality and Individual Differences*, 215 (112360). <https://doi.org/10.1016/j.paid.2023.112360>.
- Babiak, P. (2000). Psychopathic manipulation at work. In C. B. Gacono (Ed.), *The clinical and forensic assessment of psychopathy: a practitioner's guide*. New York: Lawrence Erlbaum Associates.
- Béjar, H. (1993). *La cultura del yo*. Madrid: Alianza.
- Bleichmar, H. (1983). *El narcisismo: estudio sobre la enunciación y la gramática inconsciente*. Buenos Aires: Ediciones Nueva Visión.
- Cleckley, H. M. (1941). *The Mask of Sanity: an Attempt to Reinterpret the So-Called Psychopathic Personality*. St. Louis: C.V. Mosby.
- Craparo, G., Schimmenti, A. and Caretti, V. (2013). Traumatic experiences in childhood and psychopathy: a study on a sample of violent offenders from Italy. *European Journal of Psychotraumatology*, 4(1)(6). <https://doi.org/10.3402/ejpt.v4i0.21471>
- Cutcliffe, J. R. (2000). Methodological issues in grounded theory. *Journal of Advanced Nursing*, 31(6), 1476–1484. <https://doi.org/10.1046/j.1365-2648.2000.01430.x>
- De Miguel, A. (1979). *Los narcisos: el radicalismo cultural de los jóvenes*. Barcelona: Kairós.
- Edershile, E. A. and Wright, A. G. C. (2021). Grandiose and vulnerable narcissistic states in interpersonal situations. *Self and Identity*, 20(2), 165–181. <https://doi.org/10.1080/15298868.2019.1627241>
- Freud, S. (1986). On narcissism: An introduction. In A. P. Morrison (Ed.), *Essential papers on narcissism* (pp. 17–43). New York: New York University Press.
- Garrido, V. J. (2000). *El psicópata*. Alzira: Algar.
- Garrido, V. J. (2004). *Cara a cara con el psicópata*. Barcelona: Ariel.
- Graña, L. G. (2023). La dicotomía público/privado y la violencia contra las mujeres en el ámbito de la pareja. Un análisis a través de la jurisprudencia de los sistemas europeo y americano de protección de derechos humanos. *EUNOMÍA. Revista en Cultura de la Legalidad*, (24), 184–208. <https://doi.org/10.20318/eunomia.2023.7661>
- Grapsas, S., Brummelman, E., Dufner, M. and Denissen, J. J. (2022). Affective contingencies of narcissism. *Journal of Personality and Social Psychology*, 123(2), 444–453. <https://doi.org/10.1037/pspp0000406>
- Grunberger, B. (1971). *Le Narcissisme*. París: Payot.
- Guinea, F. S. and Bonilla, J. (2006). Neurobiología y neuropsicología de la conducta antisocial. *Psicopatología Clínica Legal y Forense*, 6(1), 67–81.
- Hare, R. D. (1984). *La psicopatía: teoría e investigación*. Barcelona: Herder.

- Hare, R. D. (1991). *The Hare Psychopathy Checklist–Revised (PCL–R)*. Toronto: MultiHealth Systems. <https://doi.org/10.1037/t01167-000>
- He, Y. (2023). Too Close to the Ego: Narcissists Affective Reaction to Advertising Depends on Its Relevance to Self–Image. *Journal of Advertising*, 52(2), 264–278. <https://doi.org/10.1080/00913367.2022.2027298>
- Herreros, J. L. T. (1995). Narcisismo y sociedad actual. *Revista de Fomento Social*, (200), 559–585. <https://doi.org/10.32418/rfs.1995.200.2671>
- Jauregui, I. (2008). Psicopatía: pandemia de la modernidad. *Nómadas. Critical Journal of Social and Juridical Sciences*, 19(3).
- Karpman, B. (1961). The structure of neurosis: with special differentials between neurosis, psychosis, homosexuality, alcoholism, psychopathy, and criminality. *Archives of Criminal Psychodynamic*, 4, 599–646.
- Kernberg, O. F. (1970). Factors in the psychoanalytic treatment of narcissistic personalities. *Journal of the American Psychoanalytic Association*, 18(1), 51–85. <https://doi.org/10.1177/000306517001800103>
- Kohut, H. (1966). Forms and transformations of narcissism. *Journal of the American Psychoanalytic Association*, 14(2), 243–272. <https://doi.org/10.1177/000306516601400201>
- Kohut, H. (1968). The psychoanalytic treatment of narcissistic personality disorders: Outline of a systematic approach. *The psychoanalytic study of the child*, 23(1), 86–113. <https://doi.org/10.1080/00797308.1968.11822951>
- Kumar, M. and Sharma, A. (2023). Save the cinema, kill the critic: review of the film *Chup: Revenge of the Artist*. *Media Asia*, 50(3), 485–491. <https://doi.org/10.1080/01296612.2022.2136865>
- Lang, S., Klinteberg, B. and Alm, P. (2002). Adult psychopathy and violent behavior in males with early neglect and abuse. *Acta Psychiatrica Scandinavica*, 106, 93–100. <https://doi.org/10.1034/j.1600-0447.106.s412.20.x>
- Lasch, C. (1979). *The culture of narcissism*. New York: Warner Books.
- Lipovetsky, G. (1983). *L'ère du vide*. París: Folio.
- Lipovetsky, G. (1990). *El imperio de lo efímero*. Barcelona: Anagrama.
- Littlebear, S., Lofties, E. and Mikolon, T. (2023). Counselor Perceptions Regarding Narcissistic Personality Disorder, Narcissistic Traits, and Domestic Violence. *Contemporary Family Therapy*, 1(10). <https://doi.org/10.1007/s10591-023-09667-8>
- Malcolm, H. (1971). *Generation of Narcissus*. Boston: Little Brown and Company.
- Miller, J. D., Lynam, D. R., Hyatt, C. S. and Campbell, W. K. (2017). Controversies in narcissism. *Annual Review of Clinical Psychology*, 8(13), 1–54. <https://doi.org/10.1146/annurev-clinpsy-032816-045244>

- Millon, T. and Davis, R. (2001). *Trastornos de la personalidad en la vida moderna*. Barcelona: Masson.
- Morán, C., González, M. T. and Landero, R. (2009). Valoración psicométrica del cuestionario de acoso psicológico percibido. *Revista de Psicología del Trabajo y de las Organizaciones*, 25(1), 7–16. <https://doi.org/10.4321/s1576-59622009000100002>
- Piñuel, I. (2008). *Mi jefe es un psicópata*. Barcelona: Alienta.
- Piñuel, I. (2015). *Amor zero: como sobrevivir a amores psicopáticos*. Barcelona: Sb Editorial.
- Poythress, N. G., Skeem, J. L. and Lilienfeld, S. O. (2006). Associations among early abuse, dissociation, and psychopathy in an offender sample. *Journal of Abnormal Psychology*, 115(2), 288–297. <https://doi.org/10.1037/0021-843X.115.2.288>
- Pozueco, J. M., Romero, S. L. and Casas, N. (2011). Psicopatía, violencia y criminalidad: Un análisis psicológico–forense, psiquiátrico–legal y criminológico (Parte I). *Cuadernos de Medicina Forense*, 17(3), 123–136. <https://dx.doi.org/10.4321/S1135-76062011000300004>
- Sánchez Ramos, M. (2020). El mobbing entre congéneres en las instituciones educativas. RIDE. *Revista Iberoamericana para la Investigación y el Desarrollo Educativo*, 10(20). <https://doi.org/10.23913/ride.v10i20.589>
- Sennett, R. (1980). *Narcisismo y cultura moderna*. Barcelona: Kairós.
- Shejet, F. O. (2023). La violencia: Psicopatía, empatía y tratamientos. *Edupsykhé. Revista de Psicología y Educación*, 20(1), 1–4. <https://doi.org/10.57087/edupsykhé.v20i1.4535>
- Skinner, B. F. (1956). A case history in scientific method. *American Psychologist*, 11(5), 221–233. <https://doi.org/10.1037/h0047662>
- Švrakić, D. M. (1987). Pessimistic mood in narcissistic decompensation. *The American Journal of Psychoanalysis*, 47, 58–71. <https://doi.org/10.1007/BF01252333>
- Sweet, P. L. (2019). The sociology of gaslighting. *American Sociological Review*, 84(5), 851–875. <https://doi.org/10.1177/0003122419874843>
- Taylor, J., Loney, B. R., Bobadilla, L., Lacono, W. G. and McGue, M. (2003). Genetic and environmental influences on psychopathy trait dimensions in a community sample of male twins. *Journal of Abnormal Child Psychology*, 31(6), 633–645. <https://doi.org/10.1023/A:1026262207449>
- Tudor, H. G. (2017). *Combustible. ¿Qué es lo que hace funcionar al narcisista?* Oklahoma: Insight Books.
- Walker, L. (1979). *The battered woman syndrome*. New York: Harper and Row.

Alexandra Ainz Galende

Alexandra Ainz Galende earned her bachelor's degree in Sociology from the University of the Basque Country and a PhD *cum laude* from the University of Almería. She is currently a permanent lecturer in the University of Almería's Department of Sociology. Her research focuses on fundamentalisms, fundamentalist terrorism, radicalisation processes, social movements, Islamic feminisms, migrations and Islamophobia. She has authored several publications, including *Terrorismos fundamentalistas: medioevo armado a través de la web 2.0* (Centre for Sociological Research) and *The Demands of Niqabi Women in the Telegram Subaltern Corner Orgullo Niqabi*. Currently, she serves as the principal investigator for the R&D project "Muslims, Youth and Radicals: From ICT to Mosques", funded by FEDER funds.

Rubén Rodríguez Puertas

Rubén Rodríguez Puertas holds a bachelor's degree in Sociology from the University of Granada and a PhD in Migration Studies from the Universities of Granada, Jaén and Pablo de Olavide in Seville. Currently, he serves as a permanent labor professor in the University of Almería's Department of Sociology. His research interests span migration movements, youth, the labour market and social research methods and techniques. He is the author of books and chapters including *Nostálgicos, Conversos y Cosmopolitas. Perfiles de la nueva emigración española* (EDUAL, 2019) and *El devenir del capitalismo y su manifestación en la sociedad. De la clase obrera al nuevo precariado* (Tirant lo Blanch, 2020). His work has been published in journals such as *EMPIRIA. Revista de metodología de ciencias sociales*, *RIEM. Revista Internacional de Estudios Migratorios*, *Social Inclusion* and *Social Sciences*.

ARTICLES/ARTÍCULOS

Review of Business Location Research: a Bibliometric Analysis from 1968 to 2022

Revisión de la investigación sobre localización de empresas:
un análisis bibliométrico de 1968 a 2022

Virginia Perez-Benitez

University of Málaga, Spain
virginiaperez@uma.es

German Gemar

University of Málaga, Spain
ggemar@uma.es

Received/Recibido: 21/2/2024

Accepted/Aceptado: 29/5/2024



ABSTRACT

This research presents the results of a bibliometric analysis of academic research published on the topic of business location during the period from 1968 to 2022. Specifically, it seeks to identify, from a longitudinal perspective over time, the relationships between past and current topics, as well as to predict emerging trends in this field of research. The analysis has been conducted using SciMAT software, through which strategic diagrams and thematic networks based on the co-occurrence of keywords are obtained. A total of 509 documents from 1138 authors and 1799 keyword clusters have been processed. The results show that the main topics within the area of business location in the last five years are “Foreign direct investment”, “Perspective”, “Growth” and “Decisions”.

KEYWORDS: Business location; Globalization; Value-Chain; Multinational; Co-word analysis; Bibliometric analysis; SciMAT; Logitudinal analysis; Strategic diagram; Thematic network.

HOW TO QUOTE: Pérez-Benítez, V. y Gemar, G. (2024). Revisión de la investigación sobre localización de empresas: un análisis bibliométrico de 1968 a 2022. *Revista Centra de Ciencias Sociales*, 3(2), 73-96. <https://doi.org/10.54790/rccs.92>

Spanish version can be read on <https://doi.org/10.54790/rccs.92>

RESUMEN

Esta investigación presenta los resultados de un análisis bibliométrico de investigaciones académicas publicadas sobre el tema de localización empresarial durante el período de 1968 a 2022. Específicamente, busca identificar, desde una perspectiva longitudinal en el tiempo, las relaciones entre temas pasados y actuales, así como predecir tendencias emergentes en este campo de investigación. El análisis se ha realizado mediante el software SciMAT, a través del cual se obtienen diagramas estratégicos y redes temáticas en función de la coocurrencia de palabras clave. Se procesaron un total de 509 documentos de 1138 autores y 1799 grupos de palabras clave. Los resultados muestran que los principales temas dentro del área de localización de negocios en los últimos cinco años son “Inversión Extranjera Directa”, “Perspectiva”, “Crecimiento” y “Decisiones”.

PALABRAS CLAVE: Ubicación de la empresa; Globalización; Cadena de valor; Multinacional; Análisis de copalabras; Análisis bibliométrico; SciMAT; Análisis longitudinal; Diagrama estratégico; Red temática.

1. Introduction

The location of firms has traditionally been an important research topic because of its implications both for the profitability and survival of firms and for the economic development of territories (Gemar, Soler, & Guzman-Parra, 2019). In particular, this area of research is especially important for managers and entrepreneurs, as location can make the difference between success and failure in a start-up company (Strotmann, 2007). Localisation can refer to the location of the different activities within the company's value chain as well as to different subsidiaries of the company located in different places or even countries, as in the case of multinational companies. In any case, it can be said that the decision on the physical location of the company is of a strategic nature (Chang & Li, 2019). This decision is influenced by a multitude of different factors, which in turn depend on the sector of activity and the size of the company in question (Mejia-Dorantes, Paez, & Vassallo, 2012). Due to the complexity, business location, and specifically its decision, has also been studied from a methodological point of view, proposing various techniques and mathematical tools (Arauzo-Carod, Liviano-Solis, & Manjón-Antolín, 2010). Moreover, in recent years, due to technological advances, even data analysis techniques based on Business Intelligence are now being used to assess the location of companies, for example, using data from social networks such as Facebook (Lin, et al., 2016).

Throughout history, many theories on the location of firms have been proposed, and there has been a clear evolution over time. One of the first authors to study location economies was Marshall (1890), who recognised economies of scale external to the company resulting from co-location. Later on, the postulates of Weber (1929) and the mechanistic models, which focus on the transport cost factor, stand out. Today there are more modern theories that consider multiple factors in the decision and take into account differences between sectors, countries, and types of companies (Arauzo-Carod, Liviano-Solis, & Manjón-Antolín, 2010; Alcacer & Chung, 2007; Devereux, Griffith, & Simpson, 2007). For example, the importance of innovation, knowledge sharing, networking, local infrastructure and economic conditions, quality of life

of employees and potential human capital have recently been considered (Akın & Seyfettinoğlu, 2022; Malecki, 1985; Arauzo-Carod, 2013; Lafuente, Vaillant, & Serarols, 2010; Jo & Lee, 2014). In a more novel way, authors such as Alcácer, Dezsó, & Zhao (2015) have studied how strategic interaction influences location choices over time. The importance of the location decision makes it possible to find studies in the academic literature that apply different econometric models to explain location decisions. In this line, Cissé, Dubé, & Brunelle (2020) evaluate the impact of local characteristics on the location decision of firms in different sectors using the multinomial logic model. Xu, Shen, Zhu, & Yu (2020) propose a neural network approach using satellite data and urban data to analyse the commercial popularity of the locations of various types of businesses.

Today we are facing a globalised economy. Against this backdrop, many companies are choosing to internationalize their business activity, becoming multinational companies. Within the internationalisation strategy, the concept of cultural distance becomes relevant (Hofstede, 1984). In the literature, we can find studies such as those by Lee, Pattnaik, & Gaur (2023) which analyse the role of transnational distance in the choice of location of Ibusiness companies.

On the other hand, as already mentioned, the location of companies is also studied from a macroeconomic point of view, as it is important for the economic development of regions. In fact, the economic progress of a territory is linked to its business fabric, with the most developed economies being those with the greatest number of companies. Thus, it can be concluded that the economic success of a region depends to a large extent on the entry decisions of companies (Piacentino, Bono, Cracolici, & Giuliani, 2017). In this sense, governments use subsidies to attract companies to disadvantaged regions in the hope that positive externalities will be generated (Devereux, Griffith, & Simpson, 2007).

The above highlights the importance of business location, which becomes a relevant issue both at the microeconomic level, when approached from the point of view of the company, and at the macroeconomic level, since it affects the economic development of regions. Given the extensive development and relevance that this area of research has within academic literature, it is necessary to carry out an in-depth longitudinal analysis over time since, as far as we know, there is no previous bibliometric analysis in this field.

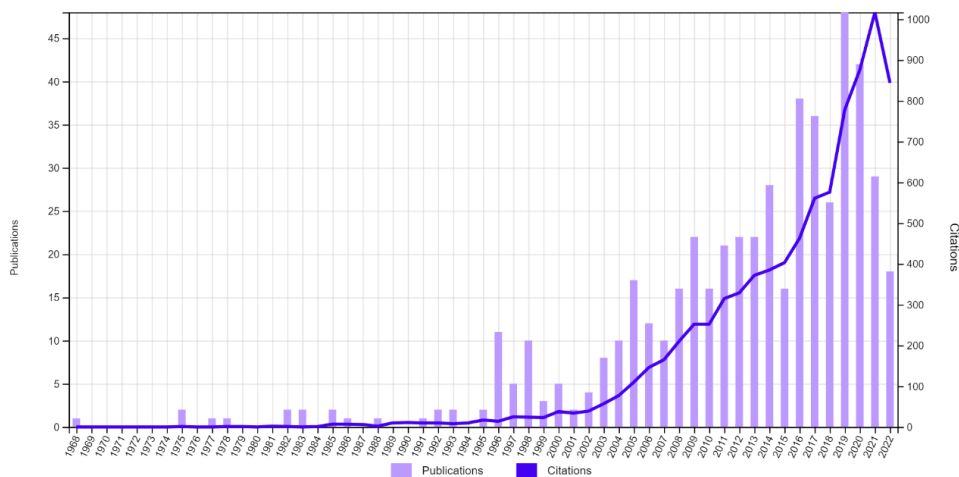
Therefore, the main objective of this paper is precisely to analyse the evolution of the business location research area over time to identify particular conceptual subdomains and to detect possible future trends. For this purpose, a bibliometric analysis of co-words has been carried out using SciMAT software for the time period from 1968 to 2022. We consider this research novel as we have not found previous longitudinal bibliometric analyses in this particular field of research. The following sections detail the dataset used in the study, as well as the methodology employed, the results and the main conclusions obtained.

2. Materials and methods

2.1. Database

For this study, data has been obtained from Web of Science (WoS) (Clarivate Web of Science (WoS), s.f.) which is a world leading database. It includes the Science Citation Index Expanded (SCIE), Social Science Citation (SSCI), Arts and Humanities Citation Index (AHCI), Emerging Sources Citation Index (ESCI), Conference Proceedings Citation Index (CPCI), Book Citation Index (BKCI), and Current Chemical Reactions and Index Chemicus. A search was conducted on 7 September 2022 with the following specific query: TS= (“business location”) OR TS= (“company location”) OR TS= (“firms location”). Where TS refers to the “Topic” which in turn includes the title, abstract and keywords. From this search we obtained 509 documents from 1138 authors and a total of 2019 unfiltered words for the period from 1968 to 2022, with 1968 being the first year in which a document published in WoS is recorded. Figure 1 shows the distribution of papers by year of publication.

Figure 1
Documents by year



Source: Web of Science (2022).

2.2. Methodology

To carry out the bibliometric analysis, the open source software SciMAT (Cobo, López-Herrera, Herrera-Viedma, & Herrera, 2012), was used to obtain scientific maps based on the co-occurrence of keywords. The total study time was divided into three periods: 1968–2012 (214 documents), 2013–2017 (140 documents) and 2018–2022 (155 documents). The reason for choosing this form of division was to make it possible to analyse a first period that is longer and more distant in time, and then the last decade, divided in turn into five-year periods in order to see a much more recent evolution of the subject, as well as, in a longitudinal co-word analysis, the first period studied is usually the longest in order to obtain a representative number of published documents (Muñoz-Leiva, Viedma-del-Jesús, Sánchez-Fernández, & López-Herrera, 2012). Table 1 shows the number of documents per period.

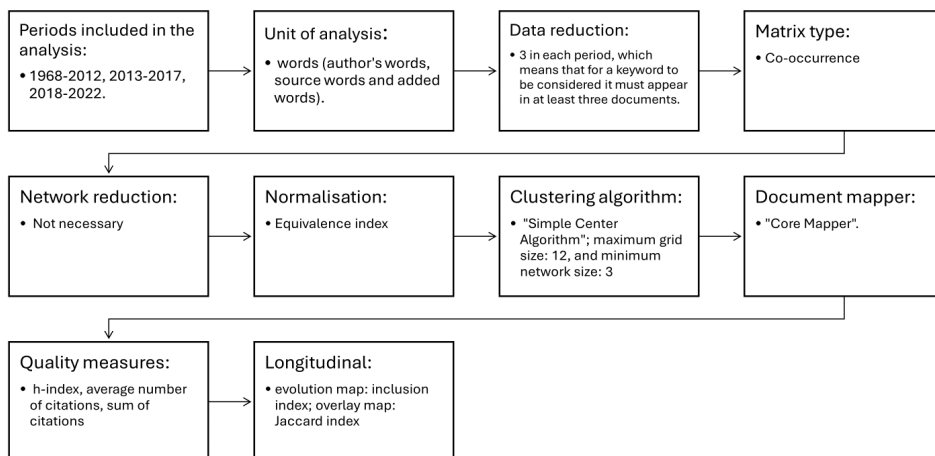
Table 1

Number of documents per period

Period	Number of documents
1968-2012	214
2013-2017	140
2018-2022	155
Total	509

Source: Own elaboration (2022).

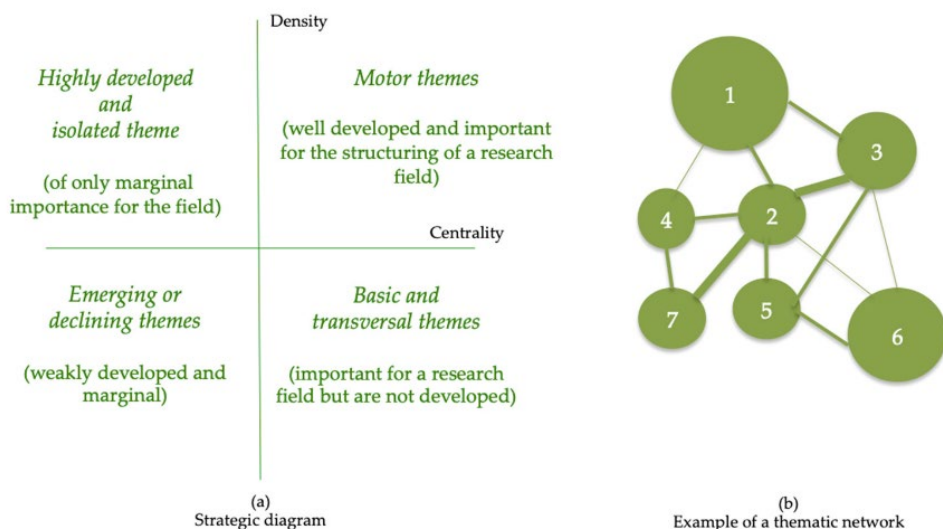
For the analysis of the co-words, a filtering process of the keywords was previously carried out so that (a) singular and plural forms, (b) words that are spelled differently according to American or British English style, (c) acronyms, (d) words with hyphens or inverted commas, and (e) synonyms, were merged into groups. Thus, out of a total of 2019 keywords, 1799 word groups were obtained. It is also relevant to note that the process of identifying keywords is done through the full text of the articles included in the corpus and not only in the title or abstract. The H-index (Hirsch, 2005), the total number of citations in each document and the average number of citations were used as measures of quality. The co-occurrence frequency, i.e. the number of documents in which two specific keywords appear together, is specifically analysed in the co-occurrence analysis. Concretely, the following steps were followed to carry out the analysis (Figure 2).

Figure 2*Steps followed for the analysis*

Source: Own elaboration.

SciMAT provides strategic diagrams, which allow the importance of each theme to be identified according to two measures: centrality and density (Callon, Courtial, & Laville, 1991). Centrality measures the degree of interaction of a network with other networks; it can be understood as a measure of the importance of a topic in the development of the whole research field under analysis and density measures the internal strength of the network or keywords describing the topic; it can be understood as a measure of the degree of development of the topic (Muñoz-Leiva, Sánchez-Fernández, Liébana-Cabanillas, & López-Herrera, 2012). Based on these measures, the strategy diagram is represented on a two-dimensional plane with the themes classified into four groups, one in each quadrant as shown in Figure 3.

Figure 3
Strategic Diagram and Thematic Network



Source: Gemar et al. (2021) adaptado de Cobo et al. (2012).

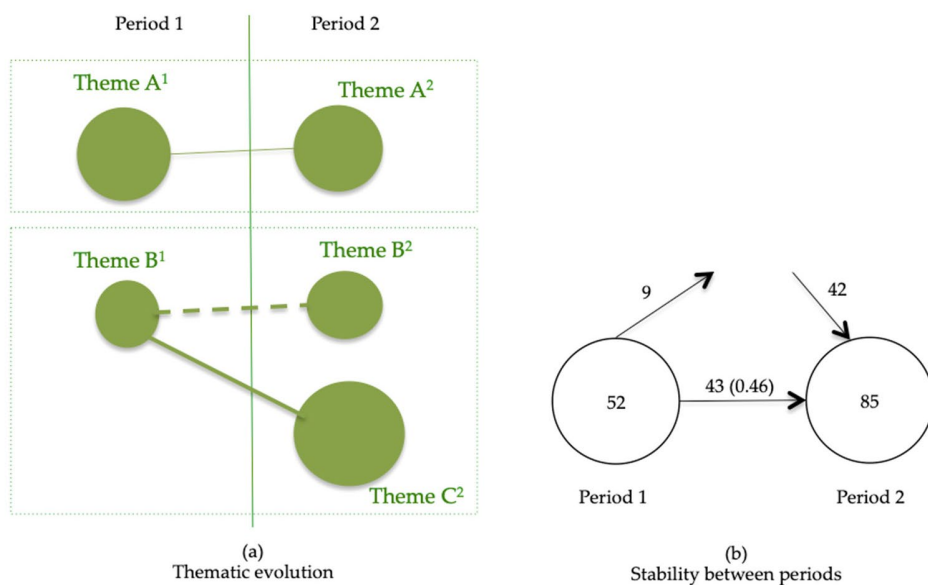
In the upper right quadrant are the motor themes, which are well developed and important for the subject area. The lower right quadrant contains the so-called basic and transversal themes, which are important but not well developed themes. The upper left quadrant corresponds to the highly developed and isolated topics of marginal importance. Finally, in the lower left quadrant are the emerging or declining themes within the subject area. Thematic networks are made up of keywords and their interconnections. The network is labelled with the name of the most central word. The volume of the spheres is proportional to the number of documents for each keyword, and the thickness of the links between two spheres is proportional to the equivalence index. A document is linked to a topic if it contains at least two keywords present in the topic network (Muñoz-Leiva, Porcu, & Barrio-García, 2015; Gemar, Soler, & Sánchez-Teba, 2021).

The results of the temporal or longitudinal analysis are shown using an evolution map and an overlapping elements graph. The evolution map (Figure 4a) shows the thematic areas or clusters for each period and the links between them. Solid lines mean that the linked clusters share the main element, while dashed lines mean that the clusters share other elements, but not the main element. The thickness of the line is proportional to the inclusion rate and the volume of the spheres to the number of published documents associated with each cluster. The graph of overlapping elements (Figure 4b) shows the stability between consecutive periods. The circles represent the periods with the number of keywords in each period. The horizontal arrows show the shared words in both periods, the stability index is shown in

brackets. The input arrow represents the number of new words entering the period, while the output arrow represents the words that are no longer in the current period but were in the previous one.

Figure 4

Examples of thematic evolution (a) Thematic evolution (b) Inter-period stability



Source: Gemar et al. (2021) adapted from Cobo et al. (2012).

3. Results and discussion

3.1. Main authors and sources

In the development of this research, a total of 509 documents from 1138 authors obtained from the main collection of Web of Science were analysed. Table 2 shows the journals with more than 4 documents collected in this study.

Table 2

Journals by number of papers

Source	Number of documents
Regional Science and Urban Economics	11
Journal of Urban Economics	10
Economic Development Quarterly	8
Growth and Change	8
Journal of Regional Science	8
Papers in Regional Science	8
Annals of regional Science	7
Sustainability	7
European Planning Studies	5
Small Business Economics	5
Tijdschrift Voor Economische en Sociale Geografie	5
Urban Studies	5

Source: Own elaboration (2022).

The main titles ordered by number of citations, as well as the year of publication, average number of citations per year and source are shown in table 3.

Table 3

Most cited documents

Title	Year	Sum citations	Average citation	Source
Deconstructing clusters: chaotic concept or policy panacea? (Martin & Sunley, 2003)	2003	1227	61.35	Journal of Economic Geography
Pollution haven hypothesis and environmental impacts of foreign direct investment: The case of industrial emission of sulfur dioxide (SO ₂) in Chinese provinces (He, 2006)	2006	414	24.35	Ecological Economics
Location strategies and knowledge spillovers (Alcacer & Chung, 2007)	2007	404	25.25	Management Science
Business location decisions in the united-states - estimates of the effects of unionization, taxes, and other characteristics of states (Bartik, 1985)	1985	330	6.68	Journal of Business & Economic Statistics
Empirical studies in industrial location: an assessment of their methods and results (Arauzo-Carod, Liviano-Solis, & Manjón-Antolin, 2010)	2010	176	13.54	Journal of Regional Science
Firm location decisions, regional grants and agglomeration externalities (Devereux, Griffith, & Simpson, 2007)	2007	173	10.81	Journal of Public Economics
Westward movement of new polluting firms in China: Pollution reduction mandates and location choice (Wu, Guo, Bing, & Bu, 2017)	2017	126	21	Journal of Comparative Economics
The Economic Geography of Offshoring: The Fit between Activities and Local Context (Jensen & Pedersen, 2011)	2011	115	9.58	Journal of Management Studies
The effects of environmental-regulation on business location in the united-states (Bartik, 1988)	1988	107	3.06	Growth and Change

Title	Year	Sum citations	Average citation	Source
Environmental regulation and French firms location abroad: An economic geography model in an international comparative study (Kheder & Zugravu, 2012)	2012	95	8.64	Ecological Economics
Who Benefits from State Corporate Tax Cuts? A Local Labor Markets Approach with Heterogeneous Firms (Suárez Serrato & Zidar, 2016)	2016	92	13.14	American Economic Review
Saving the states from themselves: Commerce clause constraints on state tax incentives for business (Enrich, 1996)	1996	91	3.37	Harvard Law Review
The role of economic and quality of life values in rural business location (Johnson & Rasker, 1995)	1995	85	3.04	Journal of Rural Studies
Ownership of intellectual property and corporate taxation (Griffith, Miller, & O'Connell, 2014)	2014	84	9.33	Journal of Public Economics
Modelling the performance of Australian hotels: a DEA double bootstrap approach (Assaf & Agbola, 2011)	2011	80	6.67	Tourism Economics
Tradeoffs between local taxes and government spending as determinants of business location (Gabe & Bell, 2004)	2004	80	4.21	Journal of Regional Science
The effects of tax increment financing on economic development (Dye & Merriman, 2000)	2000	79	3.43	Journal of Urban Economics
Host country characteristics and agglomeration in foreign direct investment (Braunerhjelm & Svensson, 1996)	1996	68	2.52	Applied Economics
Transportation infrastructure impacts on firm location: the effect of a new metro line in the suburbs of Madrid (Mejía-Dorantes, Paez, & Vassallo, 2012)	2012	67	6.09	Journal of Transport Geography
Logistics service providers and corporate social responsibility sustainability reporting in the logistics industry (Piecnyk & Björklund, 2015)	2015	66	8.25	International Journal of Physical Distribution & Logistics Management

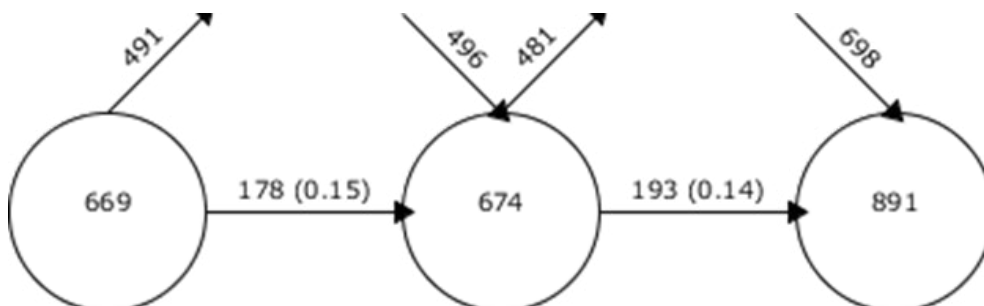
Source: Own elaboration based on WoS (2022).

3.2. Longitudinal Map

In order to analyse the evolution of the research area “business location” over time, it is useful to make a longitudinal map. In this study the total time has been divided into three periods: 1968–2012, 2013–2017 and 2018–2022. Figure 5 shows the number of keywords of interest in these years and also shows the stability between periods. We observe that in the first period there were 669 keywords. In the second period there were 674 keywords of which 178 came from the previous period, while 491 words did not continue. In the third period, of the 891 words, 193 remained from the second period, while 481 did not continue, and 698 new words were added in this period. The stability index between the first two periods is 0.15 and between the second and third period it is 0.14. This low stability between periods suggests that the research area of business location is very changeable and also cross-cutting, drawing interest from multiple fields and sectors and can be studied from different perspectives, as evidenced by the number of different words of interest that come and go over the years.

Figure 5

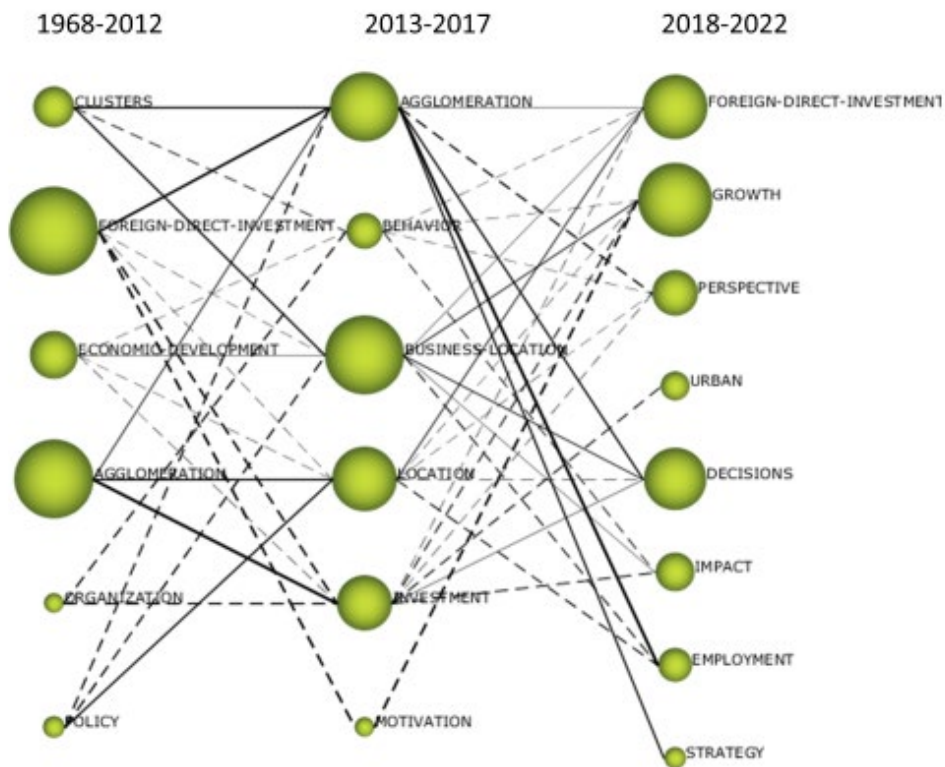
Stability between periods. Overlapping graph of keywords from 1968 to 2022



Source: Own elaboration based on SciMAT (2022).

Figure 6 shows the map of thematic evolution by period according to the number of documents. In the first period, 1968–2012, the topics of most interest in the field of business location (with more documents published) were “Foreign-Direct-Investment” and “Agglomeration”. In the second period, 2013–2017, the theme “Agglomeration” maintains its importance, with strong links to the theme “Foreign Direct Investment” from the previous period. It can be seen that the theme “Foreign Direct Investment” does not appear as such in the second period. In addition, “Business Location” appears as a new important theme in this period, linked to the “Cluster” and “Economic-Development” themes of the previous period. Regarding the third period, 2018–2022, the main themes were “Growth”, “Foreign Direct Investment” and “Decisions”. We note that the theme “Foreign Direct Investment” reappears as an important theme, while the theme “Agglomeration” disappears in this period. The new themes “Growth” and “Decisions” appear strongly. The theme “Growth” has links with “Business Location” from the previous period, while “Decisions” shares important elements with the themes “Agglomeration”, “Business Location” and “Investment”. After observing this thematic evolution, it can be concluded that the research area of business location is very dynamic and broad, and the only themes that remain important in at least two periods are “Agglomeration” and “Foreign Direct Investment”.

Figure 6
Thematic evolution map by number of documents



Source: Own elaboration based on SciMAT (2022).

3.3. Strategic maps and Thematic networks

In this section the most important themes in the research area in each of the periods are analysed. Table 4 shows the properties of the themes, also called clusters, in each period, indicating for each cluster, the number of papers in which they are found as keywords, the h-index and the sum of citations. In the period 1968-2012 there are 6 clusters, in the second period 2013-2017 another 6 clusters and in the last period 2018-2022 there are 8 clusters or themes. In table 4 the clusters are ordered by number of documents.

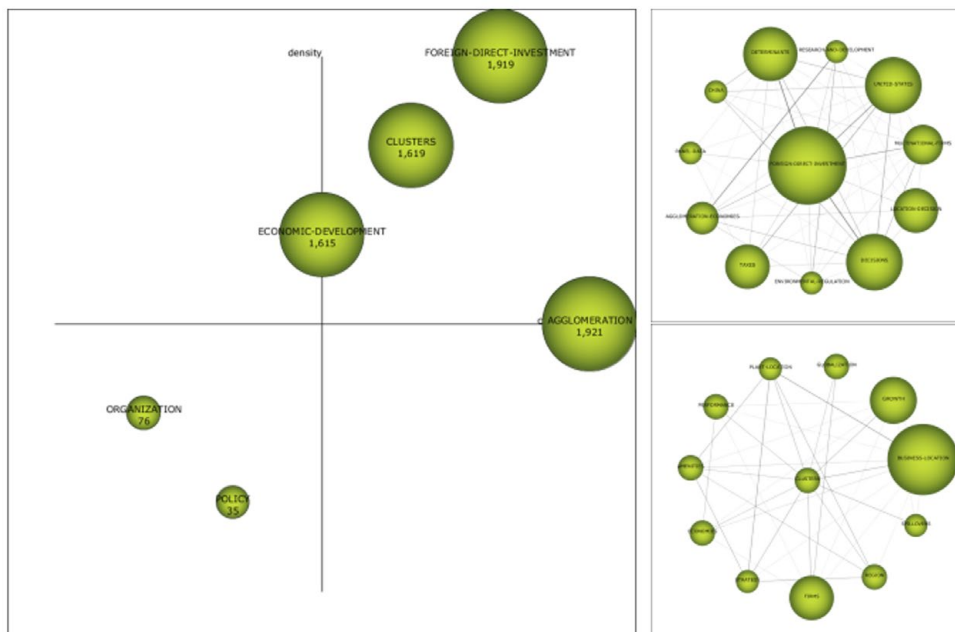
Table 4
Cluster properties

Period	Cluster	Number documents	h-index	Sum citations
1968-2012	Foreign-Direct-Investment	31	19	1919
	Agglomeration	27	14	1921
	Economic-Development	14	10	1615
	Clusters	11	8	1619
	Policy	3	2	35
	Organization	2	2	76
2013-2017	Business-location	27	10	404
	Agglomeration	23	11	460
	Location	21	8	353
	Investment	17	13	545
	Behavior	9	3	55
	Motivation	2	1	1
2018-2022	Growth	25	8	154
	Foreign-Direct-Investment	21	5	74
	Decisions	20	5	95
	Perspective	13	5	133
	Impact	10	4	56
	Employment	8	5	45
	Urban	6	4	46
	Strategy	3	1	5

Source: Own elaboration based on SciMAT (2022).

3.3.1. Period 1968-2012

Figure 7 shows the strategic diagram on the left and the thematic networks corresponding to the main themes of the period are shown on the right. In the strategic diagram the size of the spheres is proportional to the sum of citations for the theme in question. It can be seen that the driving themes of this period are “Foreign Direct Investment” and “Clusters”. The theme “Agglomeration” seems to be a basic theme in this period, but is close to becoming a driving theme. The theme “Economic Development” is well developed with a high density, but of marginal importance as it lacks the centrality to be considered a driving theme. The themes “Organization” and “Policy” are underdeveloped themes in this period and can be considered emerging or declining. In the thematic network corresponding to the theme “Foreign Direct Investment” we find the following related keywords: “Decisions”, “United States”, “Determinants”, “Location-Decision”, “Taxes”, “Multinational-Firms”, “Agglomeration-Economies”, “Panel-Data”, “China” and “Research-And-Development”. The most important of these are “Decisions”, “United States” and “Determinants”. For the network theme “Clusters” the most important words are “Business Location”, “Growth” and “Firms”. It is important to note that both the themes “Business Location” and “Growth” will become driving themes of the research field in the following periods.

Figure 7*Strategic diagram and main thematic networks, 1968-2012 period*

Source: Own elaboration based on SciMAT (2022).

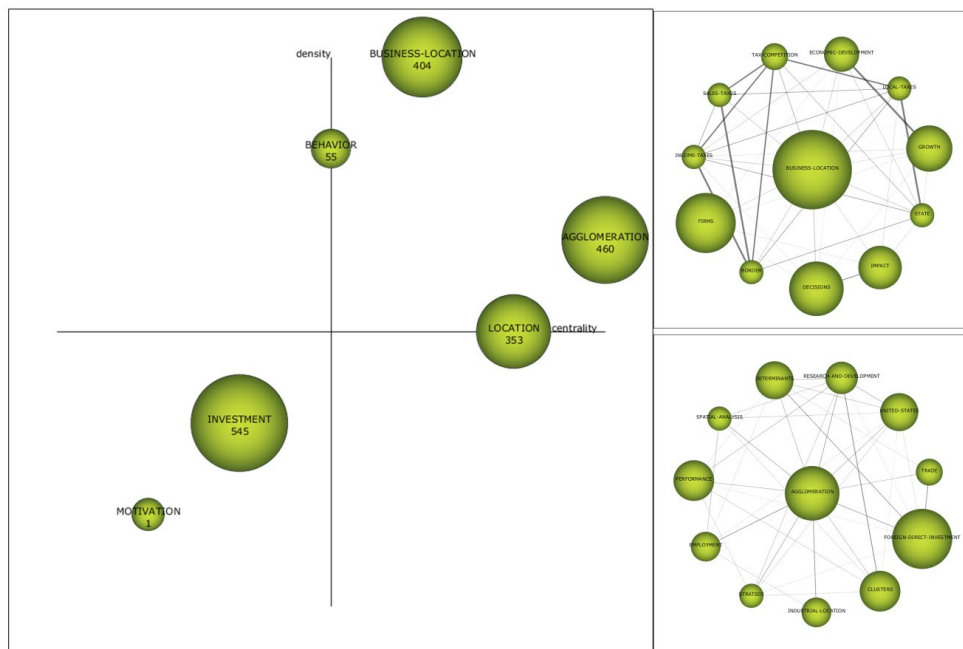
3.3.2. Period 2013-2017

Figure 8 shows on the left the strategic diagram with the main themes of the period and on the right the thematic networks of the most important motor themes. In this period it can be seen that the motor themes are “Business Location” and “Agglomeration”. The evolution of the theme “Agglomeration” is noteworthy, as it has become consolidated as a motor theme in this period by increasing its density over time. With regard to the theme “Business Location”, we can also observe its growth over time, going from being an important key word within the theme “Clusters” in the previous period, to a motor theme in this second period. The theme “Behaviour” presents a high density, but still lacks the centrality to be considered a motor theme, so it may be a well-developed theme, but of minor importance in the field of business location, in this period. Similarly, the theme “Location” has a high centrality, so it is considered important in this research area, but it is not yet a motor theme as it lacks development. The themes “Investment” and “Motivation” can be considered emerging or declining due to their low density and centrality. In terms of the thematic networks, the most significant topics in the “Business Location” theme are “Firms”, “Decisions” and “Growth”. In the “Agglomeration” thematic network, the most

important words are “Foreign Direct Investment”, “Clusters” and “Performance”. We observe that both “Foreign Direct Investment” and “Clusters” were considered motor themes in the previous period, so that they have lost relevance in this period, being displaced or absorbed by the “Agglomeration” theme.

Figure 8

Strategic diagram and main thematic networks, 2013-2017 period



Source: Own elaboration based on SciMAT (2022).

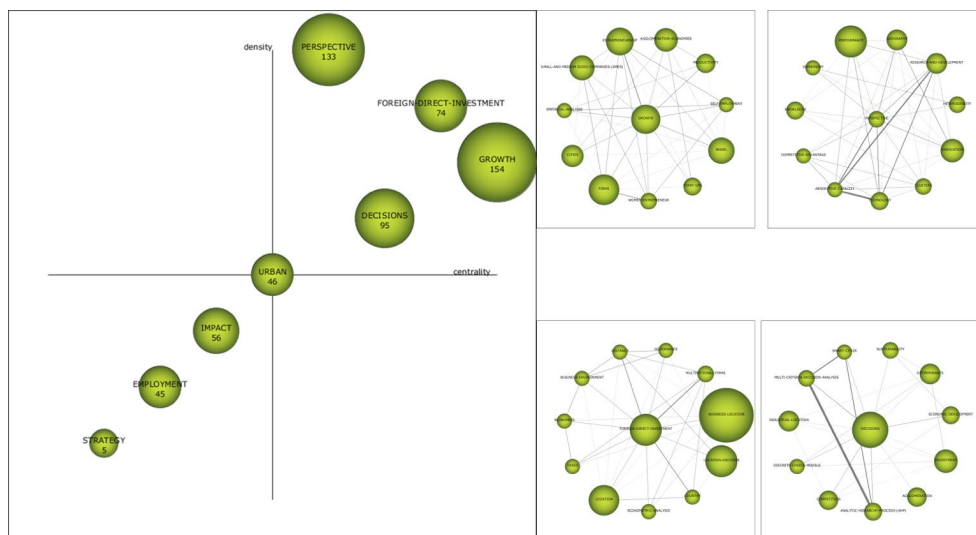
3.3.3. Period 2018-2022

Figure 9 shows on the left the strategic diagram with the most important themes of the period and on the right the thematic networks of all the motor themes of the period. In this period the motor themes are “Perspective”, “Foreign Direct Investment”, “Growth” and “Decisions”. It is striking that both “Growth” and “Decisions” were key concepts within the “Business Location” motor themes of the previous period, which have evolved over time to be considered motor themes in the current period. The theme “Foreign Direct Investment” reappears as a motor theme. The theme “Urban” is right in the middle of the diagram with a centrality and density right in the middle ground, so it cannot be classified in any of the clusters. Finally, the themes “Impact”, “Employment” and “Strategy” are classified as emerging or

declining themes, as they have a low centrality and density. In the “Perspective” thematic network, the keywords “Performance”, “Innovation”, “Geography” and “Research-And Development” stand out, the latter being strongly linked to “Absorptive Capacity” and “Technology”. With regard to the network corresponding to the theme “Foreign Direct Investment”, we highlight “Business Location” as the most important word, recalling that “Business Location” was a motor theme in the previous period. Within the thematic network “Growth” we highlight “Firms”, “Entrepreneurship”, “Model”, and “Small and Medium Size Companies” among others, of which the one with the strongest link to “Growth” is “Entrepreneurship”. Finally, the thematic network corresponding to “Decisions” is formed by the words: “Investment”, “Industrial Location”, “Determinants”, “Agglomeration”, “Competition”, “Analytic Hierarchy Process”, “Economic Development”, “Multicriteria-Decisions-Analysis”, “Sustainability”, “Discret-Model-Choice” and “Smart Cities”. The strong link between the words “Multicriteria-Decisions-Analysis”, “Analytic Hierarchy Process” and “Smart Cities” is significant.

Figure 9

Strategic diagram and main thematic networks, 2018-2022 period



Source: Own elaboration based on ScimAT (2022).

4. Conclusions

This paper conducts a bibliometric keyword analysis on the topic of business location from 1968 to 2022. Business location is an area of research with a long historical tradition that has been widely developed over the years. In particular, this topic is of great importance in the field of strategic management and also in the political sphere. Today we find ourselves in a context of economic globalisation, in which the internationalisation of companies has become a strategic factor that has an impact on the probability of success. Within the internationalisation strategy, decisions on the location of activities in the value chain, branches or company headquarters are of the utmost importance and involve the careful analysis of a multitude of factors.

The bibliometric analysis shows that within this research area a multitude of themes with different conceptual sub-domains are developed, which can be interpreted at both business and policy level. The high number of incoming and outgoing keywords in the periods shows the cross-cutting nature of this research area.

The methodology used in this paper is very useful because it allows us to analyse from a longitudinal perspective over time how concepts evolve and, by focusing on a specific period, it allows us to detect which are the important motor themes within the research area of business location. It also allows us to identify marginal, emerging or declining issues within this research area.

In principle, through longitudinal analysis, there does not seem to be much cohesion between the themes that are considered important between the three periods into which we have divided the analysis, with only the themes “Agglomeration” and “Foreign Direct Investment” being maintained in at least two periods. However, a more in-depth co-word analysis, using strategy diagrams and thematic networks, reveals strong links between the motor themes and keywords that show the thematic evolution more clearly. The high number of incoming and outgoing keywords in the periods shows the cross-cutting nature of this research area, as it is an important topic of interest both at the business level, as shown by clusters such as “Decisions” or “Business Location”, and at the political level as it is linked to the economic development of regions, as shown by the clusters “Economic Development”, “Growth” or “Foreign Direct Investment”. The study of location according to different levels and points of view implies a great richness and diversity of keywords.

With respect to the business level, we highlight how the theme of “Agglomeration” shows great importance and is maintained over time, which could refer to the so-called economies of agglomeration, which are a traditional location factor and represent the benefits obtained by companies by locating close to other companies in their sector or to urbanised centres. Another important theme that has been maintained over time is that of “Foreign Direct Investment”, which we associate with the aforementioned growing globalisation that leads to the need for companies to internationalise, with the consequent investments that this strategy entails. Also, from a business management point of view, the “Decisions” cluster stands out,

highlighting the importance of location as a strategic decision, as well as the use of certain mathematical techniques as methodological tools to support these decisions, such as multi-criteria analysis, discrete choice models or hierarchical analytical processes.

At the policy level, the importance of this area of research is also shown through topics and keywords such as Growth, Entrepreneurship, Cities, or Startups, among others. In this sense, it could be argued that the location of companies is related to the economic development of regions and cities, showing links between the existing business fabric in cities and their economic growth. In this way, it is crucial for politicians to attract investment and encourage entrepreneurship and the creation of new companies in their territories, as this is directly linked to the economic growth of the regions.

4.1. Theoretical implications

From a theoretical point of view, this paper represents an important contribution to research on firm location, organising the knowledge generated in this field to date and identifying the main motor themes on which research is currently focused, as well as future trends in this area.

The topic addressed is of interest from a strategic management point of view. A bibliometric analysis of the academic research published on the topic of business location during the period from 1968 to 2022 is carried out. The period of analysis is broad, providing a view of the subject that encompasses different economic, social and business moments. This study makes it possible to analyse from different perspectives how the topic of business location has been treated or related. The study includes 509 documents from 1138 authors and 1799 keyword groups. It should be noted that no longitudinal bibliometric analysis has been carried out in this area to date.

A review of the main titles and most cited authors, as well as the main journals with the most published papers in this research area, is also carried out.

Furthermore, at the level of methodology, the study presents SciMAT as an ideal tool for longitudinal bibliometric analysis.

4.2. Practical implications

On a practical level, the conclusions drawn from this analysis are of interest to policy makers and managers alike, since for both the location of companies is a decisive issue with important consequences for the economic growth of regions and for the internal profitability of the company.

From the perspective of strategic management, following the bibliometric analysis, it is shown that the location of both value chain activities and new company headquarters is of a strategic nature. To make this type of decision, managers appear to be relying on specific analytical tools such as discrete choice models or multi-

criteria analysis models. The company's internationalisation strategy involves direct investments abroad; these strategies are common, especially in multinational firms, and must consider the taxes of each country.

At the macroeconomic level, it is crucial for policy makers to attract investment and encourage entrepreneurship and the creation of new businesses in their territories. These policies can have positive impacts on employment and productivity and are, therefore, directly linked to economic growth in regions and cities.

5. Limitations and future lines of research

The main limitations of the study are, firstly, that although the SciMAT software is considered to be ideal for this type of analysis, some of its processes, such as the filtering of keywords, have to be carried out manually, which may introduce possible biases in the results.

Another limitation stems from the data search process carried out, since the search results depend directly on the criteria or question asked, which could lead to the omission of a word or criterion, thus affecting the number of documents obtained that constitute the corpus of data to be analysed.

With regard to future lines of research, this analysis could be carried out using other databases instead of Web of Science, such as Scopus, or a combination of both, and the results obtained could be compared. The co-word analysis could also be extended with a co-citation analysis or an author analysis, thus taking advantage of all the functionalities of SciMAT. The analysis could also be repeated using other bibliometric software, such as VOSviewer, which would allow the results obtained to be compared and complemented.

As we have shown, business location is a very broad area that can be approached from multiple perspectives. Therefore, bibliometric studies could also be carried out on some of the topics or clusters linked to business location, such as location decisions or investments abroad, which would allow us to delve deeper and provide more specificity.

Acknowledgements

This research has been funded by the Andalusian Public Foundation Center for Andalusian Studies (ROR: <https://ror.org/05v01tw04> and Crossref Funder ID [100019858](https://orcid.org/0000-0001-9858-1234)), through the project PRY081/22 titled: Seeking sustainability of organizations in strategic sectors: tourism and bioeconomy.

References

- Akın, B., & Seyfettinoğlu, Ü. (2022). Factors determining the location decision: Analysis of location choice preferences of the ICI-1000 companies with the nested logit model. *Central Bank Review*, 22(1), 57-75. <https://doi.org/10.1016/j.cbrev.2022.03.001>
- Alcácer, J., & Chung, W. (2007). Location strategies and knowledge spillovers. *Management science*, 53(5), 760-776. <https://doi.org/10.1287/mnsc.1060.0637>
- Alcácer, J., Dezsó, C., & Zhao, M. (2015). Location choices under strategic interactions. *Strategic Management Journal*, 36(2), 197-215. <https://doi.org/10.1002/smj.2214>
- Arauzo-Carod, J., Liviano-Solis, D., & Manjón-Antolín, M. (2010). Empirical studies in industrial location: An assessment of their methods and results. *Journal of Regional Science*, 50(3), 685-711. <https://doi.org/10.1111/j.1467-9787.2009.00625.x>
- Arauzo-Carod, J.-M. (2013). Location determinants of new firms: does skill level of human capital really matter? *Growth and Change*, 44(1), 118-148. <https://doi.org/10.1111/grow.12004>
- Assaf, A., & Agbola, F. (2011). Modelling the performance of Australian hotels: a DEA double bootstrap approach. *Tourism economics*, 17(1), 73-89. <https://doi.org/10.5367/te.2011.0027>
- Bartik, T. J. (1985). Business location decisions in the United States: Estimates of the effects of unionization, taxes, and other characteristics of states. *Journal of Business & Economic Statistics*, 3(1), 14-22. <https://doi.org/10.1080/07350015.1985.10509422>
- Bartik, T. J. (1988). The effects of environmental regulation on business location in the United States. *Growth and Change*, 19(3), 22-44. <https://doi.org/10.1111/j.1468-2257.1988.tb00473.x>
- Braunerhjelm, P., & Svensson, R. (1996). Host country characteristics and agglomeration in foreign direct investment. *Applied Economics*, 28(7), 833-840. <https://doi.org/10.1080/000368496328272>
- Callon, M., Courtial, J., & Laville, F. (1991). Co-word analysis as a tool for describing the network of interactions between basic and technological research: The case of polymer chemistry. *Scientometrics*, 22(1), 155-205. <https://doi.org/10.1007/BF02019280>
- Chang, X., & Li, J. (2019). Business performance prediction in location-based social commerce. *Expert Systems with Applications*, 126, 112-123. <https://doi.org/10.1016/j.eswa.2019.01.086>
- Cissé, I., Dubé, J., & Brunelle, C. (2020). New business location: how local characteristics influence individual location decision? *The Annals of Regional Science*, 64(1), 185-214. <https://doi.org/10.1007/s00168-019-00968-1>
- Clarivate Web of Science (WoS). (s.f.). Obtenido de <https://webofscience.com/wos>

- Cobo, M., López-Herrera, A., Herrera-Viedma, E., & Herrera, F. (2012). SciMAT: A New Science Mapping Analysis Software Tool. *Journal of the American Society for Information Science and Technology*, 63(8), 1609–1630. <https://doi.org/10.1002/asi.22688>
- Devereux, M., Griffith, R., & Simpson, H. (2007). Firm location decisions, regional grants and agglomeration externalities. *Journal of Public Economics*, 91(3-4), 413–435. <https://doi.org/10.1016/j.jpubeco.2006.12.002>
- Dye, R., & Merriman, D. (2000). The effects of tax increment financing on economic development. *Journal of urban Economics*, 47(2), 306–328. <https://doi.org/10.1006/juec.1999.2149>
- Enrich, P. D. (1996). Saving the states from themselves: Commerce clause constraints on state tax incentives for business. *Harvard Law Review*, 377–468. <https://doi.org/10.2307/1342149>
- Gabe, T., & Bell, K. (2004). Tradeoffs between local taxes and government spending as determinants of business location. *Journal of Regional Science*, 44(1), 21–41. <https://doi.org/10.1111/j.1085-9489.2004.00326.x>
- Gemar, G., Moniche, L., & Morales, A. (2016). Survival analysis of the Spanish hotel industry. *Tourism Management*, 54, 428–438. <https://doi.org/10.1016/j.tourman.2015.12.012>
- Gemar, G., Soler, I. P., & Guzman-Parra, V. F. (2019). Predicting bankruptcy in resort hotels: a survival analysis. *International Journal of Contemporary Hospitality Management*, 31(4), 1546–1566. <https://doi.org/10.1108/IJCHM-10-2017-0640>
- Gemar, G., Soler, I., & Sánchez-Teba, E. (2021). Waste Management: Valorisation Is the Way. *Foods*, 10(10), 2373. <https://doi.org/10.3390/foods10102373>
- Griffith, R., Miller, H., & O'Connell, M. (2014). Ownership of intellectual property and corporate taxation. *Journal of Public Economics*, 112, 12–23. <https://doi.org/10.1016/j.jpubeco.2014.01.009>
- He, J. (2006). Pollution haven hypothesis and environmental impacts of foreign direct investment: The case of industrial emission of sulfur dioxide (SO₂) in Chinese provinces. *Ecological economics*, 60(1), 228–245. <https://doi.org/10.1016/j.ecolecon.2005.12.008>
- Hirsch, J. (2005). An index to quantify an individual's scientific research output. *Proceedings of the National Academy of Sciences of the United States of America*, 16569–16572. <https://doi.org/10.1073/pnas.0507655102>
- Hofstede, G. (1984). *Culture's consequences: International differences in work-related values* (vol. 5). London: Sage Publications.
- Jensen, P., & Pedersen, T. (2011). The economic geography of offshoring: the fit between activities and local context. *Journal of Management Studies*, 48(2), 352–372. <https://doi.org/10.1111/j.1467-6486.2010.00967.x>

- Jo, Y., & Lee, C.-Y. (2014). Technological capability, agglomeration economies and firm location choice. *Regional Studies*, 48(8), 1337-1352. <https://doi.org/10.1080/00343404.2012.711946>
- Johnson, J., & Rasker, R. (1995). The role of economic and quality of life values in rural business location. *Journal of Rural Studies*, 11(4), 405-416. [https://doi.org/10.1016/0743-0167\(95\)00029-1](https://doi.org/10.1016/0743-0167(95)00029-1)
- Kheder, S. B., & Zugravu, N. (2012). Environmental regulation and French firms location abroad: An economic geography model in an international comparative study. *Ecological Economics*, 77, 48-61. <https://doi.org/10.1016/j.ecolecon.2011.10.005>
- Lafuente, E., Vaillant, Y., & Serarols, C. (2010). Lafuente, E., Vaillant, Y., & Serarols, C. (2010). Location decisions of knowledge-based entrepreneurs: why some Catalan KISAs choose to be rural? *Technovation*, 30(11-12), 590-600. <https://doi.org/10.1016/j.technovation.2010.07.004>
- Lee, H., Pattnaik, C., & Gaur, A. (2023). Internationalization of I-business Firms: The role of distance on location choice. *Journal of Business Research*, 164, 114010. <https://doi.org/10.1016/j.jbusres.2023.114010>
- Lin, J., Oentaryo, R., Lim, E.-P., Vu, C., Vu, A., & Kwee, A. (2016). Where is the Goldmine?: Finding Promising Business Locations through Facebook Data Analytics. *Proceedings of the 27th Acm Conference on Hypertext and Social Media (HT'16)*, (pp. 93-102). <https://doi.org/10.1145/2914586.2914588>
- Malecki, E. (1985). Industrial location and corporate organization in high technology industries. *Economic Geography*, 61(4), 345-369. <https://doi.org/10.2307/144054>
- Marshall, A. (1890). *Principles of economics*. London: MacMillan.
- Martin, R., & Sunley, P. (2003). Deconstructing clusters: chaotic concept or policy panacea? *Journal of economic geography*, 3(1), 5-35. <https://doi.org/10.1093/jeg/3.1.5>
- Mejia-Dorantes, L., Paez, A., & Vassallo, J. M. (2012). Transportation infrastructure impacts on firm location: the effect of a new. *Journal of Transport Geography*, 22, 236-250. <https://doi.org/10.1016/j.jtrangeo.2011.09.006>
- Muñoz-Leiva, F., Porcu, L., & Barrio-García, S. (2015). Discovering prominent themes in integrated marketing communication research from 1991 to 2012: a co-word analytic approach. *International Journal of Advertising*, 34(4), 678-701. <https://doi.org/10.1080/02650487.2015.1009348>
- Muñoz-Leiva, F., Sánchez-Fernández, J., Liébana-Cabanillas, F., & López-Herrera, A. (2012). Applying an automatic approach for showing up the hidden themes. *Expert Systems with Applications*, 39, 11055-11065. <https://doi.org/10.1016/j.eswa.2012.03.017>
- Muñoz-Leiva, F., Viedma-del-Jesús, M., Sánchez-Fernández, J., & López-Herrera, A. (2012). An application of co-word analysis and bibliometric maps for detecting the most highlighting themes in the consumer behaviour research from a longitudinal

- perspective. *Quality & Quantity*, 46(4), 1077–1095. <https://doi.org/10.1007/s11135-011-9565-3>
- Piacentino, D., Bono, F., Cracolici, M., & Giuliani, D. (2017). A spatial analysis of new business formation: Replicative vs innovative behaviour. *Spatial Statistics*, 21, 390–405. <https://doi.org/10.1016/j.spasta.2017.02.004>
- Piecyk, M., & Björklund, M. (2015). Logistics service providers and corporate social responsibility: sustainability reporting in the logistics industry. *International Journal of Physical Distribution & Logistics Management*, 45(5), 459–485. <https://doi.org/10.1108/IJPDLM-08-2013-0228>
- Strotmann, H. (2007). Entrepreneurial survival. *Small business economics*, 28(1), 87–104. <https://doi.org/10.1007/s11187-005-8859-z>
- Suárez Serrato, J., & Zidar, O. (2016). Who benefits from state corporate tax cuts? A local labor markets approach with heterogeneous firms. *American Economic Review*, 106(9), 2582–2624. <https://doi.org/10.1257/aer.2014.1702>
- Weber, A. (1929). *Theory of the Location of Industries*. Chicago: University of Chicago Press.
- Wu, H., Guo, H., Bing, Z., & Bu, M. (2017). Westward movement of new polluting firms in China: Pollution reduction mandates and location choice. *Journal of Comparative Economics*, 45(1), 119–138. <https://doi.org/10.1016/j.jce.2016.01.001>
- Xu, Y., Shen, Y., Zhu, Y., & Yu, J. (2020). AR2Net: An Attentive Neural Approach for Business Location Selection with Satellite Data and Urban Data. *ACM Transactions on Knowledge Discovery from Data*, 14(2), 1–28. <https://doi.org/10.1145/3372406>

Virginia Perez-Benitez

Professor of Economics and Business Administration at the University of Malaga, Spain, in the Department of Economics and Business Administration. PhD candidate at Doctoral program in Economics and Business, Universidad de Malaga. His research has focused on quantitative methods in business and economics research.

German Gemar

Professor of Economics and Business Administration at the University of Malaga, Spain, in the Department of Economics and Business Administration. He has a PhD in Business Administration from the University of Malaga. His research has focused on strategic management, business, firm survival, tourism, hospitality, the environment, corporate social responsibility, and cultural distance. He also has managed hotels for 15 years and worked as the general manager of the Malaga Provincial Council.

ARTICLES/ARTÍCULO

Factor Structure and Reliability of the Youth Self-Care Practice and Management Questionnaire (YPM) in a Sample of Secondary School Students

Estructura factorial y fiabilidad del cuestionario Práctica y Gestión del Autocuidado Juvenil (PGJ) en una muestra de estudiantes de secundaria

Juan Carlos Checa Olmos

University of Almería, Spain
jcheca@ual.es

Montserrat Monserrat Hernández

University of Almería, Spain
mmh548@ual.es

Ángeles Arjona Garrido

University of Almería, Spain
arjona@ual.es

Received/Recibido: 15/12/2023

Accepted/Aceptado: 18/06/2024

ABSTRACT

Self-care is the main element involved in the prevention of the disease or its care. Measuring the agency capacity of self-care becomes essential, since it identifies self-care deficits and allows strategies to be designed to alleviate them. The objective of this work is to evaluate the factor structure and reliability of the Self-Care Practice and Management questionnaire. The questionnaire is created around three practical dimensions (physical, psychological, social) and another management one. The research is carried out in Almeria with 290 high school students, who showed their willingness to participate. The results show high percentages with respect to the Total Explained Variance (TEV). The exploratory factor analysis reveals four factors for each dimension, except for management, which only breaks down one. The temporal stability of the scale was confirmed ($r=0.801$) and the correlation with the reference scale offered criterion validity. In conclusion, the YMP questionnaire is a valid and consistent tool to measure self-care in the youth population, and, therefore, it should be used in educational centres to evaluate the agency capacity of students over their well-being.

KEYWORDS: self-care practice; self-care management; health; students; secondary; factor analysis; reliability analysis.

HOW TO REFERENCE: Checa Olmos, J. C., Monserrat Hernández, M. y Arjona Garrido, Á. (2024). Estructura factorial y fiabilidad del cuestionario Práctica y Gestión del Autocuidado Juvenil (PGJ) en una muestra de estudiantes de secundaria. *Revista Centra de Ciencias Sociales*, 3(2), 97-122. <https://doi.org/10.54790/rccs.87>.

Spanish version can be read on <https://doi.org/10.54790/rccs.87>

RESUMEN

El autocuidado es el principal elemento que interviene en la prevención de la enfermedad o su atención. Medir la capacidad de agencia del autocuidado se convierte en imprescindible, puesto que identifica los déficit del autocuidado y permite diseñar estrategias para paliarlo. El objetivo de este trabajo es evaluar la estructura factorial y fiabilidad del cuestionario Práctica y Gestión del Autocuidado. El cuestionario se crea en torno a tres dimensiones prácticas (física, psicológica, social) y otra de gestión. La investigación se desarrolla en la provincia de Almería con 290 alumnos de secundaria que mostraron su voluntad de participar. Los resultados manifiestan porcentajes altos respecto a la Varianza Total Explicada (VTE). El Análisis Factorial Exploratorio desprende cuatro factores para cada dimensión, excepto para la gestión, que solo desglosa uno. La estabilidad temporal de la escala se confirmó ($r = 0,801$) y la correlación con la escala de referencia ofreció validez de criterio. En conclusión, el cuestionario PGJ es una herramienta válida y consistente para medir el autocuidado en población juvenil, y, por tanto, debería ser utilizado en los centros educativos para evaluar la capacidad de agencia del alumnado sobre su bien salud.

PALABRAS CLAVE: práctica del autocuidado; gestión del autocuidado; salud; estudiantes; secundaria; análisis factorial; análisis de fiabilidad.

1. Introduction

Self-care refers to the series of intentional actions that a person takes to control the factors that compromise their well-being and health (Berbiglia *et al.*, 2022; Orem, 1999). As such, a self-care deficit occurs when a person is subject to limitations that make them incapable of providing themselves with continuous care or that render said care ineffective or incomplete (Taylor *et al.*, 2000).

These concepts are common knowledge among health professionals, whether involved in disease prevention or treatment of those already manifested, although they require further exploration in the field of social sciences. Therefore, in medicine, nursing and psychology, prevention programmes are developed at the institutional level (see, among others, Regional Government of Andalusia, 2023; Spanish Ministry of Health, 2023) at public and private universities alike. Emphasising the importance of self-care, they are based on the idea that by offering people information on the methods and reasons for caring for themselves, they will improve their practices and, as a result, their health and well-being (see, among others, Cabrera *et al.*, 2013; López and Rodríguez, 2017; Ruiz-Aquino *et al.*, 2021).

However, despite prevention campaigns, particularly those aimed at young people, the rates of overweight and obesity, eating disorders, drug and alcohol use and sexual risk behaviours, among other issues, are on the rise (Digennaro and Iannaccone, 2023; Sanmartín *et al.*, 2022). The Spanish Association of Paediatrics (AEP) (2020), for example, points out that adolescents have a proactive attitude towards healthy practices in relation to food, exercise, leisure, drug use and sexual relations; however, this attitude is not exactly reflected in their behaviour (AEP, 2020). This highlights the need for instruments to uncover the reasons underpinning this situation, since most research on prevention focuses on analysing behavioural profiles—by verifying the actions of the subjects (see, among others, De Valenzuela *et al.*, 2021; Hernández-Serrano *et al.*, 2013; Iglesias *et al.*, 2023; Rimón and Castro, 2016)—rather than the factors that determine these behaviours.

Consequently, it is evident that the Self-Care Practice and Management questionnaire, conducted in the youth population, will help us gain a more profound understanding of both the direct actions and the factors that influence them, which is essential to be able to intervene, when necessary, and prevent or help remedy self-care deficits. The first step towards doing so is to check the validity of the instrument and then verify its temporal stability.

In short, in this article we first provide a brief overview of the different self-care management models and the instruments used. Then, we outline the objectives we set for ourselves and the methodological decisions taken to achieve them, before displaying the results of the tests performed to analyse the factor structure and reliability of the questionnaire. We end this article with a discussion and our conclusions.

1.1. Self-care management and measurement models

Since its founding in 1948, the World Health Organization (WHO) has defined health as a “state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (Hoyo *et al.*, 2021; La Valle, 2017; WHO, 1948). This has given rise to authors unrelated to the biomedical sciences, such as Durkheim (1985), having a holistic view of human behaviour, in which the different systems and organs work together, each performing their own function while influencing the functioning of the others. In addition, more specifically to the field of health, Dean (1989) posits that not all care activities are rational, since some of them have a socially learned meaning.

However, despite there being general consensus regarding the definition of health, this is not the case with care management, mainly as a result of the application of professional judgements that promote personal health and well-being. This human process adheres to Orem’s (1999) self-care theory in two ways: firstly, through the learned behaviours that humans pick up during their lifetime and, secondly, through the interaction between caregiver and care receiver. It is a process that involves both adapting one’s behaviour and using material and financial resources to guarantee continuity of care (Zárate, 2004).

At present, self-care management models have two differing approaches. On the one hand we have those that are focused on analysing achievements and errors in the treatment of different diseases and pathologies resulting from shared practices, habits, behaviours and/or ailments (see, among others, Achury and Konato, 2023; Alania-Chávez, 2021). In this type of management model, interdisciplinary teams centre their efforts on encouraging self-care and health promotion (Santiago, 2022; De la Torre, 2016; Pool-Góngora *et al.*, 2023), especially among the vulnerable and those who are already sick (Nuño-Solinis *et al.*, 2013; Reyes and Guadarrama, 2022). Moreover, its actions primarily involve interventions in health centres.

On the other hand is a model in the early stages of development that implements self-care measures in a healthy population, although it is mainly concerned with the physical and biological aspects of potential diseases. A number of instruments are used for this, including: Self-Care Ability Scale for the Elderly (SASE), Self-Care of Home-Dwelling Elderly (SCHDE), Lorensen's Self-Care Capability Scale (LSCS), Denyes Self-Care Agency Instrument (DSCAI), Denyes Self-Care Practice Instrument (DSCPI-90), Exercise of Self-Care Agency (ESCA), Self-as-Carer Inventory (SCI), Appraisal of Self-Care Agency Scale (ASA-A) and the Perceived Self-Care Agency Questionnaire (PSCAQ) (Matarese *et al.*, 2016).

However, as part of this second model, research is being done into the social and psychological factors of self-care (Campos *et al.*, 2018; León and Gómez, 2020; Videra and Reigal, 2013), although this has the drawback of using a contrasted unified scale that favours multi-causal analysis.

Management models in the field of prevention, particularly those concerning young adolescents, utilise multiple tools to measure practice and agency (Slusher *et al.*, 1999), but they fail to take into account the social and personal issues present in self-care, thus preventing analyses of the circumstances that determine and explain actions.

In Andalusian schools, self-care management programmes are developed by the school's nurse (Bernedo *et al.*, 2023; García and Langa, 2012). Despite their work arousing great interest and benefiting the educational community (Rodríguez and Hernández, 2018), their interventions are based on standardised assumptions for the whole community that are formed by qualitative analyses of each school's situation. In other words, they do not consider the subjects' self-care agency capacity, i.e., the material resources, knowledge and other elements that enable individuals to enjoy a state of optimal health and well-being. As a result, it is necessary to understand and measure this capacity and detect the elements and factors that cause a self-care deficit to materialise.

1.2. Objectives and working hypotheses

There are plenty of research projects that study the functionality of self-care in the medical sciences, as we saw earlier; in the social sciences, however, it is merely a fledgling phenomenon, given that the study of self-care is limited and visibly non-existent. What's more, this research has been rendered absolutely necessary by the complete absence of literature on self-care dynamics in young people and adolescents that addresses risk practices and the criteria that may be returned by assessment instruments. This would mark the first time that research of this kind has been conducted in Spain. In addition, some authors, such as Campos-García *et al.* (2018) and Galiana *et al.* (2015), promote a three-dimensional structure of self-care practice that comprises the physical, mental and social aspects. However, a standardised scale that allows these three facets to be measured in conjunction has yet to be developed.

The objective of this work is to describe the factor structure of the YPM questionnaire in a sample of secondary school students from Almería, and to analyse its reliability

in terms of internal consistency and temporal validity. Therefore, we base our work on the following key hypotheses: a) the factor structure and fit of the YPM questionnaire present several factors that can be measured independently and completely in a single-factor model (see, among others, Campos *et al.*, 2018; Díaz *et al.*, 2016) and facilitate the design of suitable interventions; b) there is significant internal consistency ($\alpha > 0.7$) between the different factors of the YPM questionnaire and acceptable stability ($r > 0.5$) as a result of measurements being taken at two different moments.

2. Method

2.1. Design

This study comprises an instrument design of the psychometric properties of the YPM questionnaire, including a factor structure analysis of the items, reliability testing (internal consistency of the scores) and a temporal stability analysis. The questionnaire was initially composed of 88 items covering four dimensions and corresponding to two approaches: one from a management perspective (Santiago, 2022; Pool-Góngora *et al.*, 2023) and another from practice, based on physical, mental and social actions (Campos-García *et al.*, 2018; Galiana *et al.*, 2015).

Physical self-care is the set of skills used to improve physical functioning and to prevent or control disease, exhibited as certain exercise, eating and hygiene habits, and the prevention of bodily harm (Butler *et al.*, 2019; Corral *et al.*, 2017).

Psychological self-care promotes practices that address life-altering emotional conditions (Vidal-Blanco *et al.*, 2019). Loving ourselves, having a high self-worth and learning to manage the different moments we experience all play an important role in self-care (Cerna, 2023). Furthermore, spiritual practice promotes prayer or meditation activities, which in turn improve our psychological health (Puchalski *et al.*, 2019; Steinhorn *et al.*, 2017).

The social dimension is the least studied of the three. Some studies, like Márquez-Teraza's (2022), have shed light on the types of social relationships that exist between care receivers and caregivers, who may be a family member or professional who imparts information or actively participates in care activities, such as hygiene, treatment, exercise, etc. However, there is a dearth of research into the social and relational perspective of self-care agency, although there is some evidence that points to a link between adequate social health and the prevention of psychological (depression, anxiety, ADHD) and physical diseases (overweight, obesity, etc.) (see, among others, De los Ángeles-Páramo, 2011; Lacunza *et al.*, 2013; Rondon and Angelucci, 2021; Torrel and Delgado, 2016).

2.2. Participants

The sample consisted of 290 secondary school students from the province of Almería. The sample was chosen from a total target population of 38,051 12- to 17-year-olds (Spanish Statistical Office, 2019) (confidence interval = 95%; margin of error = 5.7%).

In our sample, 61.9% said that they were female, with 36.5% male and 1.6% choosing not to answer, and the mean age was 16.07 years (SD = 1.89). Of the chosen students, 12.7% were in the first year of compulsory secondary education, 10.7% in the second, 10.6% in the third and 18.3% in the fourth, while 12.7% were in the first year of post-16 secondary education, and the remaining 35% in the final year of post-16 secondary education.

2.3. Procedure

This work forms part of the project entitled “Role of the Family in the Perception of Self-Care among Young Andalusians. Pre- and Post-COVID-19 Habits”, which is subsidised by the Andalusian Studies Centre under its 2023/2025 call for projects.

Participants were chosen from among secondary school students in the province of Almería using non-probability sampling, and they all voluntarily opted to participate in the project. In addition, their parents and/or legal guardians were required to sign a letter of informed consent regarding participation and dissemination of the resulting data. The questionnaire was managed using the LimeSurvey platform. IBM SPSS Statistics 27 statistics software was used to process and analyse the data.

2.4. Instrument

The YPM questionnaire initially comprised a set of 88 questions (see Table 1), and the students expressed their answers to each question on a five-point Likert scale, consisting of: 1: never; 2: almost never; 3: occasionally; 4: almost always; 5: always.

The goal of the questionnaire was to assess respondents' self-care practices (physical, psychological and social) and their general self-care management. This division is proposed, firstly, based on the published literature on risk habits and behaviours of young people (see, among others, Boraita *et al.*, 2022; Lacave *et al.*, 2022; Rosales, 2022; Sánchez *et al.*, 2022; Vallejo and Jiménez, 2022), and secondly, on questionnaires concerning overall self-care management (Díaz *et al.*, 2012; 2016) and studying the concept of self-care agency capacity (López-Díaz *et al.*, 2000; Orem, 1999), understood to mean the resources that the subject uses to achieve an optimal level of health and well-being.

Regarding the psychometric properties of this first version of the questionnaire, internal consistency of $\alpha = 0.71$ was recorded. However, despite the adequate result, we ultimately decided to reduce the number of items and only include those with a factor loading value greater than 0.5. This resulted in a 60-item questionnaire (the first 60 items shown in Table 1) with internal consistency of $\alpha = 0.84$ and acceptable fit indices: $S-B \div 2/df = 2.68$ ($S-B \div 2 = 80.41$ $df = 30$), CFI = 0.90.

Table 1
Items on the scale

Item	Description	Variable
Physical factor		
1	How many days a week do you attend sports classes? (Organised sport)	Physical activity
2	How many days a week do you participate in unorganised sport with friends and/or classmates?	Physical activity
3	How many days a week do you engage in moderate physical activity? (Walking, dancing, exercising, cycling, etc.)	Physical activity
4	How many days a week do you sleep at least eight hours?	Rest
5	How many days a week do you fall asleep before 11 o'clock at night?	Rest
6	You do everything you can to keep the environment where you live clean	Hygiene
7	You shower regularly to keep yourself clean	Hygiene
8	You try to maintain your weight by taking care of what you eat and/or the exercise you do	Physical activity
9	You get enough sleep to feel well-rested	Rest
10	You consume beer or other alcoholic beverages*	Risk behaviours
11	You use tobacco*	Risk behaviours
12	You use cannabis or another drug*	Risk behaviours
13	You wear your seat belt or helmet	Risk behaviours
14	You drive under the influence of alcohol and/or drugs*	Risk behaviours
15	You engage in violent fights*	Risk behaviours
16	You have unprotected sex*	Risk behaviours
17	You self-harm*	Risk behaviours
Social practice factor		
18	You spend quality time with your family	Family
19	Your family tries to help you	Family
20	Your friends try to help you when you need it	Friends
21	You can count on your friends when things go wrong	Friends
22	You can talk about your problems with your family	Family
23	You have friends with whom you can share your sorrows and joys	Friends
24	Your family is willing to help you make decisions	Family
25	You can talk about your problems with your friends	Friends
26	Your family provides you with the help and emotional support you need	Family
27	There is a special person who truly comforts you (family member)	Family
28	There is a special person who truly comforts you (friend)	Friends
29	There is a special person who truly comforts you (partner)	Partner
30	There is a special person who truly comforts you (professional)	Professional
31	There is a special person with whom you can share your sorrows and joys (family member)	Family
32	There is a special person with whom you can share your sorrows and joys (friend)	Friends
33	There is a special person with whom you can share your sorrows and joys (partner)	Partner
34	There is a special person with whom you can share your sorrows and joys (professional)	Professional
35	There is a special person in your life who cares about your feelings (family member)	Family
36	There is a special person in your life who cares about your feelings (friend)	Friends
37	There is a special person in your life who cares about your feelings (partner)	Partner
38	There is a special person in your life who cares about your feelings (professional)	Professional
Psychological practice factor		
39	You have felt too tired or exhausted to take proper care of yourself*	Emotional management
40	You have lost control of your emotions*	Emotional management
41	When you get angry, it's hard to stop and calmly reflect*	Emotional management
42	You are satisfied with the person you are	Self-esteem
43	You think you're useless*	Self-esteem
44	You think you're a failure*	Self-esteem
45	You think positively about yourself	Self-esteem

Item	Description	Variable
46	You would like to look like someone else*	Self-esteem
47	You have wanted to change who you are*	Self-esteem
48	You feel satisfied with the life you have	Life satisfaction
49	You meditate or pray	Spirituality
50	Your faith or belief in a higher being helps you overcome the challenges you face in life	Spirituality
51	You think that helping others is a positive spiritual value	Spirituality
52	You believe in yourself or live in harmony with yourself	Spirituality
53	You try to maintain and strengthen relationships with others as part of your faith	Spirituality
Management factor		
54	You are self-aware and interested in knowing if the activities you practise are good for your health	Self-care management
55	You seek help when you have health issues	Self-care management
56	You seek help if you can't take good care of yourself	Self-care management
57	Your health comes first	Self-care management
58	You try to find out more information when there's something you don't understand about your health	Self-care management
59	You have managed to change deeply rooted habits in order to improve your health	Self-care management
60	You know how to evaluate how your lifestyle influences your health	Self-care management
Items excluded by the factor analysis		
61	You consume any of the following products more than three times a week: pastries, fried snacks, fast food, sugary soft drinks and energy drinks	
62	You eat fruit and vegetables every day	
63	You eat five meals a day	
64	You eat alone more than once a day	
65	You are concerned with how what you eat affects your health	
66	You sit down for more than four hours at a time outside of school hours	
67	You are concerned with exercising to improve your health	
68	You spend more than three hours a day sat down browsing social media or using an electronic device	
69	You care about your rest	
70	You know who to contact to find out more information when you have a health problem	
71	You have daily contact with your friends (in person or via social media)	
72	When you have to take a medicine, you have someone to tell you about the effects of taking it	
73	You try not to let harmful situations change the way you are	
74	You pause to reflect on your feelings and emotions	
75	You don't know how to identify the emotion you feel	
76	You blame yourself for the problems that often happen to you	
77	You're not comfortable with your body	
78	You don't like the way you are	
79	Your outlook on most things is pessimistic	
80	You don't enjoy life	
81	There is a special person (family member) who is there when you need them	
82	There is a special person (friend) who is there when you need them	
83	There is a special person (partner) who is there when you need them	
84	There is a special person (professional) who is there when you need them	
85	You would like to do more activities related to improving your health throughout the day than you currently do	
86	You are conscious that you can take better care of your health than you are currently doing	
87	You examine your body to see if there are any changes	
88	You find it difficult to find the time to perform activities related to your health due to your daily schedule	

The items marked with * have been recoded in order to obtain positive scores with respect to the scale.
Source: own research.

The correction factor for the standard deviation (SD) of each of the three dimensions was 0.75 ($M - 0.75 * SD$ for the left-hand limit and $M + 0.75 * SD$ for the right-hand limit).

The KMO adequacy for the physical practice dimension was 0.740 (sig. < 0.001). Four variables make up 53.875% of the total explained variance (TEV): 1) risk behaviours; 2) hygiene; 3) physical activity; 4) rest. In this dimension, the scores range from 17 to 85 (low ≤ 36 < medium ≤ 56 < high).

The KMO adequacy for the social practice dimension is 0.860 (sig. < 0.001). and comprises four components, which account for 74.633% of the TEV: 1) family; 2) friends; 3) partner; 4) professional. In this dimension, the scores range from 21 to 105 (low ≤ 53 < medium ≤ 73 < high).

The KMO adequacy for the psychological practice dimension is 0.809 (sig. < 0.001). and comprises four components, which account for 65.979% of the TEV: 1) spirituality; 2) self-esteem; 3) life satisfaction; 4) emotional management. In this dimension, the scores range from 15 to 75 points (low ≤ 38 < medium ≤ 52 < high).

The KMO adequacy value for the management dimensions is 0.844 (sig. < 0.001). and comprises a single factor that makes up 51.912% of the TEV. In this dimension, the scores range from 7 to 35 (low ≤ 16 < medium ≤ 26 < high).

2.5. Analysis of the results

First, a descriptive analysis of the questionnaire items, distribution (kurtosis and skewness) and multivariate normality was carried out. Subsequently, the item-dimension correlation was observed, which would be removed if $r(i-tc) = < 0.20$ (Kline, 1986; 2011). Secondly, exploratory factor (EFA) and confirmatory factor (CFA) analyses were performed to verify the factor structure of the YPM.

During the EFA, we: a) calculated sampling adequacy using the Kaiser-Meyer-Olkin (KMO) test, with a value close to 1 being considered adequate; b) assessed applicability using Bartlett's test of sphericity (χ^2), with statistical significance of $p < 0.005$ being expected; c) analysed communality (h_2), with items with a value of less than $h_2 < 0.50$ being excluded; d) extracted the factors, using the principal component extraction (PCE) function; and e) rotated the items using the varimax method.

The CFA comprised the following calculations: a) CFA estimation using the principal axis factoring method; b) absolute fit indices using the χ^2 test, with no significance ($p > 0.05$) (Batista-Fogueta *et al.*, 2004); c) the goodness-of-fit index (GFI), with values of over 0.80 (Gómez-Guadix *et al.*, 2014).

Lastly, internal consistency was calculated using Cronbach's alpha (α)—with values equal to or greater than $\alpha = 0.70$ denoting high reliability—and the reliability of the instrument, taking temporal stability as a reference by using the test-retest method.

In addition, Pearson's correlation coefficient was used to measure the strength of the relationship between the life satisfaction scale, used as a reference (Diener *et al.*, 1985), and the dimensions of the scale, thus corroborating the reliability criterion.

3. Results

3.1. Initial analysis of the items

In the preliminary analysis, we sought to gain an understanding of the characteristics found in the questionnaire items (Table 2). Item 1, "How many days a week do you attend sports classes? (organised sports)", returned the lowest mean score on the scale ($M = 1.80$), while item 12, "You use cannabis or another drug", recorded the highest ($M = 4.68$). In the skewness and kurtosis analysis, all items met the multivariate normality acceptance criteria of ± 1.5 . Finally, the item-test correlation returned results ranging from $r(i-tc) = 0.60$ (item 26, "Your family provides you with the help and emotional support you need") and $r(i-tc) = 0.21$, displayed by items 14, 33 and 37 ("You drive under the influence of alcohol and/or drugs", "There is a special person with whom you can share your sorrows and joys [partner]" and "There is a special person in your life who cares about your feelings [partner]", respectively).

Table 2

Descriptive analysis of the items, final scale used in the YPM questionnaire (60 items)

Item/dimension	Mean	SD	Skewness	Kurtosis	$r(i-tc)$
1 PP	1.80	2.59	1.119	-0.334	0.26
2 PP	2.36	2.67	0.710	-1.048	0.25
3 PP	3.21	2.71	0.171	-1.488	0.36
4 PP	4.58	2.62	-0.563	-1.216	0.27
5 PP	2.90	2.87	0.243	-1.617	0.26
6 PP	4.20	1.21	-1.749	2.593	0.34
7 PP	4.62	0.90	-2.993	9.740	0.29
8 PP	3.34	1.52	-0.653	-0.644	0.34
9 PP	3.46	1.31	-0.463	-0.759	0.42
10 PP	4.15	1.15	-1.406	1.547	0.24
11 PP	4.12	1.53	-1.417	0.380	0.27
12 PP	4.68	0.95	-3.151	9.421	0.28
13 PP	3.96	1.60	-1.320	0.271	0.31
14 PP	4.62	1.13	-3.141	8.882	0.21
15 PP	4.47	1.04	-2.353	5.621	0.29
16 PP	3.91	1.68	-1.242	-0.018	0.21
17 PP	4.43	1.26	-2.451	5.130	0.24
18 SP	3.81	1.16	-0.543	-0.759	0.49
19 SP	4.33	1.09	-1.625	1.764	0.52
20 SP	4.14	1.07	-1.136	0.457	0.49

Item/dimension	Mean	SD	Skewness	Kurtosis	r(i-tc)
21 SP	4.04	1.14	-0.983	-0.008	0.37
22 SP	3.73	1.40	-0.674	-0.934	0.48
23 SP	4.22	1.12	-1.355	0.934	0.32
24 SP	4.18	1.14	-1.261	0.542	0.51
25 SP	4.10	1.17	-1.044	-0.004	0.36
26 SP	3.98	1.28	-0.952	-0.405	0.60
27 SP	4.31	1.15	-1.689	1.848	0.54
28 SP	4.07	1.23	-1.116	0.096	0.39
29 SP	2.43	1.75	0.583	-1.482	0.26
30 SP	2.57	1.61	0.429	-1.413	0.49
31 SP	4.29	1.14	-1.537	1.278	0.59
32 SP	4.22	1.07	-1.318	0.913	0.48
33 SP	2.48	1.77	0.525	-1.572	0.21
34 SP	2.42	1.53	0.608	-1.119	0.49
35 SP	4.41	1.04	-1.733	2.015	0.57
36 SP	4.16	1.17	-1.264	0.565	0.48
37 SP	2.62	1.79	0.366	-1.698	0.21
38 SP	2.45	1.54	0.543	-1.212	0.45
39 PsP	3.03	1.27	-0.136	-0.947	0.29
40 PsP	2.99	1.23	0.159	-0.796	0.23
41 PsP	3.26	1.31	-0.093	-1.126	0.30
42 PsP	3.59	1.30	-0.452	-0.970	0.30
43 PsP	2.15	1.25	0.763	-0.515	0.28
44 PsP	2.12	1.27	0.845	-0.366	0.22
45 PsP	3.40	1.24	-0.214	-0.954	0.41
46 PsP	2.22	1.39	0.773	-0.734	0.24
47 PsP	2.44	1.44	0.477	-1.147	0.41
48 PsP	3.77	1.28	-0.843	-0.322	0.33
49 PsP	2.55	1.51	0.470	-1.195	0.45
50 PsP	2.84	1.52	0.121	-1.413	0.39
51 PsP	3.58	1.39	-0.599	-0.868	0.45
52 PsP	3.37	1.32	-0.354	-0.952	0.37
53 PsP	3.13	1.40	-0.148	-1.138	0.40
54 OD	3.45	1.25	-0.371	-0.775	0.51
55 OD	3.59	1.21	-0.366	-0.772	0.46
56 OD	3.50	1.32	-0.426	-0.938	0.49
57 OD	3.77	1.20	-0.573	-0.698	0.42
58 OD	3.62	1.20	-0.410	-0.747	0.51
59 OD	3.37	1.31	-0.234	-0.995	0.53
60 OD	3.52	1.20	-0.389	-0.612	0.46

r(i-tc) = corrected item-test correlation. PP = physical practices. SP = social practices. PsP = psychological practices. OD = overall dimension.

Source: own research.

3.2. Factor structure of the YPM questionnaire dimensions

The adequacy of the items was evaluated using the KMO and Bartlett's sphericity tests in order to form the factors of each dimension. The communality analysis (h_2) found that the values were neither extremely high—which would be indicative of multicollinearity or redundancy ($h_2 < 0.95$)—nor low ($h_2 < 0.2$), so it was not necessary to remove any items.

More specifically, in the physical practice dimension, the lowest communality value was found in item 3, “How many days a week do you engage in moderate physical activity?” ($h_2 = 0.344$) and the highest, with a value of $h_2 = 0.728$, in item 10, “You consume beer or other alcoholic beverages” (see Table 3).

Table 3

Varimax-rotated physical practice dimension factor matrix

Item	h_2	F1	F2	F3	F4
1	0.512				0.745
2	0.413				0.834
3	0.344				0.760
4	0.528			0.748	
5	0.632			0.745	
6	0.425		0.738		
7	0.348		0.705		
8	0.711		0.583		
9	0.625			0.658	
10	0.728	0.511			
11	0.455	0.555			
12	0.801	0.762			
13	0.344		0.568		
14	0.457	0.679			
15	0.532	0.597			
16	0.416	0.587			
17	0.344	0.611			

Explained variation: F1: 0.20; F2: 0.15; F3: 0.11; F4: 0.08. KMO = 0.74; Bartlett: $X_{2(153)} = 947.173$; $p < 0.001$.

Note: Extraction method: principal component analysis.

Source: own research.

In Table 4 we can see that the lowest communality value is displayed by item 38, “There is a special person in your life who cares about your feelings (professional)” ($h_2 = 0.3142$), while the highest, with a value of $h_2 = 0.776$, was recorded by item 31, “There is a special person with whom you can share your sorrows and joys (family member)”.

Table 4

Varimax-rotated social practice dimension factor matrix

Item	h_2	F1	F2	F3	F4
18	0.735	0.706			
19	0.529	0.774			
20	0.366		0.766		
21	0.214		0.784		
22	0.625	0.799			
23	0.365		0.771		
24	0.686	0.834			
25	0.686		0.824		
26	0.411	0.892			
27	0.589	0.773			
28	0.336		0.797		
29	0.342			0.950	
30	0.475				0.891
31	0.776	0.844			
32	0.700		0.798		
33	0.377			0.960	
34	0.431				0.937
35	0.652	0.780			
36	0.425		0.802		
37	0.701			0.929	
38	0.314				0.920

Explained variation: F1: 0.36; F2: 0.15; F3: 0.12; F4: 0.10. KMO = 0.86; Bartlett: $X_{2(210)} = 3.582.230$; $p < 0.001$.

Note: Extraction method: principal component analysis.

Source: own research.

The lowest communality value ($h_2 = 0.310$) among the psychological practice factors appears in item 51, “You think that helping others is a positive spiritual value”, and the highest, with a value of $h_2 = 0.739$, in item 40, “You have lost control of your emotions” (see Table 5).

Table 5*Varimax-rotated psychological practice dimension factor matrix*

Item	h ₂	F1	F2	F3	F4
39	0.529				0.783
40	0.739				0.839
41	0.397				0.636
42	0.326			0.780	
43	0.597		0.748		
44	0.466		0.753		
45	0.531			0.753	
46	0.644		0.795		
47	0.517		0.787		
48	0.701			0.808	
49	0.641	0.789			
50	0.563	0.850			
51	0.310	0.678			
52	0.480	0.664			
53	0.644	0.792			

Explained variation: F1: 0.31; F2: 0.18; F3: 0.10; F4: 0.08. KMO = 0.81; Bartlett: $X_{2(105)} = 1,207.854$; $p < 0.001$.

Note: Extraction method: principal component analysis.

Source: own research.

Table 6, regarding the self-care management dimension, reveals that the lowest communality is shown by item 60, “You know how to evaluate how your lifestyle influences your health” ($h_2 = 0.447$), and the highest by item 58, “You try to find out more information when there’s something you don’t understand about your health”, which recorded a value of $h_2 = 0.645$.

Table 6*Self-care management dimension factor matrix*

Item	h ₂	F1
54	0.518	0.720
55	0.556	0.746
56	0.523	0.723
57	0.463	0.680
58	0.645	0.803
59	0.481	0.694
60	0.447	0.669

Variance explained with a single factor. F1: 0.52. KMO = 0.84; Bartlett: $X_{2(21)} = 488.841$; $p < 0.001$.

Source: own research.

And for the questionnaire as a whole, the following dimensions were attained by using the principal component extraction method with varimax rotation: overall man-

agement with 37.14% of the TEV, physical practice with 27.87% of the TEV, social practice with 24.17% of the TEV and psychological practice with 10.70% of the TEV.

In the confirmatory analysis, we can see from the CFA values that the model with the best fit comprised 13 factors (self-harming behaviours, hygiene, physical activity, rest, relationship with family, relationship with friends, relationship with partner, contact with professionals, spirituality, self-esteem, life satisfaction, emotional management and self-care management), which correspond to four correlating dimensions, as shown in Table 7: physical, social and psychological practices and overall management, which explain 72.3% of the TEV, KMO = 0.84. In addition, the results of the goodness-of-fit test determine that the model is acceptable ($X^2 = 0.94$).

Table 7

Correlations between YPM scale dimensions, total score and reference scale

	Physical practice	Social practice	Psychological practice	Self-care management	Total score	Life satisfaction*
Physical practice	1	0.368**	0.309**	0.705**	0.736**	0.229**
Social practice	0.368**	1	0.423**	0.812**	0.816**	0.449**
Psychological practice	0.309**	0.423**	1	0.712**	0.710**	0.379**
Self-care management	0.705**	0.812**	0.712**	1	0.995**	0.490**
Total score	0.736**	0.816**	0.710**	0.995**	1	0.479**
Life satisfaction*	0.229**	0.449**	0.379**	0.490**	0.479**	1

*Reference scale.

Source: own research.

3.3. Analysis of internal consistency, temporal stability and measurement objective

The reliability analysis shows that in both physical practice, with 17 items, and psychological practice, with 15 items, reliability is moderate, and that internal consistency in social practice, with 21 items, and management, with 15 items, is also moderate (see Table 8). Thus, the reliability levels of the different dimensions of the YPM questionnaire can be considered consistent and suitable for evaluating the practice and management of self-care among adolescents. What's more, as confirmed by the data in Table 7, when there are correlations between the dimensions, the four-dimensional model is again confirmed.

Table 8*Internal consistency of the YPM questionnaire*

Dimensions	Alpha	Items	r
Physical practice	0.700	17	0.000
Social practice	0.903	21	
Psychological practice	0.719	15	
Self-care management	0.845	7	

Source: own research.

In order to discern the temporal stability of the YPM questionnaire, the test-retest method was applied to 56 participants ten months following the initial study. The Kolmogorov-Smirnov test returned a normal distribution ($p = 0.200$) and Pearson correlation ($r = 0.801$) confirmed the temporal stability of the scale.

A Pearson correlation coefficient was employed to check the criterion and convergent validity, measuring the correlation between the different dimensions of the scale, the total score and the reference scale (Diener *et al.*, 1985). As can be seen in the results, there is strong correlation between the dimensions and the reference scale (see Table 7). More specifically, the management and social practice dimensions show the strongest correlation with the “Total score” variable, although all dimensions returned significant values and have scores of $r > 0.40$.

If we look at the correlation between the different dimensions and the reference scale, we can see that all of them have a high level of significance ($p < 0.001$), with psychological practice, management and total score recording the highest coefficients.

In summary, the questionnaire was created around four dimensions that correlate with one other ($p < 0.001$) and with a reliability of $\alpha = 0.84$. The exploratory factor analysis of each dimension found that there were four factors for physical practice (KMO = 0.740; TEV of 53.87%), four for psychological practice (KMO = 0.809; TEV of 65.979%), four for social practice (KMO = 0.860; TEV of 74.633%) and one for management (KMO = 0.844; TEV of 51.912%). Finally, a value of $r = 0.801$ was attained, thus confirming the temporal stability of the scale, and the criterion was validated by correlating with the reference scale ($p < 0.001$).

4. Discussion

The main objective of this research was to gain a deeper understanding of the structure of the YPM questionnaire, conducted in a sample of 12-to-17-year-old students in compulsory secondary education, and identify its reliability in terms of internal consistency, criterion validity and time.

We discovered that the structure comprised four dimensions that correlated with one other. KMO and Bartlett’s sphericity tests indicated the suitability of the composition

of the questionnaire's factors and dimensions. In addition, by excluding items with a communality value lower than 0.50, the study was ultimately performed on 60 items. Meanwhile, all dimensions recorded an internal consistency value of greater than $\alpha = 0.70$. Temporal stability, on the other hand, was proven with the confirmatory factor analysis by administering the questionnaire again ten months later.

These findings confirm the hypotheses proposed regarding the possibility of creating a multidimensional questionnaire that is able to measure both the level of self-care practice and management and, more specifically, each dimension at the same time. In other words, the data demonstrated the affinity of the factors and dimensions with the phenomenon subject to analysis. In addition, these results allow us to offer more detailed information regarding which dimension(s) should be prioritised in intervention processes (Chavarría, 2019; Fernández-Sánchez *et al.*, 2023), and to establish relationships between the questionnaire's different dimensions (Cosano, 2021; Poblete and Baldrich, 2012).

Consequently, it is worth highlighting the important role that self-care management plays, both independently and in relation to the rest of the dimensions, something that is indicated by the EFA, which underlines the importance of measuring this dimension in order to gain a general overview of the state of the matter. What's more, this coincides with the different applications and versions of management questionnaires that have been carried out to date (Matarese *et al.*, 2016). Furthermore, the existence of significant relationships between this dimension and those obtained from the practical content only serves to reaffirm the value of the measurement instrument, not just for use in other research, but also as a tool that can be used by public and/or private bodies responsible for ensuring the health of the youth (AEP, 2020; Bernedo *et al.*, 2023; Boraita *et al.*, 2022; Regional Government of Andalusia, 2023).

Similarly, by explaining the distribution of physical practice in three correlated dimensions, based on the assumptions of the previous scientific literature (Campos-García *et al.*, 2018; Galiana *et al.*, 2015), we were able to perform a wider and deeper analysis and thus establish a unified study method. Although there are not many studies on this issue, as we have already mentioned, some research has found that people who practise physical self-care behaviours report benefits in their mental health, self-esteem and management of emotions (Sansó *et al.*, 2015; Monserrat *et al.*, 2023). The opposite is also true: caring for emotional health can have an impact on the practice of healthy physical activities (Díaz *et al.*, 2019; Olea *et al.*, 2020). Also, the inclusion of spirituality, as a measure for managing psychological health, shows that these results concur with those of previous studies (Heidari *et al.*, 2017; Sharif Nia *et al.*, 2017).

Works studying the social dimension of care tend to focus on the relationships between caregiving and the social network of caregivers, i.e., those who assist in treatment, exercise, hygiene, etc. (Márquez-Terraza, 2022), while there is a considerable lack of research on social self-care agency, which links adequate social health to the prevention of psychological diseases (such as depression, anxiety, eating disorders) and physical diseases (overweight, obesity, etc.) (Lacunza *et al.*, 2013; Rondon and Angelucci, 2021; Torrel and Delgado, 2016).

Given the stability of the instrument in the young population, new studies are needed to establish whether these results can be generalised, both nationally and internationally, if we take into consideration not just age and gender, but also other educational levels and personal and family socio-demographic characteristics, since the intervention method may have varying effects depending on these types of variables (Marsh, 1996).

In short, the findings of this work, which centres on the youth population, can serve as a basis for future research covering a wider range of subjects and geographical areas, even opening the door for it to be adapted to other languages in order to further confirm the functional mechanisms of self-care (Badia and Baro, 2001; Gusi *et al.*, 2009).

5. Conclusions

The findings of this study have significant implications, since it has found that the YPM questionnaire devises a consistent and reliable scale that yields valid results for a segment of the population (between 12 and 17 years old). Thus, it is suitable for use as an instrument for measuring young people's self-care practice and management. However, since the results have been obtained from a unified sample from a specific province (Almería), they should be taken with caution, since they require further studies to confirm them for other contexts.

In addition, since the YPM questionnaire has convergent validity with both a reference instrument and over time, it is suitable for use in research and in interventions. In other words, the results obtained from its application reveal data on behaviour, in terms of defined practices (physical, psychological and social), and its relationship with overall management (Ayes *et al.*, 2020). Consequently, it also demonstrates the multidisciplinary nature of self-care, both as a prevention practice and as a treatment resource.

6. Bibliography

- Achury-Saldaña, D. M. & Kato, N. P. (2023). Adaptación cultural del Cuestionario de autocuidado en pacientes con asistencia ventricular definitiva. *Enfermería global*, 22(2), 234-245. <https://doi.org/10.6018/eglobal.526611>
- Alania, M. (2021). Gestión de conocimiento y autocuidado en pacientes trasplantados de células progenitoras hematopoyéticas, trabajo final de máster. Lima: INEN. <https://hdl.handle.net/20.500.12692/72343>
- Asociación Española de Pediatría (2020). Los adolescentes españoles tienen una percepción muy optimista de su estado de salud, según la encuesta «te cuidas tanto como crees», de la Asociación Española de Pediatría. https://www.aeped.es/sites/default/files/20201026_np_encuesta_adolescentes.pdf

- Ayes, C. B., Ruiz, A. L. & Estévez, G. A. (2020). Autocuidado: una aproximación teórica al concepto. *Informes psicológicos*, 20(2), 119-138. <https://doi.org/10.18566/infpsic.v20n2a9>
- Badía, X. & Baró, E. (2001). Cuestionarios de salud en España y su uso en atención primaria. *Atención primaria*, 28(5), 349-356. [https://doi.org/10.1016/S0212-6567\(01\)70387-3](https://doi.org/10.1016/S0212-6567(01)70387-3)
- Batista-Fogueta, M. J., Coenders, G. & Alonso, J. (2004). Análisis factorial confirmatorio. Su utilidad en la validación de cuestionarios relacionados con la salud. *Medicina Clínica*, 122, 21-27. <https://doi.org/10.1157/13057542>
- Berbiglia, V. A. & Thuy, L. T. (2022). Dorothea E. Orem: teoría del déficit de autocuidado en enfermería. In M. Raile Alligood (Ed.), *Modelos y Teorías en Enfermería* (pp. 198-212). Barcelona: Elsevier.
- Bernedo-García, M. C., Quiroga-Sánchez, E., García-Murillo, M. Á., Márquez-Álvarez, L., Arias-Ramos, N. & Trevisson-Redondo, B. (2023). La necesidad de la Enfermería Escolar: una revisión integradora de la literatura. *Enfermería Global*, 22(72), 490-516. <https://dx.doi.org/10.6018/eglobal.560501>
- Boraita, R. J., Ibort, E. G., Torres, J. M. D. & Alsina, D. A. (2022). Factores asociados a un bajo nivel de actividad física en adolescentes de La Rioja (España). *Anales de Pediatría*, 96(4), 326-333. <https://doi.org/10.1016/j.anpedi.2021.02.011>
- Butler, L. D., Mercer, K. A., McClain-Meeder, K., Horne, D. M. & Dudley, M. (2019). Six domains of self-care: attending to the whole person. *Journal of Human Behavior in the Social Environment*, 29, 107-124. <https://doi.org/10.1080/10911359.2018.1482483>
- Cabrera, A. R., Ramos, G. S., Palú, M. E. C. & Cáceres, B. P. (2013). Estrategia educativa sobre promoción en salud sexual y reproductiva para adolescentes y jóvenes universitarios. *Revista Cubana de Salud Pública*, 39(1), 161-174.
- Campos-García, A., Oliver, A., Tomás, J. M., Galiana, L. & Gutiérrez, M. (2018). Autocuidado: Nueva evidencia sobre su medida en adultos mayores. *Revista Española de Geriatría y Gerontología*, 53(6), 326-331. <https://doi.org/10.1016/j.regg.2018.01.010>
- Cerna Leon, Y. L. (2023). *Nivel de autoestima y prácticas de autocuidado en adolescentes de una institución educativa*. Lima: Universidad de Lima.
- Chavarría-Carranza, C. Y. (2019). Estilos de atribución causal. Importancia para la investigación e intervención profesional en la etapa adolescente. *Revista Costarricense de Psicología*, 38(1), 1-16. <http://dx.doi.org/10.22544/rcps.v38i01.01>
- Corral, V., Caso, J. & Frías, M. (Dirs.) (2017). *Psicología del cambio climático. Mitigación y adaptación conductual ante el calentamiento global*. México: Pearson.
- Cosano, P. S. (2021). El impacto de la pandemia en los jóvenes: una aproximación multidimensional. *Panorama social*, 33, 109-125.
- De la Torre Pinela, S. V. (2016). *Gestión de los cuidados de enfermería al niño con síndrome de down en su domicilio*. Guayaquil: Universidad de Guayaquil.

- De los Ángeles Páramo, M. (2011). Factores de Riesgo y Factores de Protección en la Adolescencia: Análisis de Contenido a través de Grupos de Discusión. *Terapia psicológica*, 29(1), 85-95. <https://doi.org/10.4067/S0718-48082011000100009>
- De Valenzuela Bandín, Á. L., García, R. M. & Arias, D. M. E. (2021). Prácticas de ocio y tiempo libre de los adolescentes en Galicia: análisis y reflexiones en clave socioeducativa. *Bordón: Revista de Pedagogía*, 73(1), 161-180. <https://doi.org/10.13042/Bordon.2021.83201>
- Dean, K. (1989). Conceptual, theoretical and methodological issues in self-care research. *Social Science & Medicine*, 29(2), 117-123. [https://doi.org/10.1016/0277-9536\(89\)90159-7](https://doi.org/10.1016/0277-9536(89)90159-7)
- Díaz, J. R., Fernández, C. A., Cabo, A. P., Pino, L. P. & Gómez, C. A. (2019). Motivaciones y hábitos de actividad física en alumnos universitarios. *Retos*, (36), 446-453.
- Díaz, V. L., Rojas, P. A., Barboza, Y. B., Sancho, E. C., Marín, M. C. & Guido, Y. W. (2012). Capacidad de agencia de autocuidado en las personas adultas que padecen artritis reumatoide. *Enfermería Actual en Costa Rica*, (22), 5-11.
- Díaz, V. L., Vargas, K. C., Gutiérrez, Y. P., Villegas, T. R. & Wong, I. S. (2016). Validación de la Escala de Apreciación de Agencia de Autocuidado (ASA) para Costa Rica, para población con enfermedad crónica. *Revista Enfermería Actual en Costa Rica*, (31), 12.
- Diener, E., Emmons, R., Larsen, R. & Griffin, S. (1985). The satisfaction with Life Scale. *Journal of Personality Assessment*, 49. https://doi.org/10.1207/s15327752jpa4901_13
- Digennaro, S. & Iannaccone, A. (2023). Check Your Likes but Move Your Body! How the Use of Social Media Is Influencing Pre-Teens Body and the Role of Active Lifestyles. *Sustainability* 15, 3046. <https://doi.org/10.3390/su15043046>
- Durkheim, É. (1985). *Las reglas del método sociológico*. Madrid: Akal.
- Durkheim, E. (2020). *Historia de la educación y de las doctrinas pedagógicas: la evolución pedagógica en Francia*. Madrid: Morata.
- Fernández-Sánchez, H., Guzmán-Facundo, F. R., Herrera-Medina, D. & Sidani, S. (2023). Importancia del estudio piloto en un proyecto de intervención. *Index de enfermería*, 32(1), 1132-1296. <https://dx.doi.org/10.58807/indexenferm20233776>
- Galiana, L., Oliver, A., Sansó, N. & Benito, E. (2015). Validation of a new instrument for selfcare in Spanish palliative care professionals nationwide. *The Spanish Journal of Psychology*, 18, 1-9. <https://doi.org/10.1017/SJP.2015.71>
- Gámez-Guadix, M., Villa-George, F. & Calvete, E. (2014). Psychometric Properties of the Cyberbullying Questionnaire (CBQ) Among Mexican Adolescents. *Violence and Victims*, 29, 243-246. <https://doi.org/10.1891/0886-6708.VV-D-12-00163R1>
- García, N. G. & Langa, N. L. (2012). Antecedentes históricos y perfil de la enfermera escolar. *Metas de Enfermería*, 15(7), 50-54. <https://doi.org/10.2307/j.ctv25tnwp5.4>

- Gusi, N., Badía, X., Herdman, M. & Olivares, P. R. (2009). Traducción y adaptación cultural de la versión española del cuestionario EQ-5D-Y en niños y adolescentes. *Atención Primaria*, 41(1), 19-23. <https://doi.org/10.1016/j.aprim.2008.04.005>
- Heidari, S., Rezaei, M., Sajadi, M., Ajorpaz, N. M. & Koenig, H. G. (2017). Religious practices and self-care in Iranian patients with type 2 diabetes. *Journal of Religion and Health*, 56(2), 683-696. <https://doi.org/10.1007/s10943-016-0320-x>
- Hernández Serrano, O., Espada Sánchez, J. P., Piqueras Rodríguez, J. A., Orgilés Amorós, M. & García-Fernández, J. M. (2013). Programa de prevención del consumo de drogas Saluda: evaluación de una nueva versión en adolescentes españoles. *Health and Addictions/Salud y Drogas*, 13(2), 135-144. <https://doi.org/10.21134/haaj.v13i2.210>
- Hoyo, D. E. H., Losardo, R. J. & Bianchi, R. I. (2021). Salud plena e integral: un concepto más amplio de salud. *Revista de la Asociación Médica Argentina*, 134(1), 18-25.
- Iglesias, M. L., Tapia-Frade, A. & Velasco, C. M. R. (2023). Patologías y dependencias que provocan las redes sociales en los jóvenes nativos digitales. *Revista de Comunicación y Salud*, 13, 1-22. <https://doi.org/10.35669/rcys.2023.13.e301>
- Junta de Andalucía (2023). <https://www.juntadeandalucia.es/organismos/saludyconsumo/areas/salud-vida/programas-salud/paginas/creciendo-salud.html>
- Kline, P. (1986). *A handbook of test construction: Introduction to psychometric design*. London: Methuen.
- Kline, R. B. (2011). *Principles and practice of structural equation modeling*. New York: Guilford Press.
- La Valle, R. (2017). Sobre la definición de salud. *Archivos de medicina familiar y general*, 14(2).
- Lacave, T. T., Vázquez-Barrio, T. & Álvarez, R. S. (2022). Experiencias de ciberacoso en adolescentes y sus efectos en el uso de internet. *Icono14*, 20(1), 7. <https://doi.org/10.7195/ri14.v20i1.1624>
- Lacunza, A. B., Caballero, S. V., Salazar, R., Sal, J. & Filgueira, J. (2013). Déficit sociales en adolescentes con sobrepeso y obesidad. *Ciencias Psicológicas*, 7(1), 25-32. <https://doi.org/10.22235/cp.v7i1.1094>
- León-Larios, F. & Gómez-Baya, D. (2020). Diseño y validación de un cuestionario sobre conocimientos de sexualidad responsable en jóvenes. *Revista Española de Salud Pública*, 92, e20180628.
- López Díaz, A. L. & Guerrero Gamboa S. (2006). Perspectiva internacional del uso de la teoría general de Orem. *Investigación Educativa en Enfermería*, 24(2), 90-100.
- López, L. G. & Rodríguez, G. M. (2017). El autocuidado y las apps, agentes de cambio en enfermedades como sobrepeso, obesidad y diabetes. *Revista Digital Universitaria*, 18(8). <https://doi.org/10.22201/codeic.16076079e.2017.v18n8.a3>
- Márquez-Terraza, A. V. (2022). Representaciones sociales en las personas mayores y su influencia en el autocuidado. *Revista Cuidarte*, 13(2), e2107. <https://doi.org/10.15649/cuidarte.2107>

- Marsh, H. W. (1993). *Physical Self-Description Questionnaire*. Australia: University of Western Sydney.
- Matarese, M., Lommi, M. & De Marinis, M. G. (2017). Systematic review of measurement properties of self-reported instruments for evaluating self-care in adults. *Journal Advance Nursing*, 73(6), 1272-1287. <https://doi.org/10.1111/jan.13204>
- Ministry of Health (2023). <https://www.sanidad.gob.es/campañas/portada/home.htm>
- Monserrat Hernández, M., Arjona Garrido, Á., Checa Olmos, J. C., Casimiro Andújar, A., Artés Rodríguez, E. M. & Salguero García, D. (2023). Influence of the practice of physical exercise and healthy eating on the Vigour of university lectures. *Frontiers in Sports and Active Living*, 5, 1228668. <https://doi.org/10.3389/fspor.2023.1228668>
- National Statistics Institute (2019). Continuous Register Statistics as of January 1, 2019. Data by municipalities. <https://www.ine.es/jaxi/Datos.htm?path=/t20/e245/p05/a2019/l0/&file=00004001.px>
- Nuño-Solinis, R., Rodríguez-Pereira, C., Piñera-Elorriaga, K., Zaballa-González, I. & Bikandi-Irazabal, J. (2013). Panorama de las iniciativas de educación para el autocuidado en España. *Gaceta Sanitaria*, 27, 332-337. <https://doi.org/10.1016/j.gaceta.2013.01.008>
- Olea, L. N. S., Ampudia, M. G. L., Cárdenas, R. I. S. & Martínez, B. M. (2020). Nivel de autocuidado en estudiantes universitarios de cinco licenciaturas del área de la salud. *Cuidarte*, 5(10), 32-43. <https://doi.org/10.22201/fesi.23958979e.2016.5.10.69114>
- Orem, D. (1999). *Nursing: Concepts of practice*. St. Louis: Mosby.
- Poblete, F. & Baldrich, F. (2012). Evaluación multidimensional de los servicios de salud para adolescentes en centros de Atención Primaria en una comuna de Santiago. *Revista Médica de Chile*, 140(9), 1145-1153. <https://doi.org/10.4067/S0034-98872012000900007>
- Pool-Góngora, R. A., Balam-Gómez, M. & Tuyub-Itza, M. Y. (2023). Planes de cuidados de enfermería: propuesta para padres con escolares que padecen sobrepeso u obesidad. *Sanus*, 8. <https://doi.org/10.36789/revsanus.vii.320>
- Puchalski, C. M., Sbrana, A., Ferrell, B., Jafari, N., King, S., Balboni, T., Miccinesi, G., Vandenhoeck, A., Silbermann, M., Balducci, L., Yong, J., Antonuzzo, A., Falcone, A. & Ripamonti, C. I. (2019). Interprofessional spiritual care in oncology: a literature review. *ESMO Open*, 4(1), 1-12. <https://doi.org/10.1136/esmoopen-2018-000465>
- Reyes, A. L. G. & Guadarrama, J. D. S. (2022). Valoración de enfermería en el autocuidado y estilo de vida del paciente con enfermedad crónica asociada a la obesidad. *Dilemas contemporáneos: Educación, Política y Valores*. <https://doi.org/10.46377/dilemas.v9i2.3154>
- Rimón, M. G. & Castro, M. M. (2016). Hábitos de vida saludable desde la adolescencia. *Revista de Estudios de Juventud*, (112), 107-116.

- Rodríguez, H. D. & Hernández, M. A. (2018). Necesidad percibida del profesorado de educación infantil, primaria y secundaria sobre formación en salud e implantación de la figura de la enfermera escolar. *Metas de Enfermería*, 21(9), 5-12.
- Rondón Bernard, J. E. & Angelucci Bastidas, L. (2021). Relación entre depresión y adherencia al tratamiento en diabetes tipo 2, considerando la red de apoyo social, las estrategias de afrontamiento y el sexo. *Revista costarricense de psicología*, 40(2), 215-242. <https://doi.org/10.22544/rcps.v40i02.08>
- Rosales, R. A. (2022). *Efectos adversos asociados al consumo de drogas y otros comportamientos de riesgo en la población adolescente*. Alicante: Universidad de Alicante.
- Ruiz-Aquino, M. M., Díaz-Lazo, A., Ortiz-Aguí, M. L. & Ida, V. C. E. (2021). Conductas de autocuidado frente a la prevención del contagio de la COVID-19 en pobladores peruanos. *Revista Cubana de Medicina General Integral*, 36(4).
- Sánchez, J. G. S. & Riba, S. S. (2022). Predictores asociados al consumo de tabaco en adolescentes: una revisión sistemática. *Retos: nuevas tendencias en educación física, deporte y recreación*, (46), 1065-1072. <https://doi.org/10.47197/retos.v46.93114>
- Sanmartín, A., Ballesteros, J. C., Calderón, D. & Kuric, S. (2022). *Barómetro Juvenil 2021. Salud y bienestar: Informe Sintético de Resultados*. Madrid: Centro Reina Sofía sobre Adolescencia y Juventud, Fundación FAD Juventud. <https://doi.org/10.5281/zenodo.6340841>
- Sansó, N., Galiana, L., Oliver, A., Pascual, A., Sinclair, S. & Benito, E. (2015). Palliative care professionals' inner life: exploring the relationships among awareness, self-care, and compassion satisfaction and fatigue, burnout, and coping with death. *Journal of Pain and Symptom Management*, 50(2), 200-207. <https://doi.org/10.1016/j.jpainsymman.2015.02.013>
- Santiago, M. (2022). *Programa de formación sobre el autocuidado y gestión de emociones del profesional sanitario en la unidad de cuidados paliativos pediátricos*. Zaragoza: Universidad de Zaragoza. <https://zaguan.unizar.es/record/112626>
- Sharif Nia, H., Pahlevan Sharif, S., Goudarzian, A. H., Allen, K. A., Jamali, S. & Heydari Gorji, M. A. (2017). The relationship between religious coping and self-care behaviors in Iranian medical students. *Journal of Religion and Health*, 56(6), 2109-2117. <https://doi.org/10.1007/s10943-017-0376-2>
- Slusher, I. (1999). Self-care agency and self-care practice of adolescents. *Comprehensive Pediatric Nursing*, 22(1), 49-58. <https://doi.org/10.1080/014608699265383>
- Steinhorn, D. M., Din, J. & Johnson, A. (2017). Healing, spirituality, and integrative medicine. *Annal Palliative Medicine*, 6, 237-247. <https://doi.org/10.21037/apm.2017.05.01>
- Taylor, S. G., Compton, A., Donohue-Eben, J., Emerson, S., Nergess, N. & Marriner-Tomey, A. (2000). Introducción al análisis de las teorías de enfermería. In M. Raile (ed.), *Modelos y teorías en enfermería* (pp. 9-13). España: Elsevier.

- Torrel, M. & Delgado, M. (2016). Funcionamiento familiar y depresión en adolescentes de la IE Zarumilla-Tumbes, 2013. *Ciencia y desarrollo*, 17(1), 47-53. <https://doi.org/10.21503/cyd.v17i1.1102>
- Vallejo, A. G. & Jiménez, M. A. (2022). Influencia de la Actividad Físico-Deportiva en el rendimiento académico, la autoestima y el autoconcepto de las adolescentes: El caso de la isla de Tenerife. *Retos: nuevas tendencias en educación física, deporte y recreación*, (46), 120-128. <https://doi.org/10.47197/retos.v46.93496>
- Vidal-Blanco, G., Oliver, A., Galiana, L. & Sansó, N. (2019). Quality of work life and self-care in nursing staff with high emotional demand. *Enfermería Clínica*, 29(3), 186-194. <https://doi.org/10.1016/j.enfcli.2018.06.004>
- Videra-García, A. & Reigal-Garrido, R. E. (2013). Autoconcepto físico, percepción de salud y satisfacción vital en una muestra de adolescentes. *Anales de Psicología*, 29(1), 141-147. <https://doi.org/10.6018/analesps.29.1.132401>
- White, M. L. & Myers, S. (2013). Development of a spiritual self-care practice scale. *Journal of Nursing Measurement*, 21(3), 450-462. <https://doi.org/10.1891/1061-3749.21.3.450>
- World Health Organization (1948). Definition of health. International Sanitary Conference, held in New York from June 19 to July 22, 1946, signed on July 22, 1946 by the representatives of 61 States (Official Records of the World Health Organization, 2, p. 100).
- Zárate-Grajales, R. (2004). La gestión del cuidado en enfermería. *Index de Enfermería*, 13(44-45), 42-46. <https://doi.org/10.4321/S1132-12962004000100009>

Juan Carlos Checa Olmos

He holds a Bachelor's Degree in Political Science and Sociology from the University of Granada and a PhD from the University of Almería, where he currently serves as a professor of sociology. His key lines of research include migration, labour markets and self-care. He is the author and co-author of over two hundred scientific texts that have been published by prestigious journals and publishers.

Montserrat Monserrat Hernández

She is a professor of social anthropology at the University of Almería and a researcher at the Laboratory of Social and Cultural Anthropology (LASC). She earned a PhD in Human and Social Sciences from the University of Almería in 2019. Among her main lines of research are health anthropology, eating habits and adherence to the Mediterranean diet, and the socio-cultural analysis of self-care.

Ángeles Arjona Garrido

After graduating in Political Science and Sociology from the University of Granada, she earned her PhD from the University of Almería. She is currently a professor of social anthropology at the University of Almería and holds the position of director of the Centre for Migration Studies and Intercultural Relations. In addition, her scientific work on migration, gender, labour markets and self-care has been published by renowned journals and publishers.

RESEARCH
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INVESTIGACION

RESEARCH NOTE/NOTA DE INVESTIGACIÓN

The Emotional Vote: An Experiment During the 23 July 2023 Spanish Election

El voto emocional: un experimento durante las elecciones del 23 de julio de 2023

Francisco Javier Otamendi

franciscojavier.otamendi@urjc.es

Lucía M. Guerras

lucia.guerras@urjc.es

Eva Borrega-Alonso

eva.borrega@urjc.es

Jesús Messía de la Cerda

jesusalberto.messiadelacerda@urjc.es

Universidad Rey Juan Carlos, Spain

Félix-Fernando Muñoz

Universidad Autónoma de Madrid, Spain

felix.munoz@uam.es

Received/Recibido: 22/11/2023

Accepted/Aceptado: 29/5/2024



ABSTRACT

New technologies and neuroscience may help complement traditional poll-based vote projections. As such, facial expression analysis enables us to study the emotional reactions that images of logos or candidates' faces provoke among voters. This research note presents the experiment carried out prior to the 2023 Spanish general election in which we used this technique to define and quantify the emotional vote. The main methodological conclusion is that experimentally, an analysis of voting intention based on traditional surveys can be complemented by a study of respondents' emotional reactions. This emotional vote could shed new light, which would help us gain a greater understanding of voters' electoral behaviour.

KEYWORDS: emotional vote; elicited vote; neuroscience; demographic projections; facial expression analysis; emotional reactions.

HOW TO REFERENCE: Otamendi, F. J., Guerras, L. M., Borrega-Alonso, E., Messía de la Cerda, J. y Muñoz, F.-F. (2024). El voto emocional: Un experimento durante las elecciones del 23 de julio de 2023. *Revista Centra de Ciencias Sociales*, 3(2), 125–140. <https://doi.org/10.54790/rccs.81>

The Original version can be read at <https://doi.org/10.54790/rccs.81>

RESUMEN

Las nuevas tecnologías y la neurociencia pueden ayudar a complementar los estudios tradicionales de intención de voto basados en encuestas. Así, el análisis de expresiones faciales permite estudiar las reacciones emocionales que despiertan las diferentes candidaturas presentadas entre los votantes. En esta nota de investigación se presenta el experimento realizado con motivo de las elecciones generales de 2023 en España empleando este tipo de técnicas, definiendo y cuantificando el voto emocional en función de las reacciones emocionales mostradas ante imágenes de logos y caras de candidatas/os. La principal conclusión metodológica es que experimentalmente se puede estudiar de manera conjunta la intención manifestada de voto basada en encuestas tradicionales con las reacciones emocionales demostradas por los encuestados. Este voto emocional podría aportar nuevas vías de comprensión del comportamiento electoral de los votantes.

PALABRAS CLAVE: voto emocional; voto manifestado; neurociencia; proyecciones demoscópicas; análisis de expresiones faciales; reacciones emocionales.

1. Introduction

Emotions not only play a fundamental role in our reasoning and decision-making processes, but they also have a strong cognitive-intentional component. The study of emotions has become a notorious aspect of modern politics, since they can be manipulated to shape voters' behaviour (Ansolabehere and Puy, 2023; Jaráiz *et al.*, 2020; Marcus, 2000; Oñate *et al.*, 2022; Pereira *et al.*, 2021; Rivera Otero *et al.*, 2021; Schreiber, 2017; Velez *et al.*, 2020).

The neurology tools and techniques available (Glimcher and Fehr, 2008) allow us to study the impact of emotions on political decisions, in particular which candidate a person chooses to vote for. Emotions can be quantified in a number of ways, some of which using new technologies, as is the case with facial expression analysis (FEA). Such techniques and software are now being used in a wide range of fields, including brand analysis (Bigné *et al.*, 2023; Hamelin *et al.*, 2022; Ortigueira-Sánchez *et al.*, 2022), sports (Suominen, 2021), tourism (Gómez-Díaz, 2021) and engineering (Meza-García and Rodríguez-Ibáñez, 2021). In the political and economic realms, however, FEA still has limited applications (Masch *et al.*, 2021; Rodríguez-Fuertes *et al.*, 2022; Romero-Luis *et al.*, 2023) and there are no known applications linked to voting intention, perhaps due to the considerable cost and time required to perform them.

In this research note, we detail an experiment that has been carried out in the electoral field to methodologically test the potential of FEA to detect trends in voting intention based on emotional reactions to stimuli presented as images of candidates and logos. The experiment was carried out with a mainly young and student population in three Spanish cities (Madrid, Seville and Jerez) between 1 and 8 June 2023, during the build-up to the general election held in July of that same year. Alongside the experiment, a voting intention survey, compiled by the Andalusian CENTRA Foundation, and an attachment test (Melero and Cantero, 2008) were conducted in order to study the feasibility of combining responses from surveys and traditional tests with the emotional reactions obtained through FEA. The main takeaway is that FEA-based techniques open new avenues for the study and quantification of voting intention.

2. The Analytical Framework Used to Measure Emotional Voting

The methodology employed consists of recording the emotional reactions displayed on the faces of potential voters (microexpressions) when exposed to two stimuli—images of the different candidates' faces and logos (or “brands”) of the political parties—and when filling out voting intention or attachment style questionnaires. These reactions were recorded and then analysed using the iMotions software (<https://imotions.com/>) and then an FEA was performed, which produced a series of indicators of emotional reactions linked to Ekman's (1993) seven basic emotions: joy, surprise, anger, contempt, disgust, fear and sadness.

By combining this information with the results of the surveys, we were able to develop a series of political, emotional and attachment-style indicators that can be used as the basis of a study on voting intention.

2.1. Experiment design

In order to allow us to obtain sufficient samples as quickly and cost-effectively as possible, the experiment's design combines techniques from neuroscience, psychology, experimental economics, and industrial engineering. Therefore, we broke up the activities to keep them as short as possible, which enabled the emotional reactions to the responses to be more clearly differentiated and the flow of people between the different stages of the experiments to be more efficiently managed, thus minimising the total time of the experiment and consequently maximising the number of participants who could perform the experiment per hour.

The experiments were broken down into the following steps:

1. Initial registration. The subject scans the QR code containing a questionnaire. They are assigned an ID code, which will be used to anonymise the data. After completing the questionnaire, they are given a paper document containing the informed consent, approved by Universidad Rey Juan Carlos (URJC)'s Research Ethics Committee.
2. Subjects receive a QR code confirming that they have signed the informed consent document.
3. iMotions_1. Subjects are then called in order by the experimenter in charge of managing the iMotions booths, where they are sat in front of a computer connected to a webcam. The distance between the subject and the device is adjusted and the webcam is checked to make sure it is recording properly. This first iMotions display shows the subject the faces of the main candidates for president of the Spanish government (Figure 1), and then two questions appear on the screen: “Do you know this candidate?” and “What is the likelihood of you voting for him/her?”. In order to prevent unwanted trends from appearing in the answers, and to preserve the surprise effect, the images of the candidates are shown in a random order. Each image is displayed for five seconds

Figure 2

Experiment example sequence: parties



N.B.: Official party logos ahead of the July 2023 election campaign.

It should be noted that this structure allows us to process 25 subjects every 90 minutes: each subject takes 18 minutes (six for exposure to stimuli and 12 for completing surveys and tests), with six subjects completing the experiment simultaneously.

2.2. Running the experiment

To recruit experimental subjects, posters were placed at the URJC (Vicálvaro campus) in the case of Madrid, while for all three test locations subjects were approached both on and off campus, asking them if they wished to participate in the experiments. Potential subjects were provided the absolute minimum information possible so as to not compromise the validity of the experiment, and they were also given a QR code, identical to the one shown on the posters, providing information on the study, the location and the schedule. Subjects had the option to register for the experiment or simply go straight to the room to begin the experiment immediately. Subjects could also register via the QR code and indicate the time they wished to attend. These tasks were conducted by an experimenter from the research team.

Participating subjects were welcomed at the room set up for this purpose—a classroom at URJC, and a hotel room in Seville (see Figure 3) and in Jerez—by a second experimenter, who was responsible for explaining to them what the experiment consisted of and, most importantly, obtaining the informed consent that they were required to sign if they eventually wished to participate.

Figure 3

Layout of the experiment room in Seville (Exe Sevilla Palmera hotel). Booths three and five are equipped with iMotions software



In the room were two computers with iMotions installed, and two other tables where the subjects completed the attachment style and voting intention questionnaires via a mobile application. A third member of the research team was tasked with managing the two iMotions devices and explaining to each subject how to position themselves and answer the questions, recording the participants and checking that everything worked correctly. The experimenter in charge of welcoming the participants also thanked them at the end of the experiment.

A total of 306 people participated in the various experiments—148 men and 155 women—the majority of which were young people under the age of 25 (77.45%). These people comprised the pilot sample of our experiment. Practically all participants answered over 99% of the questions, while the records of 17 subjects were deemed invalid as a result of their unsuccessful facial recognition during the iMotions_2 portion of the Seville experiment. Table 1 shows the distribution of participants by location and gender, including dates of completion.

Table 1

Participants in the experiments by location and gender

GENDER	Male	Female	Other	Total
MADRID (1–2 June)	58 (48%)	61 (50%)	3 (2%)	122 (100%)
SEVILLE (5–6 June)	41 (45%)	50 (55%)		91 (100%)
JEREZ (7–8 June)	49 (53%)	44 (47%)		93 (100%)
TOTAL	148 (48%)	155 (51%)	3 (1%)	306 (100%)

Source: own research.

2.3. Legal framework of the experiments

Safe collection and storage and the confidentiality of the recordings are of utmost importance in this type of study. During the experiment, all issues and risks related to the protection of the participants' personal data were dealt with in accordance with current national laws (Organic Law 3/2018, of 5 December, on the Protection of Personal Data and Guarantee of Digital Rights) and European Parliament guidelines (Proposal for a Regulation of the European Parliament and of the Council Laying Down Harmonised Rules on Artificial Intelligence [Artificial Intelligence Act], enacted in 2021, and the amendments made to it in 2023). As such, before commencing, the subjects signed a specific and complete informed consent document outlining the details and implications of the experiment, as well as its purpose and objectives, thus obtaining the required expression of their free will.

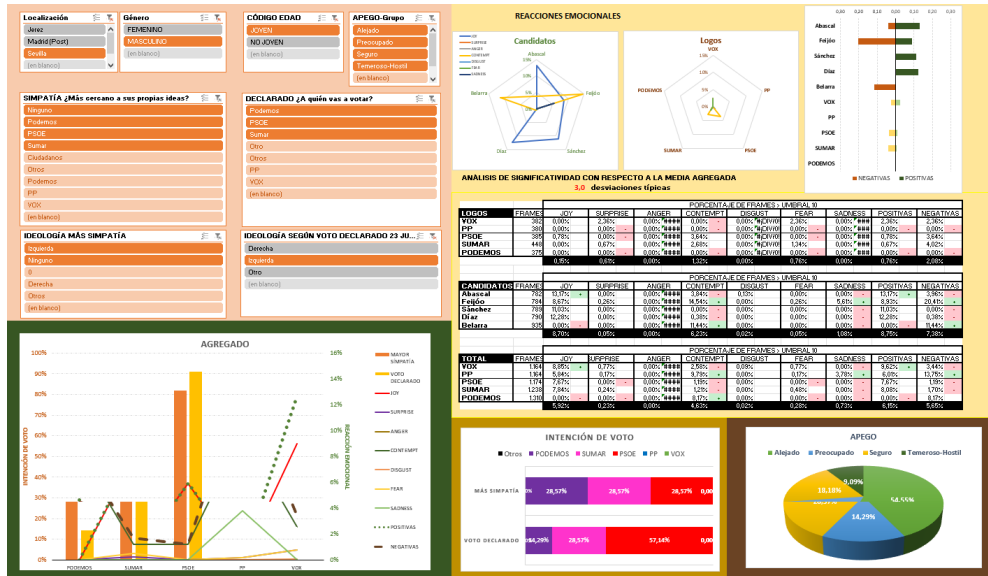
Other measures were also adopted, such as data anonymisation, restriction of access to unauthorised team members and two-factor authentication for accessing the data, among others. In addition, secure URJC programs and servers certified by Microsoft were used; the custody of data and the prevention of information leaks are two very sensitive issues. Similarly, it is worth mentioning that the European AI Act will greatly hinder this type of experiment in the future, which is why we have had to anonymise the data in order to prevent personal identification and categorisation using biometric data. Finally, the data were permanently deleted upon completion of the study.

2.4. Categorisation and quantification of indicators

We developed the EMOTIVOTO tool (see interface in Figure 4), which consists of a relational database and a series of indicators that synthesise the emotional vote, elicited voting intention and attachment style. In addition, each subject was identified in the database by their gender, age and the location where they were going to vote, allowing the analysis to be personalised according to the needs of the researcher.

Figure 4

EMOTIVOTO control panel. Pictured is the profile of a young, left-wing male voter in Seville



Source: own research.

To characterise and quantify the emotional vote, emotional reactions were converted into each of Ekman's (1993) seven basic emotions, which was performed directly by the iMotions software. Results were obtained for reactions both to the image of the logo and to the image of the candidate, giving us a total of 14 values. Reactions can be grouped into positive (joy and surprise) and negative (anger, contempt, disgust, fear and sadness) (Ekman, 1972, 1999; see also Timme and Brand, 2020).

Regarding the elicited voting intention, we obtained two indicators about the participants' affinity to the different political options shown to them based on their responses to the following questions included in the CENTRA Foundation questionnaire:

- “How likely are you to vote for ***** in the upcoming national election?”. The party they indicate that they are most likely to vote for is classed as the “elicited vote”.
- “Which party are you most sympathetic to or most closely represents your own ideals?”. We call this “sympathy”.

The answers, originally the name of the political parties, have been further grouped into ideological blocks: right (Vox, People's Party [PP]) and left (Spanish Socialist Workers' Party [PSOE], Sumar, Podemos).

Finally, regarding attachment, each subject was assigned a style based on the classification proposed by Melero and Cantero (2008): avoidant, secure, angry and anxious.

3. Aggregate Results

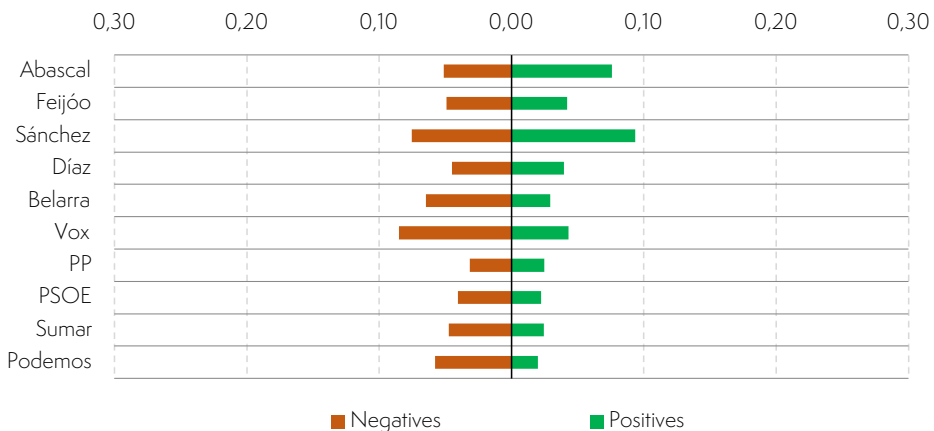
The main descriptive results for each of the three groups of indicators are presented below.

3.1. Emotional vote

The main takeaway—which applies to the entire sample—is that it is the candidates (images of their faces) who generated more emotional reactions, while the parties (represented by logos) aroused less emotions.

As for the political parties, the PP—both the photograph of the candidate and the party’s logo—failed to provoke a strong emotional reaction. Likewise, the PSOE's logo was unsuccessful in generating a reaction. Vox, on the other hand, triggered the greatest emotional response, both positive and negative, while Podemos generated high doses of negative emotions, as opposed to positive ones. The latter is also true of Sumar and the PSOE. The positive emotions generated by (PSOE candidate and incumbent prime minister) Pedro Sánchez and Vox's Santiago Abascal and the negative ones provoked by Sánchez and Sumar candidate Ione Belarra also stand out (Figure 5).

Figure 5
Emotional reactions to candidates and faces



Source: EMOTIVOTO.

3.2. Voting intention

Table 2 compares voting intention data obtained from polls conducted by opinion polling companies and the “elicited vote” and “sympathy” indicators obtained in the experiment with the results of the national election. In the experiments, the order of voting preference was: the PP (37.25%), followed by the PSOE (25.49%), with Vox (11.15%) and Sumar (9.84%) practically tied for third, and Podemos (6.56%) in last place. Also of note is the high percentage of others (16.99%) indicated in the elicited vote, which includes participants who did not vote and those who were undecided.

Table 2

Forecasts and result of 23 July 2023 elections (in percentage of the vote)

	NC Report	Gad3	Sigma Dos	CIS	Elicited vote	Most sympathy/closeness	Result (23 July)
PP	37.2	36.9	35.4	30.8	37.25	32.79	33.05
PSOE	28.3	28.6	28.0	32.2	25.49	21.64	31.70
Vox	11.1	11.7	11.2	11.8	10.78	11.15	12.39
Sumar	11.3	11.5	13.6	14.9	7.52	9.84	12.31
Podemos*	N/A	N/A	N/A	N/A	1.96	6.56	N/A
OTHERS	12.1	11.3	11.8	10.3	16.99	9.84	10.55

Note: Polls published on 17 July 2023. The experiments were conducted between 1 and 8 June.

*At the time of the experiments, Podemos and Sumar were running as separate parties, but in July 2023, Podemos joined the Sumar ballot.

Source: own research.

The discrepancy between most sympathy (closeness) and the elicited vote is quite remarkable, especially for the two main parties: the PSOE (21.64% sympathy versus 25.49% of elicited votes) and the PP (32.79% sympathy versus 37.25% of elicited votes).

3.3. Attachment

In terms of attachment, the experimental subjects presented mainly the “avoidant” style (47.19%), followed by “secure” (36.30%). The “angry” and “anxious” affective styles accounted for 11.22% and 5.28%, respectively.

4. Emotional Vote versus Elicited Vote

To understand the potential of conducting neuropolitics experiments that combine FEA and traditional questionnaires, below we describe the general results of the emotional vote and the elicited vote, analysing them by gender, age and location and ideology of the political party.

4.1. Gender

Women were more likely to vote for the PSOE and against Vox, and we can see that Vox provoked generally negative emotions in this demographic. In addition, women had more positive emotional reactions to both Sánchez and the PSOE, and negative reactions to Vox. In the case of men, the greatest emotions—both positive and negative—were provoked by Pedro Sánchez.

4.2. Age groups

In our experiment, young subjects behaved very similarly to the sample as a whole in terms of emotions. This could be partly due to the fact that young people make up the majority of the sample; even so, the data for this section of the population is quite similar to that of the other age groups.

Among “non-young” subjects (those over the age of 25), it is evident that the candidates on the whole, and those representing Vox and Podemos in particular, generated predominantly negative emotions. In addition, the elicited vote for non-young people favoured the left wing (45% left wing versus 36.2% right wing).

4.3. Location

Madrid and Seville displayed rather similar voting patterns, although emotions, especially negative ones, are slightly more pronounced in Seville. In Jerez, however, the pattern is somewhat different. Here, the greatest amount of votes were cast for the PSOE, although if we look at it in terms of left-right split, this is counterbalanced by a significant number of votes in favour of Vox. In addition, in Jerez emotions are stronger, especially against the left.

4.4. Ideology

Virtually 100% of left-wing voters chose left-wing candidates. The same can be said for right-wing voters, who in turn voted for the right-wing candidates. This reveals a strong allegiance to one’s political ideology—ideological voting seems to greatly influence voting intention.

The variance between sympathy and intention to vote both for the PSOE (51.4% sympathy versus 72.9% of elicited votes) and the PP (62.6% sympathy against 77.6% of elicited votes) is staggering. Also of note is the predominantly negative emotions that left-wing voters have towards the candidates representing leftist parties. On the right-hand side of the political spectrum, however, aside from the negative emotions aroused by the left-wing parties, the negativity that Vox provokes among the right-wing electorate is striking, even surpassing the levels recorded among left-wing voters.

Therefore, although the PP was the party that received the most elicited votes, it failed to generate as many emotions as the other parties, whether positive or nega-

tive. In fact, the PSOE stood out in many social groups and locations in terms of the positive (joy) and negative (contempt) reactions it provoked. Vox also elicited strong emotions, but to a lesser degree, with Podemos generating mainly negativity, mostly expressed as sadness in comparison to the rest of the parties.

5. Advantages and Obstacles of Analysing the Emotional Vote

Any study of this nature will obviously have its shortcomings and dangers, but it will also open up new opportunities for development. The main advantage of our analysis is the robust and contrasted method we used, enabling us to gather and use data on our experimental subjects' reactions to stimuli regarding their voting habits. The methods used and the tools designed for the analysis boast many potential applications in voting intention analysis, such as assessing the design of demoscopic surveys and even testing the design of electoral campaigns and candidate selection from an emotional point of view.

On the other hand, the principle obstacles to this methodology are possible biases and the potential lack of representativeness of the chosen samples. Participating in such an experiment, in addition to the high cost involved, requires that subjects are, at least *a priori*, familiar with new technologies and not weary of privacy concerns. This is mainly the case with the younger population.

Although there are various types of threats—such as computer attacks, security breaches in protocols for handling highly sensitive data, etc.—in our opinion, the future viability of this type of study may be put in jeopardy by legislative changes in the European Union regarding personal data security and by possible bans on experiments considered threatening to citizens' rights.

6. Conclusions

Nowadays, the availability of neuroscience tools and techniques opens up new avenues for the study of the impact of emotions on voting habits. Our experiment has proven the validity of the analytical framework and the usefulness of the EMOTIVOTO tools in detecting differences between experimental subjects' voting intention and the emotional vote. The variability of the responses obtained, which were recorded and structured in the database, and the results of the models used and integrated into EMOTIVOTO, have made it possible to identify the characteristics of different groups of voters based on their gender, age, location, ideology, etc.

Thanks to the experimental methodology used in this study, based on industrial engineering and task synchronisation, we were able to obtain a sufficient sample size, which in fact was larger than in most other studies that use facial recognition analysis, and thus obtain a meaningful sample.

As such, we have been able to discern differences between different social groups (based on gender and age) in most of the answers given in the surveys and questionnaires. It should be noted, however, that although the young university population makes up the majority of our sample, the elicited voting intention obtained in this study is similar to other sample populations, such as those used by other opinion polling companies.

Likewise, the software used—iMotions in particular—has proven to be a sufficiently effective way to test the methodology and develop parametrised tools for analysing results.

In short, this type of experiment permits more detailed and complementary analyses than those based on more common techniques—such as surveys—for studying voting intention.

7. Bibliography

- Ansolabehere, S. and Puy, M. S. (2023). Separatism and identity: a comparative analysis of the Basque and Catalan cases. *European Political Science Review*, 15(1), 1–18. <https://doi.org/10.1017/S1755773922000261>
- Bigné, E., Ruiz–Mafé, C. and Badenes–Rocha, A. (2023). The influence of negative emotions on brand trust and intention to share cause–related posts: A neuroscientific study. *Journal of Business Research*, 157, 113628. <https://doi.org/10.1016/j.jbusres.2022.113628>
- Ekman, P. (1972). Universals and cultural differences in facial expressions of emotion. In J. Cole (Ed.), *Nebraska symposium on motivation*, vol. 19 (pp. 207–282). Lincoln NE: University of Nebraska Press.
- Ekman, P. (1993). Facial expression and emotion. *American Psychologist*, 48(4), 384–392. <https://doi.org/10.1037/0003-066X.48.4.384>
- Ekman, P. (1999). Basic emotions. In T. Dalgleish y M. J. Power, *Handbook of cognition and emotion* (pp. 45–60). New York: Wiley & Sons. <https://doi.org/10.1002/0470013494.ch3>
- Glimcher, P. W. and Fehr, E. (2008). *Neuroeconomics: Decision Making and the Brain*. London: Elsevier Science.
- Gómez–Díaz, L. (2021). The Influence of Admiration on Intentions to Visit and Recommend a Destination: The Moderating Role of Negative Basic Emotions. *International Conference on Tourism Research* (pp. 253–260). Academic Conferences International Limited.
- Hamelin, N., Al–Shihabi, S., Quach, S. and Thaichon, P. (2022). Forecasting advertisement effectiveness: Neuroscience and data envelopment analysis. *Australasian Marketing Journal*, 30(4), 313–330. <https://doi.org/10.1177/18393349211005061>

- Jaráiz, E., Lagares, N. and Pereira, M. (2020). Emociones y decisión de voto. Los componentes de voto en las elecciones generales de 2016 en España. *Revista Española de Investigaciones Sociológicas*, (170), 115–136. <https://doi.org/10.5477/cis/reis.170.115>
- Knutson, B., Rick, S., Wimmer, G. E., Prelec, D. and Loewenstein, G. (2007). Neural predictors of purchases. *Neuron*, 53(1), 147–156. <https://doi.org/10.1016/j.neuron.2006.11.010>
- Marcus, G. E. (2000). Emotions in politics. *Annual Review of Political Science*, 3(1), 221–250. <https://doi.org/10.1146/annurev.polisci.3.1.221>
- Marques dos Santos, J. P., Martins, M., Ferreira, H. A., Ramalho, J. and Seixas, D. (2016). Neural imprints of national brands versus own-label brands. *Journal of Product & Brand Management*, 25(2), 184–195. <https://doi.org/10.1108/JPBM-12-2014-0756>
- Masch, L., Gassner, A. and Rosar, U. (2021). Can a beautiful smile win the vote? The role of candidates' physical attractiveness and facial expressions in elections. *Politics and the life sciences*, 40(2), 213–223. <https://doi.org/10.1017/pls.2021.17>
- Melero, R. and Cantero, M. J. (2008). Los estilos afectivos en la población española: un cuestionario de evaluación del apego adulto. *Clínica y Salud*, 19(1), 83–100.
- Meza-García, B. and Rodríguez-Ibáñez, N. (2021). Driver's Emotions Detection with Automotive Systems in Connected and Autonomous Vehicles (CAVs). In *Proceedings of the 5th International Conference on Computer-Human Interaction Research and Applications (CHIRA 2021)* (pp. 258–265). <https://doi.org/10.5220/0010741100003060>
- Oñate, P., Pereira López, M. and Mo Groba, D. (2022). Emociones y voto a Vox en las elecciones generales españolas de abril y noviembre de 2019. *Revista Española de Ciencia Política*, (58), 53–81. <https://doi.org/10.21308/recp.58.02>
- Ortigueira-Sánchez, L. C. and Cárdenas-Egúsqüiza, A. L. (2022). Political leadership, a quasi-experimental study of Peruvian voters' emotional reaction and visual attention to political humor. *International Review on Public and Nonprofit Marketing*, 19(1), 101–126. <https://doi.org/10.1007/s12208-021-00293-4>
- Otamendi, F. J., Brocas, I. and Carrillo, J. D. (2018). Sequential Auctions with Capacity Constraints: An Experimental Investigation. *Games*, 9(1). <https://doi.org/10.3390/g9010015>
- Pereira, M., Lagares, N. and López-López, P. C. (2021). Partidos y líderes en las elecciones generales de 2016 y 2019. Una visión emocional. *Revista de Estudios Políticos*, 193, 211–249. <https://doi.org/10.18042/cepc/rep.193.07>

- Rivera Otero, J. M., Castro Martínez, P. and Mo Groba, D. (2021). Emociones y extrema derecha: el caso de VOX en Andalucía. *Revista Española de Investigaciones Sociológicas*, 176, 119–140. <https://doi.org/10.54777/cis/reis.176.119>
- Rodríguez–Fuertes, A., Alard–Josemaría, J. and Sandubete, J. E. (2022). Measuring the candidates' emotions in political debates based on facial expression recognition techniques. *Frontiers in Psychology*, 13, 785453. <https://doi.org/10.3389/fpsyg.2022.785453>
- Romero–Luis, J., Carbonell–Alcocer, A., Levratto, V., Gertrudix, M., Casado, M. D. C. G. and Hernández–Remedios, A. (2023). Design and assessment of an experimental model for evaluating the effectiveness of audiovisual products on the circular economy aimed at promoting environmental awareness. *Journal of Cleaner Production*, 423. <https://doi.org/10.1016/j.jclepro.2023.138820>
- Schreiber, D. (2017). Neuropolitics: Twenty years later. *Politics and the Life Sciences*, 36(2), 114–131. <https://doi.org/10.1017/pls.2017.25>
- Suominen, S. (2021). Sport and Cultural Events: Willingness to Pay, Facial Expressions and Skin Response. *Athens Journal of Sports*, 8(3), 201–214. <https://doi.org/10.30958/ajspo.8-3-3>
- Timme, S. and Brand, R. (2020). Affect and exertion during incremental physical exercise: Examining changes using automated facial action analysis and experiential self–report. *PLoS ONE*, 15(2). <https://doi.org/10.1371/journal.pone.0228739>
- Vélez, W. I. A., Sebedón, D. D. L. T. and Pacherras, B. K. V. (2020). Escala de la actitud electoral basada en neuropolítica frente a los estímulos de la comunicación política en jóvenes y adultos de la ciudad de Piura, 2019. *Paian*, 11(2), 10–20. <https://doi.org/10.26495/rcp.v11i2.1512>

Francisco Javier Otamendi

Full Professor at URJC's Department of Applied Economics and director of the BNE (Behavioural Neuroeconomics) research and teaching innovation group viaSIM (Simulated Reality). He is an expert in modelling, simulation and quantitative analysis.

Lucía M. Guerras

PhD student at URJC. She holds a Master's Degree in Development of Neurocognitive Techniques in Business Organisations: Neuromanagement from URJC.

Eva Borrega-Alonso

PhD student at URJC. She holds a Master's Degree in Development of Neurocognitive Techniques in Business Organisations: Neuromanagement from URJC.

Jesús Messía de la Cerda

Associate Professor in URJC's Department of Private Law, specialist in civil law. He holds a PhD in Law from Universidad Complutense de Madrid.

Félix-Fernando Muñoz

Associate Professor in the Department of Economic Analysis: Economic Theory and Economic History at the Universidad Autónoma de Madrid. He specialises in economic theory and evolutionary economics.

REVIEWS/

RESEÑAS

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P. Oñate, J. M. Rivera y C. Ortega (Eds.).
Las elecciones generales de noviembre de 2019.
Madrid: Centro de Investigaciones Sociológicas,
2023

Inmaculada Szmolka

Universidad de Granada, España

ismolka@ugr.es

Las elecciones generales de 10 de noviembre de 2019 fueron, hasta cierto punto, singulares desde la perspectiva de la gobernabilidad democrática. Por un lado, este proceso electoral fue consecuencia del intento fallido de formar gobierno tras los comicios celebrados en abril de ese mismo año, lo que llevó a la anticipada disolución de la XIII legislatura y a una nueva convocatoria electoral. Por otro lado, las elecciones de noviembre de 2019 dieron lugar a la formación del primer gobierno de coalición del período actual democrático entre el Partido Socialista Obrero Español y Unidas Podemos, tras haber obtenido Pedro Sánchez la confianza en el Congreso de los Diputados gracias al voto afirmativo de los diputados de estos dos partidos, de los de otras seis formaciones políticas y la abstención de otras dos.

La monografía que aquí se reseña, *Las elecciones generales de noviembre de 2019*, analiza de forma rigurosa, sistemática y pormenorizada los múltiples aspectos de este proceso electoral: el contexto en el que tuvo lugar la elección, la campaña electoral, la oferta programática, los liderazgos y las candidaturas, los efectos del sistema electoral, los factores explicativos del voto, la participación y los resultados electorales, los perfiles de los parlamentarios elegidos y la gobernabilidad resultante. Además, este libro se integra y da continuidad a los estudios electorales publicados en la Colección Elecciones del Centro de Investigaciones Sociológicas (CIS), que representa un banco bibliográfico fundamental para conocer en profundidad las sucesivas elecciones generales celebradas en nuestro país y que utiliza los estudios pre- y poselectorales realizados por el CIS, siguiendo la tradición de los National Election Studies de otros países como Reino Unido o Estados Unidos.

El libro está editado por los profesores Pablo Oñate, José Manuel Rivera y Carmen Ortega, que cuentan con una dilatada trayectoria en la investigación electoral. A ellos se unen otros 36 autores, reputados profesores e investigadores en más de una docena

de universidades, que escriben los distintos capítulos que componen la obra sobre el ámbito concreto en el que son especialistas. A lo largo de sus respectivos análisis, los autores utilizan distintos enfoques y técnicas de investigación, tanto cualitativas como cuantitativas. No obstante, pese al carácter académico y científico de esta obra, es un libro no solo accesible a expertos en el ámbito de estudio electoral, sino al público en general interesado en el desarrollo de las elecciones y sus consecuencias políticas.

Aunque la obra se centra de forma monográfica en las elecciones de noviembre de 2019, el capítulo de los profesores Montabes y Valencia sobre la legislatura 2016-2019 y los comicios adelantados del 28 de abril de 2019 resulta conveniente para contextualizar las elecciones de noviembre de 2019.

En el siguiente capítulo, Gonzalo Pardo Beneyto y Óscar Barberá analizan el proceso de selección de los candidatos de los principales partidos a la presidencia del gobierno y a las listas electorales de las formaciones políticas al Congreso de los Diputados en cada provincia. Este proceso de selección vino determinado por la repetición de las elecciones en un espacio corto de tiempo, por lo que los partidos optaron en gran medida por mantener las listas electorales de la convocatoria de abril, con las consiguientes consecuencias para las garantías y la calidad democrática del proceso de selección de candidatos.

Antonio Garrido y Alberto Mora se ocupan del estudio de la campaña electoral y lo hacen a través del análisis de los datos de estudios electorales del CIS. Destacan como elementos diferenciadores la relevancia de la cuestión de la gobernabilidad en los temas de campaña y la incursión de Vox en la estrategia de las campañas electorales de los partidos con el objeto de contener la fuerza creciente de la formación de derecha radical. Por otro lado, los autores señalan como elementos de continuidad el desinterés de los ciudadanos por la campaña electoral y el efecto desmovilizador que tuvo sobre los electores.

Paulo Carlos López-López y Jesús Manuel Benítez-Baleato realizan el análisis de las redes sociales y los electores en el espacio digital, estudiando los perfiles de los electores que utilizaron las redes sociales con un uso político-electoral, a partir de la explotación del Estudio poselectoral realizado por el CIS. Adicionalmente, examinan el nivel de la relación entre la ciudadanía y los candidatos de los principales partidos políticos a través del indicador de compromiso o *engagement*, basándose en el análisis de sus perfiles en las redes sociales Facebook, Twitter e Instagram en los seis meses previos a la celebración de las elecciones. Sus principales resultados señalan que los hombres y, sobre todo, los más jóvenes, son los que sobresalen por su ciberactivismo; Facebook aparece como la plataforma más habitual para ejercer el compromiso político de los ciberactivistas, y Vox y sus electores destacan por la utilización que realizan de las redes sociales.

Carmen Ortega, Juan Montabes y Fátima Recuero analizan el rendimiento del sistema electoral en las dos convocatorias de 2019, en el contexto de un estudio comparativo longitudinal de todas las elecciones generales celebradas desde 1977, reflejando los cambios en los efectos del sistema electoral. Exponen cómo en las últimas cuatro

convocatorias, especialmente en las de 2019, se ha producido un considerable incremento de la desproporcionalidad electoral en los distritos electorales de menor tamaño, lo que puede ser indicativo de que el voto a los nuevos partidos no está necesariamente guiado por consideraciones estratégicas sobre la utilidad del voto. El análisis evidencia que los partidos más sobrerrepresentados en las elecciones de 2019 fueron el PP y, en menor medida, el PSOE (como también lo fue Teruel Existe, ratio 3,53). Por el contrario, Unidas Podemos y Más País se vieron infrarrepresentados por los efectos del sistema electoral, así como los partidos de ámbito no estatal PRC, CUP y BNG.

José Manuel Trujillo, Giselle García-Hípola y Gabriel Colomé examinan la movilización electoral en esta convocatoria electoral, considerando que fueron las elecciones con mayor abstención electoral desde 1977 (en la media, no obstante, del conjunto de los países de la Unión Europea, en una tendencia compartida con la mayoría de los países del mundo). Analizan la participación electoral desde el punto de vista del análisis generacional, mostrando que las diferencias entre grupos de edad y de generación influyen sobre la movilización, junto con otras variables de tipo actitudinal y sociodemográfico. Esto lleva a los autores a preguntarse «hasta qué punto el relevo generacional puede estar detrás de los cambios tectónicos en la política española».

Serafín González Quinzán y José Manuel Rivera Otero analizan los factores explicativos del voto, estudiando, en primer lugar, la transferencia del voto entre partidos entre las elecciones de abril y las de noviembre de 2019, destacando Junts y Vox por la mayor fidelidad de sus votantes, seguidos por los del PP y el PSOE. A ello añaden un análisis multivariante sobre los datos del estudio poselectoral del CIS, analizando el peso de los factores sociodemográficos, actitudinales, contextuales, de identificación y de liderazgo en el voto. Este análisis evidencia el destacado poder explicativo del contexto en el que se celebraron las elecciones, especialmente la situación provocada por el procés independentista en Cataluña, añadiéndose el potente valor explicativo de la ideología, la identificación partidista y la valoración del respectivo líder entre los votantes de cada partido.

Diego Mo Groba y Ramón Máiz examinan el impacto que pudieron tener los nacionalismos en las elecciones generales de 2019. Para ello realizan un análisis descriptivo y espacial del sentimiento nacionalista en las diferentes comunidades autónomas, a lo que añaden un análisis multivariado. Todo esto les permite concluir que existe un predominio de una identidad dual en España, así como una asimetría en cuanto al sentimiento nacionalista en el ámbito autonómico: en Cataluña, aunque el sentimiento dual es mayoritario (40,5), destaca el porcentaje de ciudadanos que se identifican como solo catalanes (22,3); en el País Vasco destaca la polarización existente entre los que poseen una identidad dual (33,1%) y los que manifiestan una identidad únicamente vasca (29,7%). Los autores señalan la relevancia del factor de la identificación partidista en la construcción de la identidad, de forma que el nacionalismo español se construye alrededor del voto a partidos de ámbito estatal ubicados en la derecha del espectro ideológico (votantes del PP y Vox), mientras que el nacionalismo gallego, vasco y catalán se crea alrededor de los partidos nacionalistas de ámbito no estatal (aunque también de formaciones de izquierda).

Ángel Cazorla Martín y María Pereira López analizan el impacto de variables económicas en el voto, examinando el peso de los principales indicadores macroeconómicos, así como del contexto económico previo a la celebración de las elecciones. La coyuntura económica positiva no benefició —a diferencia de lo ocurrido en los comicios de 2015 y 2016— al partido gobernante (el PP). Los factores contextuales —especialmente, la corrupción— tuvieron más relevancia que los económicos, produciéndose un voto de castigo al PP por parte de un buen número de votantes. Los análisis estadísticos multivariantes evidencian la relevancia de las dimensiones económicas prospectivas y retrospectivas entre los votantes de la izquierda, así como el peso del componente egotrópico (situación personal) entre los que votaron al PSOE.

Guadalupe Martínez Fuentes y Jonatan García Rabadán estudian el peso del liderazgo en el voto, destacando el rol de Pedro Sánchez —debido a la experiencia institucional que perciben en él los ciudadanos—. También destacan los liderazgos de Albert Rivera —por ser el mejor valorado por los votantes— y de Santiago Abascal —por la alta evaluación positiva de sus votantes—. No obstante, los autores señalan la influencia relativa del liderazgo en la decisión del voto: mayores tasas de popularidad no determinan el sentido del voto.

Los editores de *Las elecciones generales de noviembre de 2019* han tenido el acierto de incorporar una perspectiva menos habitual en los estudios sobre el comportamiento electoral: el efecto de las emociones. Erika Jaráiz y Nieves Lagares analizan el papel de los afectos, sentimientos y emociones en el voto a los cinco principales partidos en estos comicios, junto con otros predictores del voto de carácter estructural, psicosociológico y económico, tradicionalmente utilizados. Jaráiz y Lagares elaboran cinco modelos de Ecuaciones Estructurales (SEM) explicativos del voto a cada uno de los principales partidos políticos (PSOE, PP, Unidas Podemos, Ciudadanos y Vox). El principal sentimiento que influye en el voto a los cinco partidos es el de la simpatía, seguido de otros tanto de carácter positivo como negativo: voto al PSOE, orgullo y entusiasmo; voto al PP, entusiasmo y ansiedad hacia el PSOE; voto a Unidas Podemos, orgullo hacia la formación política y asco hacia el PP; voto a Ciudadanos, esperanza; y voto a Vox, orgullo hacia la formación política. En opinión de las autoras, la existencia de sentimientos negativos entre los votantes de algunos partidos políticos (resentimiento, amargura o asco) revela la polarización emocional y política que caracterizó a las elecciones de noviembre de 2019. Por otro lado, las autoras destacan la relevancia de las emociones como variable que interviene en otros factores explicativos del voto, como son el liderazgo y la identificación partidista.

También se realiza un análisis específico del efecto del género en el comportamiento electoral: Cristina Moreno y Susana Ruiz Seisdedos estudian el impacto del género en el comportamiento electoral y en relación con la edad, el nivel educativo, la ocupación, la práctica religiosa, la ideología y la identificación partidista, apuntando que no se observan diferencias significativas que distingan el voto entre hombres y mujeres.

El volumen acoge otros cinco capítulos en los que se analizan los factores explicativos del voto a cada uno de los principales partidos de ámbito estatal (PP, PSOE, Vox, Unidas Podemos y Ciudadanos) y uno en el que se estudian los del voto a los partidos

de ámbito no estatal. En estos capítulos se analiza la evolución de la respectiva organización partidista y su liderazgo, su oferta en las elecciones, así como el peso de las distintas variables en el voto, a partir de la realización de modelos estadísticos de carácter multifactorial.

El libro se cierra con un análisis de los perfiles de los diputados elegidos en noviembre de 2019, estudiando el cambio y la continuidad en la élite parlamentaria. Pablo Oñate, Bernabé Aldeguer y Mélanie Barragán analizan las características sociodemográficas (sexo, edad y nivel de estudios) de los diputados elegidos, así como su experiencia política en la España multinivel (tanto en el ámbito local, autonómico, como estatal) y en cuanto a cargos en la estructura partidista respectiva, en cargos de designación (gobiernos) y cargos de elección (concejalías/alcaldías, parlamentos autonómicos o Cortes Generales). Los autores señalan pautas de continuidad y de cambio en esa «nueva» élite parlamentaria que nos aproximan más que nos alejan a las pautas observadas en los perfiles políticos de las élites parlamentarias de países vecinos, si bien en nuestro caso con algunas características específicas que las distinguen, en particular, entre los escaños de alguna formación política.

En definitiva, *Las elecciones generales de noviembre de 2019* constituye una obra de referencia obligada para académicos y estudiosos interesados en el análisis riguroso de los procesos electorales, el comportamiento electoral y las dinámicas políticas en España. También para estudiantes que quieran aprender a hacer este tipo de análisis, dado el riguroso carácter científico de los que el libro presenta, sin que ello sea óbice para que el libro esté escrito con un estilo ameno y sencillo. Un buen ejemplo de trabajo científico politológico con el que los lectores, además de aprender, disfrutarán.

REVIEWS/RESEÑAS

M. Massó. *Contested Money. Toward a New Social Contract*. London: Routledge, 2024

Carlos de Castro

Universidad Autónoma de Madrid, España
c.decastro@uam.es

El dinero cautiva la imaginación de nuestra sociedad. Es la base material para las ensoñaciones individuales y colectivas de una vida mejor. Desprovisto de su halo misterioso, el valor del dinero suele darse por supuesto, salvo en momentos y lugares con altas tasas de inflación. Cuando la inflación es elevada o cuando nuestras monedas se deprecian al cambiarlas por otras experimentamos súbitamente cómo el dinero pierde valor. Del mismo modo, en momentos de crisis financiera, como la vivida desde 2008, la volatilidad de los precios en todos los mercados, el aumento de los tipos de interés y las restricciones al crédito, los recortes en el gasto público y los salarios generaron una reducción del dinero disponible para el conjunto de la población que se empezó a preguntar qué estaba ocurriendo con el sistema monetario y financiero.

Esos momentos de inflación y crisis en los que se rompe el hechizo del valor del dinero abren la posibilidad de interrogarse por su naturaleza. En este libro, Matilde Massó, profesora titular del Departamento de Sociología y Comunicación de la Universidad de A Coruña y una de las más reconocidas expertas en sociología económica y en los estudios de financiarización, analiza precisamente los procesos y mecanismos a través de los cuales el dinero adquiere un valor en las prácticas sociales concretas. Sin embargo, Massó no plantea únicamente una discusión teórica y abstracta, sino que, basándose en una concepción del dinero como institución social, explora el significado social y cultural de la emergente revolución en las prácticas monetarias, tales como la proliferación de las criptomonedas, monedas locales, dinero electrónico, etc., para concluir proponiendo un nuevo paradigma del dinero basado en una concepción democrática de la organización de sus funciones monetarias tradicionales (medio de pago, unidad de cuenta y depósito de valor) orientada al cumplimiento de objetivos socialmente valiosos.

Para aclarar el sentido de su propuesta, la autora desarrolla en los primeros capítulos una discusión con los paradigmas dominantes del dinero con el fin de recuperar una concepción institucional y social sobre cómo se crea el dinero, cómo se gestiona y cómo desempeña sus funciones.

Desde el paradigma económico clásico, el dinero es una mercancía neutra que facilita el intercambio mercantil. Esta concepción neutra y abstracta del dinero es la que permitiría cumplir con la función de ser un medio de pago que facilita el intercambio de mercancías diferentes. Pero para cumplir esta función el dinero mercancía también ha de cumplir simultáneamente con las otras dos funciones, esto es, debe ser unidad de cuenta y reserva de valor. La confianza en que el valor del dinero está respaldado por algo intrínsecamente valioso —por ejemplo, oro, un algoritmo digital o un contrato de deuda personal— permite que se pueda establecer un sistema de equivalencias entre mercancías referenciadas en el dinero mercancía (p. 123).

Frente a esta concepción del dinero como mercancía, la autora, basándose en las ideas de David Graeber y Geoffrey Ingham, defiende una concepción del dinero como deuda. La idea general es que el dinero surgió como un sistema o un dispositivo técnico para contabilizar deudas y créditos. Por lo tanto, para la autora, el dinero «está constituido por relaciones humanas de deuda y crédito. Este rasgo es característico de las sociedades de mercado, tanto en los sistemas de patrón oro como en las economías de crédito, y también se aplica a otros tipos de organizaciones económicas basadas en transacciones monetarias. En otras palabras, el dinero es, esencialmente, deuda circulante» (p. 126). Esta concepción fiduciaria del dinero conduce a prestar atención a sus dimensiones institucionales y sociales. Esto quiere decir que «el dinero es, en última instancia, una institución social, compuesta por acuerdos sociales y legales de derechos y deberes entre diferentes actores» (p. 2).

Esto supone una clara visibilización de la naturaleza política del dinero en la medida en que los actores que participan en las relaciones de deuda (ciudadanos, Estados, empresas e instituciones financieras, etc.) ocupan diferentes posiciones de poder en el sistema monetario. El dinero no puede ser, por tanto, algo neutral, sino que las «relaciones de deuda se crean con distintos fines e intereses que reflejan las luchas de poder estructurales e instrumentales entre deudores y acreedores... Por lo tanto, el dinero se crea en una lucha por el poder y la subsistencia económica entre actores económicos y el valor del dinero es el resultado de esa disputa» (p. 127).

Esta concepción del dinero conduce a la autora a indicar que la atribución de valor al dinero también está vinculada a los sistemas simbólicos de la sociedad. Cuando el dinero funciona como unidad de cuenta establece un valor de equivalencia entre diferentes objetos. Desde el paradigma clásico este proceso de atribución de valor aparece como algo aporomático y natural en el que la cuantificación del valor está vinculada a un referente externo y objetivo que garantiza el valor, su mantenimiento a lo largo del tiempo y su transmisibilidad. Por el contrario, Massó sostiene que la atribución de valor al dinero es un proceso disputado y está conectado con los referentes culturales y sociales que los sujetos utilizan para definir y perseguir los bienes comunes.

Con esto en mente, Matilde Massó analiza en los capítulos posteriores las innovaciones monetarias que se han producido recientemente y evalúa hasta qué punto, a pesar de la sofisticación tecnológica de algunas de ellas, se separan de la concepción mercantil del dinero. Las monedas alternativas son muy diferentes entre sí y pueden referirse a las monedas locales, criptomonedas, al dinero electrónico o al dinero cor-

porativo, entre otras. Todas ellas operan fuera del sistema monetario convencional cumpliendo algunas de las funciones del dinero. Por ejemplo, en su análisis de las criptomonedas destaca su naturaleza descentralizada y la innovación tecnológica en los procesos de creación, verificación y transmisión de valor.

Aunque muchas voces han señalado que las criptomonedas pueden desafiar el paradigma tradicional de las monedas emitidas por los gobiernos y los bancos centrales, al proporcionar un medio de intercambio digital que opera independientemente de las instituciones financieras tradicionales, Matilde Massó advierte que esa alarma está injustificada, puesto que el alcance y uso limitado de estas monedas hace que sea un fenómeno residual en el conjunto del sistema monetario, por lo que su capacidad de desestabilización es muy cuestionable. No obstante, la autora reconoce que las criptomonedas pueden llegar a plantear algún problema relacionado con la volatilidad de los precios, los riesgos de seguridad cibernética y la regulación estatal.

La objeción principal que la autora plantea a las criptomonedas es que siguen operando dentro de las coordenadas culturales de la concepción mercantil del dinero. La enorme sofisticación de la tecnología empleada en los procesos de creación de valor omite por completo la naturaleza institucional y social del dinero y participa de una concepción del valor respaldada por una miríada de individuos que, de manera descentralizada y a través de una compleja infraestructura tecnológica, crean y transmiten el valor del dinero.

Otro de los ejemplos de innovación monetaria que menciona la autora son las monedas locales. Matilde Massó se centra en su papel en el fortalecimiento de las economías regionales y la promoción de la participación comunitaria. Además, destaca cómo estas monedas operan a nivel local y están diseñadas para fomentar el intercambio económico dentro de una comunidad específica. De esta manera, las comunidades aspiran a contribuir a la revitalización de áreas social y económicamente deprimidas, al promover el comercio local y reducir la dependencia de grandes jugadores de la economía global. Del mismo modo, la autora resalta su capacidad para fomentar la cohesión social y la solidaridad dentro de una comunidad al fortalecer los lazos entre productores, consumidores y comerciantes locales.

Con este análisis la autora demuestra que las monedas son diseños institucionales y técnicos que pueden cumplir algunas de las funciones del dinero (principalmente la del medio de pago y unidad de cuenta) y que las comunidades pueden desarrollar con diferentes fines algo que se aparta de la concepción mercantil del dinero. La autora no es ajena a los problemas de estas monedas locales para cumplir con las funciones del dinero. De hecho, muchos de estos proyectos de moneda local están diseñados para coexistir con el sistema monetario convencional.

En este sentido, Massó describe algunos de los desafíos que aún deben afrontar las monedas locales si aspiran a ampliar su alcance: la necesidad de una sólida infraestructura social de apoyo y la gestión efectiva para garantizar su viabilidad a largo plazo, la importancia de abordar cuestiones como la aceptación generalizada y la interoperabilidad con el sistema monetario convencional.

Tras este recorrido, el capítulo final pretende proponer un nuevo paradigma del dinero basado en una reconceptualización de las funciones monetarias tradicionales, esto es, en una unidad de cuenta monetaria no neutral, en un medio de pago no transferible y en un proceso diferente para crear y almacenar valor monetario (p. 103). Se trataría de un nuevo paradigma que no sustituiría al sistema monetario convencional, sino que coexistiría con él.

El nuevo contrato social monetario propuesto por Massó aboga por una serie de principios fundamentales, como la inclusión financiera, la equidad económica y la sostenibilidad ambiental. En lugar de centrarse únicamente en el crecimiento económico y la acumulación de riqueza, este contrato social busca garantizar que el sistema monetario contribuya al bienestar general y a la prosperidad compartida.

La autora reconoce que su propuesta aún es incipiente y requiere repensar algunas cuestiones, pero el camino que abre es realmente fascinante y esperanzador. Su idea de la democratización de las funciones del dinero está anclada a la recuperación de todas aquellas prácticas sociales y económicas invisibilizadas y desvalorizadas en las economías de mercado. Esta aspiración conecta con uno de los elementos nucleares de la sociología económica que trata de analizar cómo los procesos de intercambio mercantil están integrados en los contextos sociales, institucionales, políticos y culturales. Como han propuesto Wolfgang Streeck y Nancy Fraser, entre otros, el capitalismo sería no solo un sistema económico, sino un orden social que articula las diferentes instituciones de la vida social. Esto implicaría que el funcionamiento del capitalismo dependería no solo de la apropiación de trabajo no remunerado en el ámbito de la producción, sino también de la apropiación de trabajo no remunerado realizado en el ámbito de los hogares, la naturaleza o la política.

Pues bien, la propuesta de Matilde Massó está orientada a monetizar ciertos sectores de la economía no monetaria, pero sin organizarlos según las reglas y normas del mercado. Se refiere a prácticas sociales como el trabajo doméstico y de cuidados de menores, mayores y dependientes o el trabajo de colaboración con las entidades del tercer sector, el trabajo del cuidado del medio ambiente. Se trata de prácticas sociales sin las cuales no es posible sostener la vida de las sociedades y que el mercado desvaloriza a pesar de su indudable valor social y medioambiental.

La propuesta de Massó permite abrir una disputa sobre cuáles son los bienes comunes a los que ha de reconocerse un valor monetario, cómo cuantificar ese valor, cómo asignar ese valor y cómo transmitirlo. Esto significa que el dinero deriva, esencialmente, de la capacidad humana de crear una equivalencia abstracta entre objetos de distinta naturaleza. Por tanto, el paradigma monetario propuesto en este libro tiene su origen en la idea de equivalencia, pero no entre objetos, sino entre derechos y responsabilidades. En el corazón de este paradigma se encuentra un nuevo acuerdo entre los ciudadanos y el gobierno, fundamentado en un enfoque de reciprocidad y basado en una concepción de beneficio mutuo. En él, quienes deseen generar ingresos cumplirán la obligación correspondiente de hacer una contribución productiva a la sociedad. La contribución individual voluntaria valida el derecho de los individuos a trabajar y respeta, en caso necesario, el derecho de los individuos a no trabajar. En el desarrollo de esas actividades los individuos crearían valor monetario. El Estado

reconocería cuáles son las actividades sociales que permiten crear valor, cuantificaría el valor creado por cada individuo y certificaría el dinero acumulado por cada individuo. Todas aquellas prácticas sociales de valor social y medioambiental se convertirían en la base de la creación del valor y en la unidad de cuenta no neutral del nuevo paradigma, lo que supondría una radical desmercantilización democrática de numerosas actividades sociales.

En el fondo, la autora, navegando en la complejidad técnica del dinero y los sistemas monetarios, recupera el aliento crítico de numerosos proyectos emancipadores que partían de definir el valor de nuestras vidas y nuestros horizontes compartidos al margen de las aspiraciones reduccionistas de la economía de mercado de convertir todo lo valioso en valor económico apropiable. Dentro de las coordenadas de la rigurosidad técnica y científica, el trabajo de Massó ofrece recursos para ampliar la imaginación social y política de los proyectos emancipadores.

REVIEWS/RESEÑAS

C. J. Fernández Rodríguez. *Cadenas, redes y algoritmos. Una mirada sociológica al management*. Madrid: Catarata, 2022

Andrea Moreno-González
Universidad de Oviedo, España
morenogandrea@uniovi.es

El gerencialismo representa el Ethos del capitalismo contemporáneo y nos permite visualizar el punto de vista de la alta gerencia sobre la compleja relación entre gestión y sociedad, enunciado como un discurso (p. 136)

En *Cadenas, redes y algoritmos. Una mirada sociológica al management* (Catarata, 2022), Carlos Jesús Fernández Rodríguez realiza un fantástico ejercicio analítico sobre el papel de las ideas gerenciales en el cambio social e institucional. Como ya hizo Weber en *La ética protestante y el espíritu del capitalismo*, este texto ahonda en los orígenes ideológicos de la gestión empresarial capitalista que sostiene y reproduce el sistema desde los años ochenta y que ha caracterizado y dado forma a la etapa posfordista. Prologado exquisitamente por Luis Enrique Alonso y a través de seis capítulos y un epílogo, este libro nos invita a reflexionar desde una perspectiva crítica sobre la evolución de las ideologías del management y su influencia en las organizaciones públicas y privadas con las que interactuamos como ciudadanos y como personas trabajadoras y consumidoras. Asimismo, invita a reflexionar sobre los cambios derivados de la globalización de la economía, que han conllevado una pérdida de control sobre las estructuras productivas en favor de organizaciones financieras y herramientas algorítmicas capaces de tomar decisiones ajenas a los procesos de gestión tradicional. A través del análisis profundo de las ideas y procesos a los que se adscriben las organizaciones, Fernández Rodríguez navega en este libro por la historia del pensamiento neoliberal reciente y señala los retos de la academia y las instituciones públicas en este escenario.

La disección ideológica sobre el concepto del management y de los mecanismos que inciden en el sistema económico actual se explora fundamentalmente en los dos primeros capítulos. En el primero, Fernández Rodríguez define los discursos del management como los máximos exponentes de los valores del neoliberalismo y argumenta que su capacidad para implicar a trabajadores y directivos en el destino de la empresa

ha logrado impregnar todas las esferas sociales. Por ello, defiende el autor, su estudio nos permite comprender las transformaciones en las organizaciones, los procesos asociados al trabajo y los cambios en las instituciones públicas y sus políticas. En el segundo capítulo ahonda en el origen académico del pensamiento managerial con un profundo estudio de los textos del conservador Peter Drucker, al que presenta como su principal exponente teórico. Fernández Rodríguez nos ofrece un examen exhaustivo de estos textos en el que muestra la evolución ideológica de este académico que defiende la libertad como un deber social ejercido por trabajadores y empresas y que teorizó sobre la sociedad del conocimiento y la aparición de figuras como los inversionistas y los emprendedores en sustitución de la burguesía tradicional. A través de este estudio, demuestra que prácticas normalizadas hoy en día como la descentralización organizativa, la dirección por objetivos, el *outsourcing* y la privatización de servicios públicos se enraízan en el pensamiento desarrollado por Drucker en la segunda mitad del siglo XX. Así, el autor defiende que, en un momento de debilitamiento constante de los Estados de bienestar, comprender el origen ideológico de las actuales transformaciones en la gestión de las organizaciones privadas, las instituciones públicas y los modos de organización social ayuda a comprender los efectos que han tenido sobre las relaciones laborales, la estructura social y de clases y las estrategias de gestión política.

«China en el imaginario del Management» es el título del tercer capítulo, en el que el autor reflexiona sobre los riesgos derivados del capitalismo globalizado e ilimitado a través del análisis de las estrategias y prácticas gerenciales del país asiático representadas en la literatura managerial occidental. Fernández Rodríguez muestra la paradoja de cómo los inversores se mueven entre la necesidad de comprender los códigos culturales chinos para maximizar sus ganancias y el miedo a que una fuerte expansión del gigante asiático pueda afectar las economías occidentales. Recuerda que este modelo de gestión y de crecimiento explica parte de su éxito por el pragmatismo, las jerarquías flexibles y la presencia de directivos caracterizados por promover modelos basados en la cooperación y el conocimiento compartido, pero también por una flagrante ausencia de derechos sociolaborales y valores democráticos. De este modo critica la veneración y el pragmatismo que Occidente ha desarrollado hacia el país oriental, basados en la primacía de la competitividad y el funcionamiento de la cadena mundial de suministros sobre los valores democráticos presentes en nuestros marcos de relaciones industriales. Así, desentraña cómo el modelo de desarrollo capitalista actual ha socavado los cimientos más básicos de la democracia.

En el cuarto capítulo el autor dibuja una de las principales transformaciones derivadas de la implementación de las estrategias del management: la creación de la figura del cliente. El proceso de maduración de la sociedad de consumo ha producido mercados segmentados en los que las estrategias de marketing ahondan en la idea de individualización de las necesidades de consumo. El autor defiende que este hecho ha revertido en un cambio organizativo en las empresas, que han podido prescindir de figuras de control intermedias ante el desarrollo de una autodisciplina de las trabajadoras dirigida a satisfacer dichas necesidades en cada cliente. Este proceso también ha impactado a la Administración pública, que bajo este paradigma ha adoptado estrategias mercantilistas con la idea de mejorar la atención y reducir la burocracia.

Todo ello ha convertido a los ciudadanos en clientes y ha impactado tanto en la calidad de los servicios públicos como en las condiciones de trabajo de las personas que los proveen.

Los *critical management studies* son los protagonistas del quinto capítulo. En él, Fernández Rodríguez presenta esta disciplina, nacida en Inglaterra, como una respuesta natural al deterioro sufrido por los Estados de bienestar como consecuencia del auge del neoliberalismo y nos muestra los datos fundamentales sobre sus inicios, evolución y estado actual. Si bien todo el libro cuenta con una detallada y trabajada revisión bibliográfica, este capítulo nos ofrece un brillante análisis de la literatura asociada a este campo, que permite comprender los cambios en la organización del mundo del trabajo y sus efectos sobre la vida de las personas desde los años setenta. El autor destaca la perspectiva crítica que estos estudios han aportado al management al señalar aspectos relativos al poder, la desigualdad y la violencia en las organizaciones. Clasifica las dos corrientes de análisis principales que han ido variando en su predominancia a lo largo del tiempo: una basada en el análisis de los procesos del trabajo y otra ligada a los elementos culturales o identitarios de las organizaciones. En este sentido, indica que la crisis del 2008 reforzó la vuelta a críticas apegadas a corrientes marxistas. Sin embargo, reconoce que en España la expansión de estos estudios críticos ha sido limitada hasta épocas recientes y destaca que las prácticas mercantilistas adoptadas por las universidades del país continúan dificultando su consolidación y difusión entre los expertos de la sociología del trabajo y de las organizaciones en nuestro país. En este sentido, este capítulo busca ser un revulsivo que ponga en valor el aporte de dichos estudios.

Siguiendo con los estudios organizacionales críticos, el sexto capítulo se centra en el análisis de la figura de Paul du Gay, al que sitúa como un referente por su análisis de la burocracia y las identidades subjetivas. A modo de contextualización realiza un resumen completo y conciso sobre lo que supuso el thatcherismo para los Estados de bienestar y sus servicios públicos y es aquí donde encuentra relevancia la obra de Du Gay. La importancia de este autor se sitúa en su capacidad para analizar el capitalismo desde los estudios culturales, incorporando la subjetividad de los trabajadores bajo el liberalismo y dotando de herramientas conceptuales tanto a la sociología del trabajo como a la de las organizaciones. Fernández Rodríguez analiza sus aportes teóricos y las críticas que le fueron realizadas por parte de diversos autores, a pesar de ellas, eleva la importancia de Du Gay por su defensa de la burocracia y del sistema público, en un escenario de desplazamiento del concepto de ciudadanía sometido a la lógica mercantilista que ataca las estructuras básicas del Estado de bienestar. En este sentido, ensalza la importancia de la investigación sobre las funciones de las instituciones y la realidad de los Estados, marco en el que ha de situarse el análisis del cambio institucional.

El libro finaliza con un epílogo que titula «Escenarios futuros: algoritmos, cisnes negros y crisis del management», en el que dibuja los retos a los que se enfrentan tanto las ideologías gerenciales como las ciencias sociales en el plano inmediato. Si bien el autor reconoce que las predicciones son difíciles y poco recomendables, Fernández Rodríguez argumenta que acontecimientos como la COVID-19 o la guerra de

Ucrania han modificado de forma sustantiva las ideas en torno a la gestión, porque han borrado las certezas sobre las que se había construido el mundo de la empresa. Además, la financiarización de la economía y la gestión algorítmica han producido importantes cambios en la organización empresarial, poniendo en entredicho las funciones propias de los gestores que salían de las escuelas de negocios. Por tanto, todo ello puede representar, según el autor, la puerta abierta al fin del gerencialismo tal y como se ha desarrollado hasta ahora y consecuentemente pone en cuestión su viabilidad en un escenario imprevisible en el que quizás el management pueda acabar siendo víctima de su propia doctrina.

En definitiva, este libro supone un importante aporte bibliográfico para la introducción a los estudios organizacionales críticos en español. Aporta una contextualización de la disciplina en su desarrollo histórico, presenta las herramientas conceptuales básicas, analiza los cambios fundamentales del mundo empresarial y dota de una importante revisión literaria a través de la cual poder seguir ampliando conocimientos en este campo. Fernández Rodríguez demuestra en estas páginas su profundo conocimiento de la materia que expresa con sencillez y que permite acercar la perspectiva crítica organizacional a todos los públicos.

REVIEWS/RESEÑAS

**J. M. Calvillo Cisneros y A. Calatrava García
(Coords.). *El orden mundial en transición*.
Madrid: Dykinson, 2023**

Yolanda Alonso Herranz

Universidad Carlos III de Madrid y Universidad Alfonso X El Sabio, España
yalonso@der-pu.uc3m.es

Tal vez la última frase acuñada por los coordinadores de la obra — los profesores José Miguel Calvillo Cisneros y Adolfo Calatrava García¹— sea la más adecuada para dar comienzo a esta reseña: «Nos encontramos inmersos en un profundo cambio, en un nuevo orden en transición» (p. 256).

En este orden, nace esta obra coral como culminación de los trabajos realizados por el grupo de investigación «Seguridad, Desarrollo y Comunicación en la Sociedad Internacional» de la Universidad Complutense de Madrid. Presentan un ámbito de estudio multidisciplinar, un trabajo oportuno y más que adecuado para el desarrollo de un profundo y completo análisis del complejo orden mundial actual. En su contenido encontramos un particular enfoque sobre el análisis de la realidad internacional y el nuevo orden mundial en formación.

Estructurada en dieciséis capítulos más uno final de los propios coordinadores, se encuentra una perfecta conexión e integración en su contenido dada la pluralidad de estudios vertebrados sobre una cuestión central: el nuevo orden mundial. Su trasfondo reside casi en su totalidad en analizar las distintas directrices bajo las cuales se puede percibir la configuración en la actualidad del nuevo orden mundial surgido tras el final de la Segunda Guerra Mundial (septiembre de 1945).

El primer capítulo, al igual que el final, corresponde a los coordinadores de la obra: José Miguel Calvillo Cisneros y Adolfo Calatrava García. Los autores nos muestran, por un lado, cómo el elemento fundamental de los órdenes mundiales es la distribución de poder entre las grandes potencias, pues estas son determinantes en su configuración (p. 13), y por otro, destacan los tres principios bajo los cuales se asienta el orden mundial nacido tras la Segunda Guerra Mundial —el principio de soberanía

1 El doctor Adolfo Calatrava falleció el pasado 9 de junio de 2024.

nacional y de autodeterminación, el liberalismo económico, y el multilateralismo inclusivo a través de la negociación y el debate bajo el derecho internacional público—. Estos tres elementos determinan la consideración sobre la crisis actual del orden internacional (p. 15). En consonancia con lo establecido en este capítulo introductorio, el segundo capítulo (pp. 19 y ss.), que corre a cargo del profesor Javier Morales Hernández, nos ofrece el estudio sobre la disciplina de las relaciones internacionales (RI), que enmarca todo el juego de consideraciones o desavenencias entre los distintos Estados a nivel mundial.

El profesor José Miguel Calvillo Cisneros, en el tercer capítulo, denota uno de los principales hechos generadores de la crisis del sistema multilateral, la deslegitimación del orden liberal ha despertado la competencia y las ambiciones de otros actores que hasta la fecha se encontraban bajo el poder hegemónico de las denominadas grandes potencias. Así, la competencia entre Estados Unidos y sus aliados que van perdiendo poder en favor del creciente poder de China y sus aliados (p. 32). Tras ahondar en profundidad en los distintos tipos de multilateralismo y la crisis del sistema, los desafíos globales presentes a los que debe adecuarse (cambio climático, pandemias, etc.) el orden actual deben ampliarse sin diferenciación entre Estados y dando cabida a nuevas categorías de actores no estatales, ofreciendo para ello una respuesta basada en el denominado multilateralismo incluyente (p. 45).

En este sentido, el segundo bloque temático, que abarca los capítulos cuarto a octavo, invita al lector a conocer en profundidad el análisis de los actores internacionales bajo los cuales se sitúa el prisma de las relaciones de poder. Así, la profesora Gracia Abad Quintanal pone de relieve las líneas trazadas por la Administración Biden en su acción y política exterior y los distintos escenarios en la configuración del orden internacional (pp. 49 y ss.), reforzando las alianzas con Israel, Australia, Japón y Corea del Sur (p. 55). Por su parte, China y sus movimientos internacionales son objeto de estudio por el profesor Fernando E. Nuño-Santana (pp. 61 y ss.). De este modo, cobra protagonismo no solo como segunda economía mundial, sino por la sinergia con Rusia durante la guerra de Ucrania desde 2022, y que demuestra cómo sus propios dirigentes, Xi Jinping y Vladimir Putin, cuentan con un interés mutuo en el desafío del orden mundial dominado por Estados Unidos (p. 69). Además, China se encuentra inmersa en la consecución de la tan ansiada «reunificación completa» con Taiwán, y en impulsar su política exterior a través de la denominada «nueva ruta de la seda».

La configuración del nuevo orden geopolítico en el que emerge con fuerza el eje Indo-Pacífico frente al primigenio eje euroatlántico sirve de base esencial para encontrar el estudio del capítulo séptimo por parte del profesor Javier Gil Pérez sobre la República de la India (pp. 97 y ss.) y sus objetivos estratégicos, que, en general, pueden resumirse en dos amenazas claras provenientes de Pakistán y de la propia China. En este «juego de cartas» internacional, India, en base a su táctica geopolítica, mantiene relaciones con países ciertamente controvertidos en la esfera internacional como Irán, y la especial influencia que sobre su política ejerce Rusia. Asimismo, durante décadas ha tenido unas difíciles relaciones con Estados Unidos, aunque se han tornado ciertamente significativas por el creciente papel desempeñado por la India en el eje Indo-Pacífico.

En el espectro internacional no podemos olvidar dos motores esenciales, por un lado, el liderazgo ejercido por Brasil en el ámbito regional de Sudamérica, y por otro, el papel desempeñado por la Unión Europea. El primero de ellos es extensamente analizado en el capítulo octavo por la profesora Sabrina E. Medeiros y la doctora Ana Paula Rodríguez (pp. 111 y ss.). El nuevo sistema de seguridad en Europa y el papel que puede desempeñar de ahora en adelante como unidad política es el propósito de estudio en el capítulo sexto por el profesor Adolfo Calatrava García. La crisis del sistema de seguridad europeo ha culminado en el conflicto entre Rusia y Ucrania; hasta este momento, la declaración como Estado independiente por parte de Ucrania y su singular política ha supuesto una fractura insalvable entre quienes apostaban por un acercamiento a Occidente y quienes buscaban un allanamiento con Rusia (p. 81). En este sentido, la declaración unilateral de independencia de la provincia de Crimea y, más tarde, de los territorios ucranianos de Donstsk y Luganks en la región del Dombás, marcan la ruptura casi absoluta en las relaciones entre Rusia y los países occidentales de la Unión Europea y la OTAN.

Lógicamente, el desarrollo de los distintos y convulsos acontecimientos a nivel mundial impulsó a los autores a ampliar sus estudios a otras zonas geográficas al margen del liderazgo de Estados Unidos, de la posición de Europa y Occidente y la superación del eje euroatlántico. Así, los capítulos nueve a once nos invitan a realizar un recorrido sobre las dinámicas de cambio en el denominado «Sur global», para esto, el profesor David Hernández Martínez (pp. 126 y ss.) analiza la situación, en primer lugar, de América Latina; en su opinión, nos encontramos ante un «mapa local extremadamente complicado», destacando el papel desempeñado por las redes del crimen organizado y en especial la situación de Colombia y Venezuela, la frontera de México con Estados Unidos, y el Estado fallido de Haití; en segundo lugar, en el área subsahariana, y en especial, de la República Democrática del Congo y la República del Congo, el golfo de Guinea y la situación de Níger, además de Somalia; si bien ensalza la particular importancia del Sahel para la estabilidad y seguridad internacional (p. 131). Finalmente, el autor analiza los distintos focos de crisis y conflicto en Asia (p. 133).

No podemos obviar la situación de Oriente Medio. Acontecimientos como la guerra del Golfo (1991), el 11 de septiembre (Nueva York, 2001) y la invasión de Irak y las denominadas «primaveras árabes» han alterado el efímero equilibrio regional, siempre bajo el prisma de la lucha entre las potencias regionales y los intereses estratégicos de las grandes potencias mundiales, dando lugar a un «sistema multipolar de bloques antagónicos» (p. 139), todo esto es estudiado por la profesora Paloma González del Miño en el capítulo décimo.

El profesor Miguel Ángel Benedicto Solsona, en el capítulo onceavo (pp. 161 y ss.), manifiesta como frente al proceso de globalización asociado al «antiguo orden mundial», hoy cabe hablar de la tendencia hacia la «desglobalización», y en este margen es preciso situar en el estudio las medidas estratégicas adoptadas por la UE en diversos sectores.

Un estudio tan exhaustivo como el ofrecido por el conjunto de esta obra no puede olvidar incluir otras alternativas bajo las cuales se asienta y se percibe una especial influencia en la configuración del orden internacional en el dinamismo de la realidad actual. De este modo, en el capítulo doceavo (pp. 173 y ss.), cuya autora es Elena Pé-

rez Lagüela, se realiza una investigación analítica sobre la crisis energética global en la que estamos inmersos, «el incremento en los precios de los combustibles fósiles (carbón, petróleo y gas natural) ha incidido directamente en el incremento del precio de la electricidad, viéndose además afectado, entre otros factores, por la invasión rusa de Ucrania» (p. 174). En paralelo, en los últimos años hemos asistido a un abismal cambio en las diversas estrategias de comunicación, y también propagandísticas, de los agentes estatales, motivadas principalmente por el avance de la tecnología digital; todo esto ha sido fuente de estudio en el capítulo treceavo (pp. 194 y ss.), a cargo del profesor Antonio César Moreno Cantano.

Si bien uno de los principales focos de estudio en el cambiante orden internacional ha sido el fenómeno terrorista en todas sus diversas manifestaciones, extendiéndose hoy bajo la concepción de «terrorismo global». El profesor Alfredo Crespo Alcázar, en el capítulo catorceavo (pp. 209 y ss.), aborda la estrategia llevada a cabo por parte de la Unión Europea. Tras el atentado del 11 de septiembre (Nueva York, 2001) se asume la lucha antiterrorista como elemento propio y distintivo en su política de seguridad. En particular, destaca el fenómeno de los denominados «combatientes terroristas extranjeros retornados».

Desde esta perspectiva, los movimientos migratorios son una realidad compleja, además de un componente de la sociedad internacional actual, ligados al surgimiento de diversos problemas como el desarrollo, la desigualdad, el cambio climático, la pobreza, las guerras y las violaciones de los derechos humanos. La profesora Teresa Sánchez González aborda en el capítulo quinceavo (pp. 225 y ss.) el estudio de los factores y tipos de inmigración que le permiten culminar en la especial consideración de la vulneración de los derechos humanos de las mujeres migrantes.

Finalmente, la Agenda 2030 marcará el contenido del capítulo decimosexto (pp. 241 y ss.), de la profesora Elena C. Díaz Galván, y que aun no estando exento de críticas, refleja los valores bajo los que se asienta el derecho internacional actual, entendiéndolo, por tanto, que es esencial «reflexionar sobre la paz, la democracia, los derechos humanos, el desarrollo sostenible, etc., todo ello, incardinado al nuevo y cambiante orden mundial» (p. 243).

El breve capítulo diecisieteavo, y a modo de alegato final por parte de los autores, permite al lector encontrar una síntesis de los extremos, escenarios y, si cabe, de las posiciones analizadas en la obra por parte de los distintos autores intervinientes. En consecuencia, estamos ante un trabajo perfectamente sistematizado que compone una obra necesaria para el estudio y reflexión sobre la realidad internacional actual.

La importancia de comprender el entramado de relaciones geoestratégicas y la continua modificación en las mismas por la realidad cambiante en la configuración de poder por parte de las potencias mundiales y de las emergentes, hace que sea una premisa esencial tomar en consideración los distintos extremos que focalizan la situación mundial actual. En esta obra, el lector va a encontrar un pulcro y minucioso análisis desarrollado por la letra de los autores especialistas en la materia, configurando así un marco de referencia dentro del estudio de las relaciones internacionales.

